

**N.K.T.NATIONAL COLLEGE OF EDUCATION
FOR WOMEN
(AUTONOMOUS)**

Re-accredited by NAAC with "A" grade - 3.26/4.00
Affiliated to Tamilnadu Teachers Education University

**REGULATIONS AND SYLLABUS
BASED ON NCTE AND RCI
CURRICULUM FRAME WORK
for**

**Two year Bachelor of Special Education(Visual Impairment)
(B.Ed. Spl.Edn.[VI]) programme approved by Members of
Board of Studies in the meeting held on 26.02.2020 and
approved by the members of
Academic Council in the Meeting held on 04.03.2020 and
approved by the Governing body meeting held on
04.09.2020**

With effect from the academic year 2020-2021 onwards

With effect from the academic year 2019-2020 batch
onwards

S.NO.	PAPER CODE	CONTENT	COURSE STATUS	PAGE NO.
REGULATION				1-21
SEMESTER I				
1	PE1	Childhood and Growing up as a Learner	1/2	22-23
2	PE2	Contemporary India and Education	1	24-26
3	PE3a	Learning and Teaching - Part – I	1/2	27-28
4	CPS 2a (Any one subject based on which admission is given)	Pedagogy of Tamil	1	29-32
5		Pedagogy of English	1	33-37
6		Pedagogy of Mathematics	1	38-42
7		Pedagogy of Physical Science	1	43-46
8		Pedagogy of Biological Science	1	47-49
9		Pedagogy of Elements of Economics	1	50-53
10		Pedagogy of Computer Science	1	54-57
11		Pedagogy of History	1	58-60
12		Pedagogy of Geography	1	61-64
13		Pedagogy of Commerce & Accountancy	1	65-68
14		Pedagogy of Home Science	1	69-71
15	C12	Identification of Children with Visual Impairment and Assessment of Needs	1	72-74
16	EPC 2	Physical Education, Adapted Physical Education and Yoga	1/2	75-76
SEMESTER II				
17	PE 3b	Learning and Teaching - Part - II	1/2	77-78
18	PE4	Psychological Perspectives of Learners	1/2	79-80
19	CPS 2b (Any one subject based on which admission is given)	Pedagogy of Tamil	1	81-84
20		Pedagogy of English	1	85-88
21		Pedagogy of Mathematics	1	89-92
22		Pedagogy of Physical Science	1	93-96
23		Pedagogy of Biological Science	1	97-100
24		Pedagogy of Elements of Economics	1	101-104
25		Pedagogy of Computer Science	1	105-108
26		Pedagogy of History	1	109-112
27		Pedagogy of Geography	1	113-116
28		Pedagogy of Commerce & Accountancy	1	117-120
29		Pedagogy of Home Science	1	121-123
30	CPS 3	Evaluation of Learners	1	124-128
31	B1	Introduction to Persons with Disabilities	1/2	129-132
32	EPC 3	Reading and Reflecting on Texts	1/2	133-134
SEMESTER III				
33	CPS 2c (Any one	Pedagogy of Tamil	1/2	135-136
34		Pedagogy of English	1/2	137-139

35	subject based on which admission is given)	Pedagogy of Mathematics	1/2	140-143
36		Pedagogy of Physical Science	1/2	144-146
37		Pedagogy of Biological Science	1/2	147-149
38		Pedagogy of Elements of Economics	1/2	150-152
39		Pedagogy of Computer Science	1/2	153-155
40		Pedagogy of History	1/2	156-158
41		Pedagogy of Geography	1/2	159-161
42		Pedagogy of Commerce & Accountancy	1/2	162-164
43		Pedagogy of Home Science	1/2	165-166
44	C13	Curriculum, Adaptation and Strategies for Teaching Expanded Curriculum	1	167-169
SEMESTER IV				
45	PE 5	Knowledge and Curriculum	1	170-172
46	C14	Intervention and Teaching Strategies	1	173-176
47	C15	Technology and Education of the Visually impaired	1	177-180
48	C16	Psycho Social and Family Issues	1/2	181-183
49	CPS 2d (Any one subject based on which admission is given)	Pedagogy of Tamil	1/2	184-186
50		Pedagogy of English	1/2	187-188
51		Pedagogy of Mathematics	1/2	189-192
52		Pedagogy of Physical Science	1/2	193-195
53		Pedagogy of Biological Science	1/2	196-198
54		Pedagogy of Elements of Economics	1/2	199-201
55		Pedagogy of Computer Science	1/2	202-204
56		Pedagogy of History	1/2	205-207
57		Pedagogy of Geography	1/2	208-210
58		Pedagogy of Commerce & Accountancy	1/2	211-213
59	Pedagogy of Home Science	1/2	214-215	
60	B2	Inclusive Education and Orientation & Mobility	1/2	216-218
61	EPC 5	Drama and Art in Education	1/2	219-220

REGULATIONS

**N.K.T.NATIONAL COLLEGE OF EDUCATION FOR WOMEN
(AFFILIATED TO TAMILNADU TEACHERS EDUCATION UNIVERSITY)
DEGREE OF BACHELOR OF SPECIAL EDUCATION (B.Ed.Spl.Edn.)
(Visual Impairment)**

REGULATIONS

(With effect from the academic year 2020-2021)

The Bachelor of Special Education programme, generally known as B.Ed.Spl.Ed(VI) is a professional course that prepares teachers for upper primary or middle level (classes VI to VIII), secondary level (classes IX-X) and senior secondary level classes (XI-XII) and resource teachers for all levels.

1. ELIGIBILITY FOR ADMISSION TO THE COURSE

Eligibility for admission to the course is based on the guidelines of the Government of Tamilnadu, Tamilnadu Teachers Education University and Rehabilitation Council of India in force from time to time.

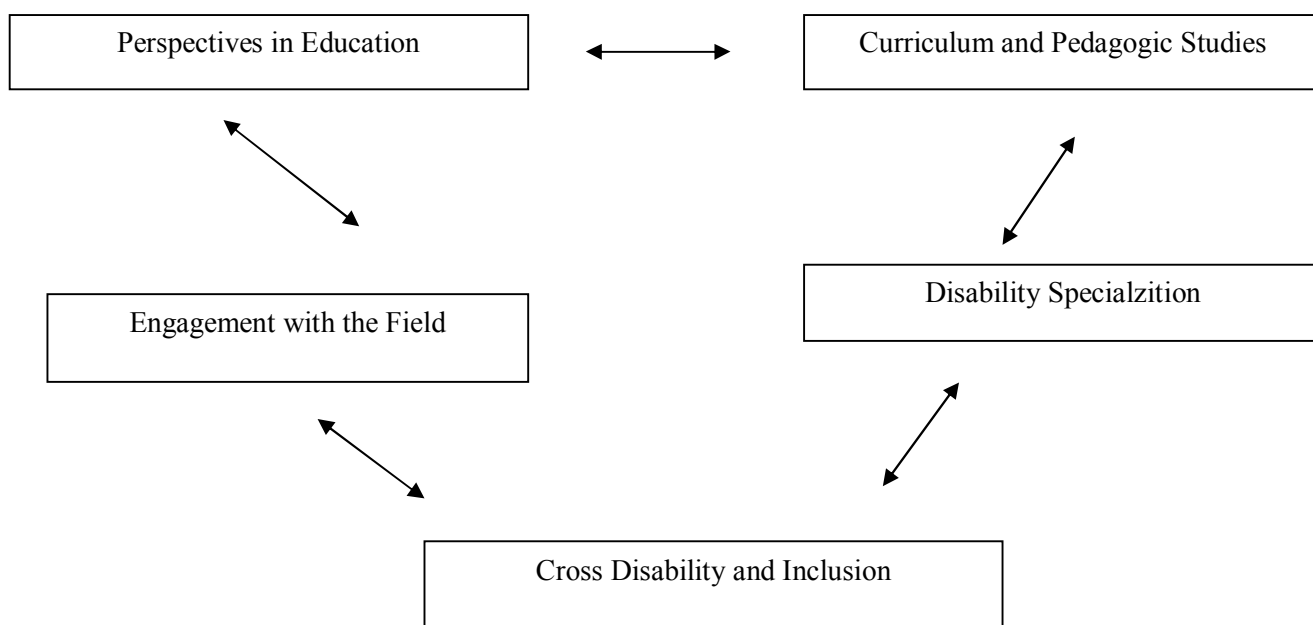
2. DURATION OF THE B.Ed COURSE:

The course of B.Ed. Spl.Ed(VI) programme shall be for a duration of two academic years consisting of 400 working days/curriculum transaction days or 2400 hours which is spread over 4 semesters excluding admission and examination days. The 400 working days will include curriculum transaction days, school internship, revision examination days and study holidays. Though the duration of the course is for two academic years, the candidates are permitted to complete the course in a maximum of three years from the date of admission to the programme.

3. PROGRAMME CONTENT

The programme is comprised of five broad inter-related curricular areas – (I) Perspectives in Education, (II) Curriculum and Pedagogic Studies, (III) Disability Specialization (Visual Impairment), (IV) Cross Disability and Inclusion (Other than VI) and (V) Engagement with the Field. All the courses include in-built field-based units of study and projects along with theoretical inputs from inter disciplinary perspective. Engagement with the Field is the curricular component that is meant to holistically link all the courses across the programme, while it also includes special courses for Enhancing Professional Capacities (EPC) of the student teachers. Transaction of the courses is to be done using a variety of approaches, such as, case studies, group presentations, projects, discussions on reflective journals, observations of children, and interactions with the community in multiple socio cultural environments.

The courses included under each of the five broad curricular areas are as follows:



I Perspectives in Education

Perspectives in Education includes courses in the study of childhood, child development and adolescence, contemporary India and education, theoretical foundations of learning, teaching and assessment. The following are the four courses to be transacted in the two year period, under the curricular area of Perspectives in Education:

Course 1	PE1	Childhood and Growing up as a Learner
Course 2	PE2	Contemporary India and Education
Course 3	PE3 (a&b)	Learning and Teaching - Part I & Part II
Course 4	PE4	Psychological Perspectives of Learners
Course 5	PE5	Knowledge and Curriculum

The course on 'Childhood and Growing up as a learner and Psychological Perspectives of Learners' shall enable student-teachers to acquire knowledge on childhood, child development and adolescence (Sharma, 2003). It aims to develop understanding about children of different age groups, through close observation and interaction with children from diverse socio economic and cultural backgrounds (Saraswathi, 1999). The course on 'Contemporary India and Education' shall enable student-teachers to engage with studies on Indian society and education, acquire conceptual tools of sociological analysis and hands-on experience of engaging with diverse communities, children and schools.

This course shall develop a conceptual understanding about issues of diversity, inequality and marginalization in Indian society and the implications for education, with analyses of significant policy debates in Indian education. The course on 'Learning and Teaching' will focus on aspects of social and emotional development; self and identity, and cognition and learning. 'Knowledge and Curriculum' shall address the theoretical foundations of school knowledge from historical, philosophical and sociological perspectives, with critical analysis of curricular aims and contexts, and the relationship between curriculum, policy and learning.

II. Curriculum and Pedagogic Studies

Curriculum and Pedagogic Studies offers a study of the nature of disciplines, critical understanding of the school curriculum; pedagogy as the integration of knowledge about the learner, the discipline and the societal context of learning, and research relating to different aspects of young children's learning. The design of the programme would enable students to specialize in one subject area, at two levels of schools. The courses under the curricular area of 'Curriculum and Pedagogic Studies' for the two year period include:

Course 6	CPS2 (a,b,c&d)	Pedagogy of a School Subject - Part I,II,III &IV
Course 7	CPS3	Evaluation of Learners

The course on 'Evaluation of Learners' will focus on aspects of evaluating the qualitative and quantitative.

III. Disability Specialization (Visual Impairment)

The courses under the curricular area of 'Disability Specialization (Visual Impairment)' for the two year period include:

Course 8 C12 - Identification of Children with Visual Impairment and Assessment of Needs

Course 9 C13 - Curriculum, Adaptation and Strategies for Teaching Expanded Curriculum

Course 10 C14 - Intervention and Teaching Strategies

Course 11 C15 - Technology and Education of the Visually Impaired

Course 12 C16 - Psycho Social and Family Issues

This curricular area would have three components:

- Acquire knowledge and skills about nature and education needs of children with visual impairment .
- Develop conceptual understanding of education provisions and skills for working with visually impaired children in special schools.
- Enhance knowledge and skills for professional development.

IV. Cross Disability and Inclusion :

The courses under the curricular area of 'Cross Disability and Inclusion ' for the two year period include:

Course 13 B1 – Introduction to Persons with Disabilities

Course 14 B2 - Inclusive Education and Orientation & Mobility

This curricular area would have two components:

- Acquire knowledge and skills about nature and education needs of children with various disabilities as well as of few select specific disabilities .
- Develop conceptual understanding of education provisions and skills for working with children with various disabilities in other than specialization and inclusive settings.

It is expected that so far separated general and special education would initiate more bilateral collaboration with each other to fulfil the global objectives of EDUCATION FOR ALL.

V. Engagement with the Field – the Self, the Child, Community and School

This curricular area would have three components –

- Tasks and Assignments that run through all the courses as indicated in the year wise distribution of the syllabus
- School Internship
- Courses on Enhancing Professional Capacities (EPC)

Course EPC2: Physical Education, Adapted Physical Education and yoga.

Course EPC3: Reading and Reflecting on Texts.

Course EPC5: Drama and Art in Education.

S. No	Category	No. of Courses offered		No. of Courses to be studied for semester I		No. of Courses to be studied for semester II		No. of Courses to be studied for semester III		No. of Courses to be studied for semester IV		No. of Courses to be studied for two years	
		DA	NDA	DA	NDA	DA	NDA	DA	NDA	DA	NDA	DA	NDA
1	Perspectives of Education(PE)	-	5	-	3	-	2	-	-	-	1	-	5
2	Curriculum and Pedagogic Studies(CPS)	-	43	-	1	-	2	-	1	-	1	-	5
3.	Disability Specialization (visual impairment)	5	-	1	-	-	-	1	-	3	-	5	-
4.	Cross Disability and Inclusion	2	-	-	-	1	-	-	-	1	-	2	-
3	Enhancing Professional Capacities(EPC)	1	2	1	-	-	1	-	-	-	1	1	2
	Total	8	50	2	4	1	5	1	1	4	3	8	12

DA- Disability Area

NDA-Non-Disability Area

SEMESTER – I**No of Curriculum Transaction Days: 100 days or 600 hours****No. of Credits: (a) Theory - 18 credits @ 17hrs/credit = 306 hours****(In the practicum, 3.5 credits (120 hours) are assigned for tasks and assignments that run through the courses PE1, 2, 3a, C12 & CPS 2a****: (b) Practicum (School Internship for 2 weeks) – 2.1 credits @ 34hrs = 72 hours**

course Code	Title of the Course	Credits	Allotment of Hours	Maximum Marks			
				Internal	External	Total	Practicum/Field Work-Tasks & Assignments
Perspectives in Education (PE)							
PE1	Childhood and Growing up as a Learner	2	34	20	30	50	25
PE2	Contemporary India and Education	4	68	40	60	100	25
PE3a	Learning and Teaching - Part – I	2	34	20	30	50	25
Disability Specialization(C)							
C12	Identification of Children with Visual Impairment and Assessment of Needs	4	68	40	60	100	25
Curriculum and Pedagogic Studies (CPS)							
CPS 2a	Pedagogy of a School Subject-Part I (Major Based) Tamil/English/Mathematics/ Physical Science/Biological Science/ Elements of Economics/ Computer Science/ History/ Geography/ Commerce and Accountancy/ Home Science.	4	68	40	60	100	25
Enhancing Professional Capacities (EPC)							
EPC 2	Physical Education, Adapted Physical Education and Yoga	2	34	50	Nil	50	Nil
	Total	18	306	210	240	450	125
	Engagement with the field School Internship (2Weeks) 1.General & Inclusive (1 Week) 2.Special & other than Special (1 Week) b. Tasks and Assignments	2	72				

Components of Practicum: 320 marks

SEMESTER I		
1.	Observation of 5 classes of Level I(2) & Level II(3) mentor teachers in their respective UG/PG major subjects, based on which admission is given and Submission of Reflective Journal - General School (5)	10
2.	Observation of 5 classes of Level I(2) & Level II(3) mentor teachers in their respective UG/PG major subjects, based on which admission is given and Submission of Reflective Journal - Inclusive School(5)	10
3.	Observation of 5 classes of Level I (Other than the Special School) and Level II (Special School) mentor teachers in their respective UG/PG major subjects, based on which admission is given and Submission of Reflective Journal	20
4.	Observation and Submission of Reflective Journal on Demonstration of Level I subjects by Subject Experts from the school (Tamil/English/Mathematics/Physical Science/ Biological Science/Computer Science/Economics/History/Geography/Commerce and Accountancy/Home Science) (General)	20
5.	Observation and Submission of Reflective Journal on Demonstration of Level II subjects by Subject Experts from the school (Tamil/English/Mathematics/Physical Science/ Biological Science/Computer Science/Economics/History/Geography/Commerce and Accountancy/Home Science) (General)	20
6.	Observation and Submission of Reflective Journal on Demonstration of Level I & Level II subjects by Teacher Educators.(General School)	20
7.	Observation and Submission of Reflective Journal on Demonstration of Level & Level II subjects by Subject Experts from the Inclusive school (Special School)	20
8.	Observation and Submission of Reflective Journal on Demonstration of Level I & Level II subjects by Teacher Educators (General School)	20
9.	Mini Teaching Record related to Major disciplines –5Skills(General School)	50
10.	Mini Teaching Record related to Disability Specialization-3 Skills (Special)	30
11.	Psychology Experiments Record - Part I	30
12.	Physical Education, Adapted Physical Education and Yoga Record	25
E1- PRACTICAL ACTIVITIES FOR DISABILITY AREA		
13.	E1 Functional Vision Assessment	20
14.	E1 Learning of Braille – Introduction to Bharati/ Hindi or Regional Braille	25
TOTAL		320

THEORY	PRACTICUM	TOTAL
450	320	770

Note: Practical Examination will be held for 320 marks on completion of all the activities falling under Practicum components of courses PE1, PE 2, PE 3a, CPS 2a, C12, and School Internship. Each candidate needs to secure 50% of marks in each practicum activity.

SEMESTER – II**No of Curriculum Transaction Days: 100 or 600 hours****No. of Credits: (a) Theory - 16 credits @ 17hrs/credit = 272 hours***(In the practicum, 5 credits (170 hours) are assigned for tasks and assignments that run through the courses PE 3b, PE4, CPS2b, CPS 3, & B1***: (b) Practicum (School Internship for 2 weeks) - 2 credits @ 34hrs/credit = 72 hours**

Course Code	Title of the Course	Credits	Allotment of Hours	Maximum Marks			
				Internal	External	Total	Practicum/Field Work-Tasks & Assignments
Perspectives in Education (PE)							
PE 3b	Learning and Teaching - Part - II	2	34	20	30	50	25
PE4	Psychological Perspectives of Learners	2	34	20	30	50	25
Curriculum and Pedagogic Studies (CPS)							
CPS 2b	Pedagogy of a School Subject-Part I (Major Based) Tamil/English/Mathematics/ Physical Science/Biological Science/ Elements of Economics/ Computer Science/ History/ Geography/ Commerce and Accountancy/ Home Science.	4	68	40	60	100	25
CPS3	Evaluation of Learners	4	68	40	60	100	25
Cross disability and Inclusion(B)							
B 1	Introduction to Persons with Disabilities	2	34	20	30	50	25
Enhancing Professional Capacities (EPC)							
EPC 3	Reading and Reflecting on Texts	2	34	50	Nil	50	Nil
	Total	16	272	190	210	400	125
	Engagement with the field a. School Internship (2Weeks) 1.General & Inclusive-(1 Week) 2.Special School -(1 Week) b. Tasks and Assignments	2	72				

Components for Internship based Activities: 360 marks

SEMESTER II		
1	Participation in a 5 day Citizenship Training Camp and submission of camp record(General)	50
2	Projects on Identifying and Analyzing the Guidance Needs of Learners (General)	25
3	Preparation of 5 Teaching and Learning Materials (TLM) based on Level I Syllabus and 5 Teaching and Learning Materials (TLM) based on Level II pertaining to their major subjects, and submission of same to Co-operative Schools after passing the first year practical examinations.(General)	40
4	Preparation of 5 Teaching and Learning Materials (TLM) based on Level I Syllabus and 5 Teaching and Learning Materials (TLM) based on Level II pertaining to their major subjects, and submission of same to Co-operative Schools after passing the first year practical examinations. (Special)	40
5	Development of Question Bank in the School Content (Major Based) -Level II (General)	40
6	Reflective Record on Continuous and Comprehensive Evaluation (CCE) practiced in the co-operative schools at Level I and Level II based on their major subjects. (General)	25
7	Lesson planning focusing on adaptation, evaluation in special and inclusive school (major disability).- (Special School)	40
8	Psychology Experiments Record - Part II	30
E1- PRACTICAL ACTIVITIES FOR DISABILITY AREA		
9.	E1 Learning of Braille- A)Bharati hindi/Regional Braille B) Braille:Mathematical sign for :Numeric indicator, basic operation ,simple fractions and brackets	20
10.	C) Braille Competency Assessment	10
11.	E1 Learning the use of Assistive Devices- Taylor frame, Abacus :Basics operations using arithmetic and algebraic types	40
TOTAL		360

THEORY	PRACTICUM	TOTAL
400	360	760

Note: Practical Examination will be held for 360 marks on completion of all the activities falling under Practicum components of courses PE 3b, PE 4, CPS 2b, CPS3, B1 and School Internship. Each candidate need to secure 50% of marks in each practicum activity.

SEMESTER – III**No of Curriculum Transaction Days: 100 or 600 hours****No. of Credits: (a) Theory - 6 credits @ 17hrs/credit = 102hours****(In the practicum, 3.5 credit (120 hours) is assigned for tasks and assignments for the Course General – CPS 2c (17 hours)****Special – C13 (103 hours)****: (b) Practicum (School Internship for 13 weeks) – 13.2 credits @ 34hrs/credit = 450 hours**

Course Code	Title of the Course	Credits	Allotment of Hours	Maximum Marks			
				Internal	External	Total	Practicum/Field Work-Tasks & Assignments
Curriculum and Pedagogic Studies (CPS)							
CPS 2c	Pedagogy of a School Subject-Part I (Major Based) Tamil/English/Mathematics/ Physical Science/Biological Science/ Elements of Economics/ Computer Science/ History/ Geography/ Commerce and Accountancy/ Home Science.	2	34	20	30	50	25
Disability Specialization(C)							
C13	C13 -Curriculum, Adaptation and Strategies for Teaching Expanded Curriculum	4	68	40	60	100	25
	Total	6	102	60	90	150	50
	Engagement with the field a.School Internship 1.a.General & b. Inclusive - (6 Weeks) 2.Special – (4 Weeks) 3.other than Special School – (3 Weeks) 13 Weeks b.Tasks and Assignments	13.2	450	1(a&b) 150 2&3- 150		300	

Components for Internship based Activities: 695 marks

1	Observation and Submission of Reflective Journal on observation of 10 Peer teaching classes at Level I pertaining to the major subjects of the student – teachers(General)	20
2	Observation and Submission of Reflective Journal on observation of 10 Peer teaching classes at Level II pertaining to the major subjects of the student – teachers(General)	20
3	Reflective Journal on Co-teaching with mentor teachers(General) a) Reflections on Co-teaching with Mentor Teachers : Level - I - 15 marks (5 sessions related to the major subjects of the student teachers) b)Reflections on Co-teaching with Mentor Teachers : Level - II - 15 marks (5 sessions related to the major subjects of the student teachers)	30
4	Classroom Observation of all Subjects at different level for other than Major disabilities (5) and Inclusive School (5)	10
5	Lesson Plan Records(General) a) Lesson Plan Record : Level - I - 15 marks (10 Lesson Plans pertaining to the major subjects of the student teachers) b) Lesson Plan Record : Level - II - 15marks (10 Lesson Plans pertaining to the major subjects of the student teachers)	30
6	Lesson Plan Records (Special) a) Lesson Plan Record : Level - I - 20 marks (20 Lesson Plans pertaining to the Major Disability of the student teachers) b) Lesson Plan Record : Level - II - 20 marks (15 Lesson Plans pertaining to the Inclusive School of the student teachers) c) b) Lesson Plan Record : Level - II – 10 marks (10 Lesson Plans pertaining to the Other than Major Disability of the student teachers)	50
7	Preparation and Use of TLM a) Preparation and use of 15 TLM :Level - I & Level – II (General)	15
8	Preparation and use of 45 TLM : Special School (15),Inclusive School (15) &Other than major Disability (15)	45
9	Power Point Presentation (PPT) (Soft and Hard copy are to be submitted at the time of Practical Examination) Preparation and use of PPT for Level – I and Level – II Teaching and Learning Materials (TLM) in their respective major subjects. (General)	10
9	Power Point Presentation (PPT) (Soft and Hard copy are to be submitted at the time of Practical Examination) Preparation and use of PPT for Teaching and Learning Materials (TLM) in their respective major subjects. (Special School, Inclusive & other than Special School)-	35
10	Assessment of Teaching Competency General -Level – I& Level - II	100
11	Assessment of Teaching Competency Special – (Major Disability, Inclusive and Other than Major Disability)	200
12	Individual case study record(20 marks) and Institutional case study record (20 marks)- (Special School)	40
13	Action Research Report (Each student - teacher has to identify one unique problem for action research, which should be different from other student - teachers)	20

14	Reflective Journal on School Internship(General)	15
15	Reflective Journal on School Internship(Special)	15
	E1- PRACTICAL ACTIVITIES FOR DISABILITY AREA	
16	E1 Preparing Individualized teaching lesson IEP (10) (Special School, Other than Special School and Inclusive School)	40
	TOTAL	695

THEORY	PRACTICUM	TOTAL
150	695	845

Note: Practical Examination will be held for 695 marks on completion of all the activities falling under Practicum components of course CPS 2c, C14 and School Internship. Each candidate need to secure 50% of marks in each practicum activity.

SEMESTER – IV**No of Curriculum Transaction Days : 103 or 618 hours****No. of Credits : (a) Theory - 20 credits @ 17hrs/credit = 340 hours*****(In the practicum ,7 credits(238 hours) are assigned for tasks and assignments that run through the courses PE5, C14, C15,C16, CPS 2d and B2*****: (b) Practicum (School Internship for 1 week) - 1 credit @ 34hrs/credit = 36 hours**

Course Code	Title of the Course	Credits	Allotment of Hours	Maximum Marks			
				Internal	External	Total	Practicum/Field Work-Tasks & Assignments
Perspectives in Education (PE)							
PE 5	Knowledge and Curriculum	4	68	40	60	100	25
Disability Specialization (C)							
C14	Intervention and Teaching Strategies	4	68	40	60	100	25
C15	Technology and Education of the Visually Impaired	4	68	40	60	100	25
C16	Psycho Social and Family Issues	2	34	20	30	50	25
Curriculum and Pedagogic Studies (CPS)							
CPS 2d	Pedagogy of a School Subject-Part I (Major Based) Tamil/English/Mathematics/ Physical Science/Biological Science/ Elements of Economics/ Computer Science/ History/ Geography/ Commerce and Accountancy/ Home Science.	2	34	20	30	50	25
Cross Disability and Inclusion (B)							
B 2	Inclusive Education and Orientation & Mobility	2	34	20	30	50	25
Enhancing Professional Capabilities							
EPC 5	Drama and Art in Education	2	34	50	-	50	-
Total		20	340	230	270	500	150
Engagement with the field		1	36				
a. School Internship (1Week – Special School)							
b. Tasks and Assignments							

Components for Internship based Activities: 305marks

1.	Report on Organization of Non- scholastic activities- (General) (Any 2 activities such as Exhibition, Celebration of Important Days, Festivals, Role Play, Dramatization ,Quiz, School Assembly, Awareness Programmes, Rally, etc. in the Co-operative Schools (4* 5= 20 marks)	10
2.	Report on Organization of Non- scholastic activities – (Special) (Any 2 activities such as Exhibition, Celebration of Important Days, Festivals, Role Play, Dramatization ,Quiz, School Assembly, Awareness Programmes, Rally, etc. in the Co-operative Schools (4* 5= 20 marks)	10
3	Test and Measurement Record - Level II(General) (Based on the scores of Achievement Test conducted by the student - teachers in their major Subjects during their internship period)	40
4	Module Preparation(Special) Preparation and use of module for any unit pertaining to their major subjects at Level – II	40
5	Website Analysis Report - Level - II(General) (Identifying and Downloading 2 different web based materials on the same topic related to the major subjects of the student - teachers and preparing a comparative detailed analysis on their salient features)	20
6	Work Experience Record(General) (Preparation of socially useful productive materials like pickles, phenol, soap powder, candle, files, office covers, etc.,)	20
7	Report on maintenance of Records and Registers in Schools(Special) A detailed report on the maintenance of various records and registers in the Co-operative Schools)	20
8	Field Trip Record (General)	10
9	Field Trip Record (Special)	10
10	Environment Education Record (Student teachers need to assess and write a detailed report on the environmental context of the co-operative schools) (General)	15
11	Drama and Art Record (Any 3 activities of student teachers with an emphasize on self- realization through Drama, Puppet show, Dance, Music, Song, Painting, Drawing, Clay modeling, Rangoli, Paper Cutting, Paper folding, Visits to places of importance of Art & Architecture, Exhibitions, Cultural centers, Fair, Art Gallery, etc.,)	10
12	Drama and Art Record – Special School (Any 3 activities of student teachers with an emphasize on self- realization through Drama, Puppet show, Dance, Music, Song, Painting, Drawing, Clay modeling, Handmade looms, Paper Cutting, Paper folding, Visits to places of importance of Vocational Training Centre for Challenged Persons)	20
	E1- PRACTICAL ACTIVITIES FOR DISABILITY AREA	
13	E1 Orientation and Mobility Training a) Sighted Guide Technique b) Pre Cane skills c) Cane technique d) Direction finding technique	30

14	Teaching lessons on O&M and ADL VI & VIMD Individualized Teaching lessons on orientation and mobility and activities of daily living	30
15	Assistive technology Album for Disabilities	20
	Total	305

THEORY	PRACTICUM	TOTAL
500	305	805

Note: Practical Examination will be held for 305 marks on completion of all the activities falling under Practicum components of courses *PE5, C14, C15, C16, CPS2d, B2* and School Internship. Each candidate needs to secure 50% of marks in each practicum activity.

SCHEME FOR FOUR SEMESTERS

Semester	Credits			Hrs of Transaction			Marks for Theory	Marks for Practicum	Total Marks
	T	P	E	T	P	E			
I	18	3.5	2	306	120	72	450	320	770
II	16	5	2	272	170	72	400	360	760
III	6	3.5	13.2	102	120	450	150	695	845
IV	20	7	1	340	238	36	500	305	805
Total	60	19	18.2	1020	648	630	1500	1680	3180

SCHEME OF EVALUATION (FORMATIVE) FOR ALL THE PERSPECTIVE COURSES AND PEDAGOGY COURSES***Components of Continuous Internal Assessment for 40 mark (Formative):***

- Seminar – 5 + Theory Assignment – 5
- Task and Assignment – 10
- Test - 20 (Average of 2 Cycle Test)
- Internal Examinations – 40 + 60 (Revision Examination)

Components of Continuous Internal Assessment for 20 mark (Formative):

- Seminar – 5 + Task and Assignment – 5
- Test - 10 (Average of 2 Cycle Test)
- Internal Examinations - 20 + 30 (Revision Examinations)

Continuous Internal Assessment for 50 marks will be assessed for the Enhancing Professional Capacities Courses (EPC) as follows:

<i>S.No</i>	<i>Activities</i>	<i>Marks Alloted</i>
<i>EPC2 Physical Education and Yoga</i>		
<i>1</i>	Performance in Calisthenics or Light Apparatus	05 marks
<i>2</i>	Performance in Marching	05 marks
<i>3</i>	Assessment of any one organized games	10 marks
<i>4</i>	Skill Performance in Athletics	10 marks
<i>5</i>	Performance in Yogasana	10 marks
<i>6.</i>	Adapted Physical Education – Visual Impairment	10 marks
Total		50 marks
<i>EPC3 Reading and Reflecting on Text</i>		
<i>1</i>	Review of major based State Board School Text book	15 marks
<i>2</i>	Review of an autobiography	15 marks
<i>3</i>	Review of a reference book related to core courses	10 marks
<i>4</i>	Review of any one Commission reports	10 marks
Total		50 marks

<i>EPC5 Drama and Art in Education</i>		
<i>1</i>	Performance of group dances	10 marks
<i>2</i>	Visiting a museum or art gallery and developing a reflective journal	10 marks
<i>3</i>	Craft work on origami	10 marks
<i>4</i>	Painting performance	10 marks
<i>5</i>	Performance in stage drama	10 marks
	Total	50 marks

Field based Practicum for 25 marks for courses PE1, PE2, PE 3a, PE 3b, PE 4, PE 5, CPS2a-2d, CPS3, C12, C13, C14, C15,C16, B1 & B2 are provided in the respective syllabi.

SCHEME OF EVALUATION (SUMMATIVE)***Question Paper Pattern for End Semester Examination for 60 marks (Summative):***

Section	Type of Question	No. of Questions	Marks allotted for each question	Total Marks
A	Objective Type (Multiple Choice Question)	10	1	10
B	Very Short Answer Type (Maximum of 50 words or half a page for each question)	5 out of 7	2	10
C	Short Answer (Maximum of 200 words or two pages for each question)	4 out of 6	5	20
D	Essay type (Maximum of 400 words or four pages for each question)	2 out of 4	10	20
Maximum Marks				60

Passing Minimum marks: 30 in each course.

Maximum Time: 3 hours

Question Paper Pattern for End Semester Examination for 30 marks(Summative):

Section	Type of Question	No. of Questions	Marks allotted for each question	Total Marks
A	Objective Type (Multiple Choice Question)	4	1	4
B	Very Short Answer Type (Maximum of 50 words or half a page for each question)	3 out of 5	2	6
C	Short Answer (Maximum of 200 words or two pages for each question)	2 out of 3	5	10
D	Essay type (Maximum of 400 words or four pages for each question)	1 out of 2	10	10
Maximum Marks				30

Passing Minimum marks: 15 in each course.

Maximum Time: 1 & 1/2 hours

Attendance:

Each candidate whose admission is approved by Tamilnadu Teachers Education University and Rehabilitation Council of India should gain Attendance Norms of Tamil Nadu Teachers Education University for B.Ed. i.e. 85% attendance in general or 75% attendance on medical grounds and 90 % of attendance during School Internship in every semester. For theory course students who could not comply with the above stated norms in any semester be permitted to re-do the B.Ed.Special Education Programme for the particular semester provided that the annual intake of students strength should not exceed the strength of 200 as sanctioned by the NCTE (within the course duration of 3 years as per the NCTE norms) from the 2018-2019 Batch of students onwards.

Scheme of Examination:

There shall be a written examination at the end of each semester.

Appearance for the Examination:

Each candidate whose admission is approved by Tamilnadu Teachers Education University should apply for the practical examination and written examinations in the first attempt itself. Candidates who have failed to satisfy the minimum attendance norms of Tamilnadu Teachers Education University will not be permitted to appear for the written examination. Such candidates' appearance in the practical examination will stand cancelled automatically. However, the basis of permitting to appear for the examination shall be in accordance with the regulations of Tamilnadu Teachers Education University, in force from time to time.

Valuation:

There shall be single valuation of the answer scripts. In case of practical examination, marks approved by the internal and external examiners shall be taken as the final award.

Passing minimum for written examination:

Each candidate should apply for the written examination in the first attempt. A candidate shall be declared to have passed the Written Examination only if she secures not less than 50% in each course in internal assessment, internal papers and end semester examination. All other candidates shall be deemed to have failed in the Written Examination. A candidate who fails in one or more courses in the Written Examination shall be permitted to appear again only for those courses in which she fails.

Reappearance for Written Examination

Each unsuccessful candidate shall be permitted to reappear for those papers in which she has failed within three subsequent semesters but the candidate who has failed in the fourth semester is permitted to reappear in the subsequent two semesters only.

Practical Examination

A Panel consisting of Fourteen Members (One Convener, Ten Externals and Three Internal Members) duly approved by the Board of Studies ,Academic Council and Governing Body of the College will examine the candidates in teaching competency and all practical related activities related to papers under 'Perspectives in Education' and 'Curriculum and Pedagogic Courses.

Passing Minimum for Practicum Components

Each candidate should apply for the practical examination in the first attempt. Candidates who have secured not less than 50% in each of the practical activities for which weightage is given shall be deemed to have passed in the practical examination. Others will be treated as unsuccessful candidates in the practical examination.

All the records related to the Practical Component should be made available to the duly appointed Practical Examination Board at the time of Practical Examination and whose decision on the marks to be awarded shall be final.

Reappearance for Practicum Examination

Candidates who have not appeared or failed in the Practical Examinations is permitted to reappear within three subsequent semesters but the candidate who has failed in the Practical Examination related to fourth semester is permitted to reappear in the subsequent two semesters only.

Re-totaling or Revaluation

Candidates can apply for getting Xerox copies of their answer scripts either re-totaling or revaluation within 10 days after the publication of results by paying necessary fee prescribed by the University.

Classification of Successful Candidates

A candidate shall be awarded the B.Ed.Special Education (Visual Impairment) degree if she has passed both in the theory components and the practicum components.

Successful candidates shall be classified as specified hereunder by taking into account of their secured marks in Theory and Practical Examination separately.

CLASSIFICATION***Percentage of Marks*** ***Classification***

50 to 59 Second Class

60 to 74 First Class

75 and Above Distinction

Theory	Practical	Over all
I Class	I Class	I Class
II Class	I Class	II Class
I Class	II Class	II Class
Distinction	I Class	I Class
I Class	Distinction	I Class
Distinction	Distinction	Distinction

B.Ed.Spl.Edn(VI)
SYLLABUS
2020 - 2021

SEMESTER - I

PERSPECTIVES IN EDUCATION (PE)**SEMESTER - I****PE1 CHILDHOOD AND GROWING UP AS A LEARNER****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- Acquaint with knowledge of developmental stages from prenatal to old age;
- Reflect on various theories propounded by psychologist;
- Acquire knowledge about various methods to assess development.

Unit I: Growth and development

Characteristics of development- Process of growth and development - Factors affecting development: Heredity, Environment – Life span development - Developmental task: Meaning, Factors that hinder in acquisition of ideal developmental task- Stages of development with respect to Physical, Psychosocial, Cognitive, Linguistic, Emotional and Moral. Prenatal development, Infancy, Early childhood (Preschool period) - Middle childhood- Adolescent- Young adulthood- Middle age- Old age.

Unit II: Theoretical Perspectives of development

Approaches to theories of development – Social Cognition- Vygotsky social formation of mind. Constructivist: Piaget's theory of cognition development. Moral: Kohlberg's theory of moral development. Psycho sexual: Freud theory of development- Psycho social: Erickson's theory- merits and demerits.

Unit III: Methods, approaches to measure development

Concept of method and approaches-Methods of collecting scientific data: Interview - Questionnaire- Case studies- Observation- participative and non-participative- Clinical method- Introspection- its merits and demerits. Approaches: Cross sectional design- Longitudinal design - its merits and demerits.

Suggested references:

- ❖ Berk, Laura E. (2010). *Child Development*. New Delhi: PHI Learning Private Limited.
- ❖ Chaube, S.P. (2011). *Developmental Psychology*. New Delhi: Neelkamal Publishing Pvt. Ltd.
- ❖ Dinkmeyer, Don C. (1965). *Child Development: The Emerging Self*. New Delhi: Prentice Hall of India Pvt. Limited.
- ❖ Dumville, Benjamin. (2001). *Child Psychology*. New Delhi: Sports Publications.
- ❖ Hurlock, Elizabeth B. (2005). *Developmental Psychology – A life span approach*. New Delhi: Tata McGraw Hill Publishing Company Limited.
- ❖ Mahmud, Jafar. (2011). *Developmental Psychology*. New Delhi: A.P.H. Publishing Corporation.
- ❖ Manivannan, M. (2011). *Psychology of Learning and Human Development*. New Delhi: Neelkamal Publications Pvt. Limited.
- ❖ Murthu, K.S. (2008). *Child Psychology: Anti social behaviour*. New Delhi: Cyber Tech Publications.
- ❖ Schaffer, Rudolph H. (2004). *Child Psychology*. New Delhi: Neelkamal Publications Pvt. Limited.
- ❖ நாகராஜன், கி மற்றும் தேவ. சீத்தாராமன் .(2014): உளவியல் நோக்கில் கற்றலும் மனித மேம்பாடும். சென்னை : ஸ்ரீராம் பதிப்பகம்.
- ❖ நாகராஜன், கி. (2008): கல்வி உளவியல் . சென்னை : இராம் பதிப்பகம்.

SEMESTER - I**PE 2 CONTEMPORARY INDIA AND EDUCATION****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- integrate the problems and solutions of Contemporary Indian Society;
- recall the Educational provisions in the Indian Constitution;
- recognize the special recommendations of the Indian Education Commissions in pre and post independence India;
- summarize the various programmes of quality improvement for Education;
- recognize the various schools of Education;
- classify the contributions of Indian Philosophers.

Unit I: Contemporary Indian Society and Education

Education: meaning, concept, importance and nature- Problems and solutions of Contemporary Indian society (in the context of religion, language, race, social stratification) - HEERA (Higher Education Empowerment Regulation Agency), RCI, RUSA (Rashtriya Uchchatar Shiksha Abiyan) RMSA National Higher Education.

Unit II: Indian Constitution and Education

The place of Education in the Indian Constitution- Right to Information Act- National Curriculum Framework (2005)-National Curriculum Framework for Teacher Education (2009) - The role of a teacher with reference to fundamental rights and duties of the citizens.

Unit III- Education in Pre and Post Independence India

Educational reforms in pre-independence period- Macaulay's Minutes, Wood's Despatch, Hunter Commission, Sargent Report, Basic Education.

Education in post- Independence period: Mudaliar Commission (1952), Education Commission (1964-66), NPE (1968), NPE(1986), Ramamurthy Review Committee (1992), Yashpal Committee (1993-2009), J.S. Varma Committee(2012).

Unit IV: Various Programmes of Quality Improvement for Education:

Sarva Shiksha Abhiyan- Operation Black Board- Open Schools and Universities- National Literacy Mission- Integrated Child Development Services- Transit Schools-Education of Women and Under privileged Sections of Society - Swach Bharath – Tree Plantation.

Unit V: Schools of Education

Naturalism- Existentialism- Idealism- Pragmatism- characteristics, aims of Education, role of the teacher, curriculum, methods of teaching employed.

Unit VI: Indian Philosophers

Mahatma Gandhi -Rabindranath Tagore -Sri Aurobindo -Swami Vivekananda - Krishnamurthy: their ideas and contribution to the field of Education.

Suggested references:

- ❖ Annual Report 2008-2009, National Council for Teacher Education. (NCTE), New Delhi.
- ❖ Batra, L. (2008). *Deconstructing the World Class City*. Seminar, No. 582. (Special Economic Zones Issue).
- ❖ Batra, Poonam. (2005). *Voice and Agency of Teachers: The Missing Link in the National Curriculum Framework. 2005*, EPW, October 1-7, pp. 4353.
- ❖ Chaube, S.P. (2013). *Problems of Indian Education*. Agra: Shri Vinod PustakMandir.
- ❖ Curriculum Framework for Teacher Education, draft 2006. New Delhi: National Council for Teacher Education (NCTE).
- ❖ Deshpande, S. (2004). *Contemporary India: A Sociological View*. New Delhi: Penguin Chapter 5: Caste inequalities in India Today.
- ❖ Glenn, L. (1970). *Philosophy and Education*. London: Macmillan Publication.
- ❖ Jha, S. (2002). *Secularism in the Constituent Assembly Debates. 1946-1950*. Economic and Political Weekly, 27, 3175-3180.

- ❖ Kapila, U. (2009). *Indian Economy since Independence*. New Delhi: Academic Foundation. Chapter 1: Indian Economy at independence.
- ❖ Qureshi, Muniruddin. (2005). *Social Aspects of Education*. New Delhi: Anmol publications pvt. Ltd.
- ❖ Rao, Digumarti Bhaskara (2013). *Right to Education*. New Delhi: Neelkamal publications pvt. Ltd.
- ❖ Singaravelu, G. (2012). *Education in the Emerging Indian Society*. New Delhi: Neelkamal publications pvt. Ltd.
- ❖ Swaroop Sarena, N.R., & Chaturvedi, Shikha. (2012). *Teacher in Emerging Indian Society*. Meerut: Lall Book Depot.
- ❖ Working Group Report on Elementary Education and Literacy, XI Five Year Plan, 2007- 12. New Delhi: Planning Commission of India.
- ❖ செந்தில் குமார், சு. (2010), வளரும் இந்திய சமுதாயத்தில் கல்வி. நாமக்கல் : செந்தில் பதிப்பகம்
- ❖ நாகராஜன், கி. (நவயட). (2014). மலரும் இந்திய சமுதாயத்தில் கல்வி. சென்னை : ஸ்ரீராம் பதிப்பகம்.
- ❖ சந்தானம், எஸ். (2003), வளரும் இந்தியாவில் கல்வி ரூ கல்வி மேலாண்மை. சென்னை : சாந்தா பப்ளிஷர்ஸ்

SEMESTER - I**PE 3a LEARNING AND TEACHING Part - I****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- recognise the concept of learning and teaching;
- acquire knowledge about the task of teaching;
- accept and understand the importance of modification in teachers' behaviour;

Unit I: Concept of Learning and Teaching

Concept of Teaching – Meaning and definitions of the term teaching; Nature and characteristics of teaching; the relation of teaching with other similar concepts; Analytical concept of teaching. Concept of Learning – Meaning and definition of the term learning, Relationship between teaching and learning.

Unit II: Task of Teaching and Skills Associated with Teaching

Meaning and definition of teaching task- variables involved with teaching task- Phases and Operations of teaching task-The pre-active phase, interactive phase and post-active phase Levels of teaching task- Memory level of teaching, understanding level and reflective level of teaching and skills associated involved in the three phases of teaching.

Unit III: Modification in Teachers' Behaviour

Modification in Teacher' Behaviour – Introduction and meaning, simulated teaching, t- group training, Interaction Analysis, Teacher Evaluation.

Suggested references:

- ❖ Bob Burkill., & Ray Eaton. (2011). *Developing Teaching and Learning*. London: Cambridge University Press.
- ❖ Derek, Rowntree. (1986). *Teaching through self-instruction*. London: Kogan page.
- ❖ Jaya Pillai, K. (1985). *Effective teaching*. Madurai: publishing division, Madurai Kamarajar University.
- ❖ Kulkarni,S.S.(1986). *Introduction to Educational technology*. Bombay: Oxford and IBH Publishing Co.
- ❖ Kumaraswamy Pillai, K. (1980). *Curriculum, Teaching and Evaluation*. Annamalai Nagar: Sivakami Printers.
- ❖ Mangal,S.K.(1986). *Fundamentals of Educational Technology*. Ludhiana: Prakash Brothers.
- ❖ NCTE. (1998). *Competency Based and Commitment Oriented Teacher Education for Quality School Education*. New Delhi: NCTE Initiation Document 98/21.
- ❖ Ramesh Varma., & Suresh Sharma. (1998). *Modern Trends in Teaching Technology*. New Delhi: Anmol Publications.
- ❖ Sampath, K. (1981). *Introduction to Educational Technology*. New Delhi: Sterling Publishing Pvt. Ltd.
- ❖ Sharma Prem Latha. (2006). *Learning Readiness*. New Delhi: Roshan Offset Printers.
- ❖ Sharma, Motilal. (1985). *System Approach: Its Application in Education*. Bombay: Himalaya Publishing House.
- ❖ Sharma, R.A. (1991). *Technology of Teaching*. Meerut: R.Lall Book Depot.
- ❖ Sharma,R.A. (1982). *Programmed Instruction and Instructional Technology*. Meerut: International Publishing House.
- ❖ Siddiqui, M.H., & Khan, M.S. (1991). *Models of Teaching Theory and Research*. New Delhi: Ashish Publishing House.
- ❖ Thomas, Mathew. (2009). *Effective Teaching*. New Delhi: S. Chand and Company Ltd.

CURRICULUM AND PEDAGOGIC STUDIES (CPS)**SEMESTER - I****CPS 2a - Part I - PEDAGOGY OF TAMIL****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****தமிழ் கற்பிக்கும் முறைகள் - பகுதி 1****நோக்கங்கள்****இப்பாடப்பொருளைக் கற்றபின்பு மாணவ-ஆசிரியர்:**

- தமிழ்மொழிக் கல்வியின் தோற்றம், வளர்ச்சி பற்றிக் கூறுதல்;
- தமிழ்மொழி கற்பித்தலின் நோக்கங்களையும் குறிக்கோள்களையும் விவரித்தல்;
- தமிழ்மொழி கற்பித்தலுக்கான பயிற்று முறைகளை கைக்கொள்ளுதல்;
- நுண்ணிலைக் கற்பித்தல் திறன்களில் பாட நிகழ்வுகளை எழுதிப் பயிற்சி பெறுதல்;
- தமிழ்மொழிக் கற்பித்தலில் நுட்பக்கூறுகளின் பங்கினை பயன்படுத்துதல்;
- தமிழ்மொழி கற்பித்தலுக்கான முறைகளையும் அணுகுமுறைகளையும் பின்பற்றுதல்;

அலகு 1: தமிழ்மொழியின் தோற்றம், வளர்ச்சி, தனித்தன்மை

தமிழ்மொழி: மொழியின் பண்புகள் - மொழியின் தோற்றம் - மொழித் தோற்றக் கொள்கைகள் - தமிழ் மொழியின் கிளை மொழிக் கொள்கைகள் - தமிழ் மொழியின் வளர்ச்சி - தமிழ் மொழியின் வரலாறு - பேச்சு மொழியும் எழுத்து மொழியும் - தமிழ் எழுத்துச் சீர்திருத்த வரலாறு - தமிழ் மொழியின் தனித்தன்மைகள்.

அலகு 2: தமிழ்மொழி கற்பித்தலின் நோக்கங்களும் குறிக்கோள்களும்

தமிழ்மொழிக் கல்வியின் நோக்கங்கள்: எண்ணத்தை வெளியிடும் கருவி - பட்டறிவை எடுத்தியம்பல் - அறிவுகளைஞ்சிய வாயில் - அடிப்படை மொழித்திறன்களை வளர்த்தல் (கேட்டல், பேசுதல், படித்தல், எழுதுதல்) - இலக்கிய இன்பம் - படைப்பாற்றல் - சொற்களைஞ்சியத்தைப் பெருக்குதல் - சமூகப் பண்பாட்டு வளர்ச்சி - வாழ்க்கைத் திறன்களைப் பெறுதல் - விழுமப்பதிவு. தமிழ்மொழிக் கல்வியின் குறிக்கோள்கள்: செய்யுள், உரைநடை, இலக்கணம், துணைப்பாடம், கட்டுரை, கடிதம் கற்பித்தல்.

அலகு 3: பயிற்று முறைகள்:

பண்டைய முறைகள்: சொற்பொழிவு முறை, உரையாடல் முறை, தடைவிடை முறை, வினாவிடை முறை, பன்முகப் பயிற்சி முறை, விதிவரு முறை, விதிவிளக்கு முறை, காரண காரியம் முறை, நெட்டுரு முறை. *தற்கால முறைகள்:* விரிவுரை முறை, வெளிப்படுத்து முறைகள், பங்கேற்பு முறைகள், விளையாட்டு முறை, நடிப்பு முறை, தனிப்பயிற்சி முறை, வகுப்பறைக் கற்பித்தல் முறை, மேற்பார்வை முறை, செயல்திட்ட முறை, ஒப்படைப்பு முறை.

அலகு 4: நுண்ணிலைக் கற்பித்தல்

கல்வி நோக்கங்கள் - பெஞ்சமின் புளும் வகைமை நெறி - ஆண்டர்சன் வகைமை நெறி - நுண்ணிலைக் கற்பித்தல் - ஆலன் ரையான் குறிப்பிடும் சில திறன்கள் - பேராசிரியர் பாசி குறிப்பிடும் திறன்கள் - நுண்ணிலைக் கற்பித்தல் சுழற்சியின் படிநிலைகள் - பயிற்சி பெறும் திறன்களும் விளக்கங்களும் - தொடங்குதல் திறன் - விளக்குதல் திறன் - வினாக்கேட்டல் திறன் - பல்வகைத் தூண்டல்களை பயன்படுத்தும் திறன் - வலுவூட்டிகளை பயன்படுத்தும் திறன் - பாடம் முடிக்கும் திறன் - கரும்பலகை பயன்பாடு - இணைப்புப் பாடங்கள்.

அலகு 5: தமிழ்மொழிக் கற்பித்தலின் நுட்பங்கள்

கற்பித்தல் துணைக்கருவிகள்: கற்பித்தல் துணைக்கருவிகளின் பயனும் இன்றியமையாமையும் - துணைக்கருவிகளின் வகைகள் - காட்சி துணைக்கருவிகள், கேள்வித் துணைக்கருவிகள், காட்சிக் கேள்வித் துணைக்கருவிகள் - எட்கர் டேலின் அனுபவக் கூம்பு - டெசிஸ்டாஸ்கோப் - மொழிபயிற்றாய்வுக்கூடம் - அமைப்பும் செயல்படும் விதமும் - செயற்கைக்கோள் - பல்லாடகத் துணைக்கருவிகள்: கணினி - திரவப்படிக்கைக் காட்சி வீழ்த்தி (LCD) - கணினி வழியின் நழுவங்கள் (PPT) - கணினி துணையுடன் கற்பித்தல் (CAI) - கற்றல் கற்பித்தலுக்கான வலைதளங்களை அடையாளம் காணல் (WWW) - கைபேசி: முகநூல் (Facebook) சுட்டுரை (Twitter) புலனம் (WhatsApp) - தமிழ் மென்னுருக்கள் முதலியன.

அலகு 6: கற்பித்தலின் நவீன முறைகளும் அணுகுமுறைகளும்

ஆசிரியர் கட்டுப்பாட்டில் கற்பித்தல்: பொருள் - வரையறை - கற்பித்தல் முறைகள்: செயல் விளக்க முறை, அணிக் கற்பித்தல் முறை - களப்பயண முறை - கற்போர் கட்டுப்பாட்டில் கற்பித்தல்: தாமாகவே கற்றல் - நிரல்வழிக் கற்றல் - கெல்லர் திட்டம் - கணினி உதவியுடன் கற்றல் - டால்டன் திட்டம். திட்டமிட்டுக் கற்றல் ஹெர்பார்ட்டின் படிநிலைகள் - குழுக்கட்டுப்பாட்டில் கற்பித்தல்: கருத்தரங்கம் - குழு கலந்துரையாடல் - வல்லோர் ஆய்வரங்கம் - செயலரங்கம்.

செயல்முறை ஒப்படைப்பு:

- தற்போதைய சூழலில் தமிழ்மொழிக் கல்வியின் நிலையினை மதிப்பிட்டு அறிக்கை தயாரித்தல்.
- பள்ளி ஆசிரியரின் செய்து காட்டலை உற்றுநோக்கி அறிக்கை தயாரித்தல்.
- கல்லூரி பேராசிரியரின் செய்து காட்டலை உற்றுநோக்கி அறிக்கை தயாரித்தல்.
- பள்ளி ஆசிரியர் மற்றும் மாணவ-ஆசிரியர்களின் வகுப்பறைக் கற்பித்தலை உற்றுநோக்கி அறிக்கையினைத் தயாரித்தல்.
- நுண்ணிலைக் கற்பித்தல் திறன்களில் பாட நிகழ்வுகளை எழுதி பயிற்சி பெறுதல்.
- அடைவுத் தேர்வினை எழுதுதல் (முன்அறிவிப்பு தேர்வு மற்றும் முன்அறிவிப்பில்லா தேர்வு)
- பாடத்தலைப்புகளில் கருத்தரங்கு நடத்துதல்.
- ஒப்படைப்பு எழுதுதல்.

பார்வை நூல்கள்

- ❖ பாக்கியமேரி. (2013). இலக்கண இலக்கிய வரலாறு மொழித்திறன், சென்னை: பாவேந்தன் பதிப்பகம்.
- ❖ இலக்கிய தேர்ச்சி அளவிடல். (2013). மைசூர்: இந்திய மொழிகளின் நடுவண் நிறுவன வெளியீடுகள்.
- ❖ இரத்தினசபாபதி .பி. (2007). செம்மொழிக் கல்வி, சென்னை: சாந்தா பதிப்பகம்.
- ❖ கணபதி வி. (2004). தமிழ் இலக்கண இலக்கிய அறிமுகம், சென்னை: சாந்தா பதிப்பகம்.
- ❖ கணபதி வி. (2007). நற்றமிழ் கற்பிக்கும் முறைகள், சென்னை: சாந்தா பதிப்பகம்.
- ❖ கணபதி வி., மற்றும் பலர். (2013). புடப்பொருள் மற்றும் தமிழ்க் கற்பித்தல், சென்னை: சாந்தா பதிப்பகம்.
- ❖ கலைச்செல்வி வெ. (2012). கல்வியியல் சிறப்புத் தமிழ், நாமக்கல்: சஞ்சீவ் வெளியீடு.
- ❖ கலைச்செல்வி வெ. (2013). தமிழ் பயிற்றல் நுட்பங்கள், நாமக்கல்: சஞ்சீவி வெளியீடு.
- ❖ பரமசிவம் சொ. (2010). நற்றமிழ் இலக்கணம், சென்னை: பட்டுபதிப்பகம்.
- ❖ பிரபாகரன் உ. (2012). தமிழ் கற்பித்தல் முறைகள், கும்பகோணம்: அரவிந்த் பதிப்பகம்.
- ❖ பழனிவேலு ஞா. (2011). செந்தமிழ் கற்பித்தல் (பொதுத்தமிழ்), தஞ்சாவூர்: நதி பதிப்பகம்.
- ❖ சுலோச்சனா ஆ. (2015). இலக்கிய வீச்சு, சென்னை: தமிழகக்கல்வி ஆராய்ச்சி வளர்ச்சி நிறுவனம்.
- ❖ சுப்புரெட்டியர் ந. (2010). தமிழ் பயிற்றும் முறை, சேலம்: அறிவுச்சுடர் பதிப்பகம்.
- ❖ வீரப்பன் பா. (2000). உயர்நிலைத் தமிழ் கற்பித்தல் ஆசிரியர் கையேடு, மைசூர்: (NCERT).
- ❖ வீரப்பன் பா. (2004). தொடக்கநிலைத் தமிழ் கற்பித்தலில் புதிய அணுகுமுறைகள், சென்னை: ஜோதி பதிப்பகம்.
- ❖ வஜ்ரவேலு சு. (2009). அருந்தமிழ் கற்பிக்கும் முறைகள், சென்னை: அம்சா பதிப்பகம்.
- ❖ வேணுகோபால் இ. பா. சாந்தகுமாரி. (2009). பொதுத் தமிழ் கற்பித்தல், சென்னை : சாரதா பதிப்பகம்.

- ❖ வேணுகோபால் இ. பா., சாந்தகுமாரி. (2009). சிறப்புத் தமிழ் கற்பித்தல், சென்னை : சாரதா பதிப்பகம்.
- ❖ வேணுகோபால் இ. பா. (2009). பைந்தமிழ் கற்பிக்கும் முறைகள், சென்னை: சாரதா பதிப்பகம்.
- ❖ அகேசன் செ. (2009) கல்விப் புதுமைகளும் நுட்பவியலும், சென்னை : சாரதா பதிப்பகம்.

வலைதளப்பார்வை

- ❖ <http://mycbseguide.com/blog/continuous-and-comprehensive-evaluation-cce/>
- ❖ www.chennaiLibrary.com
- ❖ www.wikipedia.com

SEMESTER – I**CPS 2a Part I -PEDAGOGY OF ENGLISH****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- explain the role of English in the right perspective and rationale for learning English as a second language;
- state the various aims and objectives involved in teaching and learning of the language;
- adhere the methods and the current trends in the teaching of English;
- use different teaching aids suiting to the needs of the learners;
- use audio-tutorial system, language laboratory and teleconferencing in teaching the language;
- explain the need for individualization of instruction to aid individual differences among the learners
- realize the importance of Mini-Teaching for development of teaching skills.

Unit I: Need and Nature of the language

Role of English language in Indian society- Meaning and Nature of the language- Principles of language learning- Psychology of language learning- Factors affecting language learning- Learning the mother tongue and learning a second language- Teaching of English as a skill subject- Difficulties of teaching English.

Unit II: Aims and Objectives of teaching English

Aims of teaching English: cultural, literary, utilitarian, linguistic and integrative aims- Objectives of teaching English at different school levels: primary, secondary and higher secondary levels- Distinction between educational aims and objectives- Meaning of instructional objectives- Relationship of teaching- learning objectives with general aims and objectives of teaching English- Taxonomy of instructional objectives: Revised Bloom's Taxonomy of Educational Objectives - Writing objectives in behavioural terms.

Unit III: Methods, Approaches, Techniques and Strategies of teaching English

Methods: Grammar Translation Method, Direct Method, Bilingual Method, Text Book Method and Audio-lingual Method- Approaches: Structural approach, situational approach, oral approach, communicative approach and eclectic approach- Techniques: Story telling technique, dramatization technique, role play technique, pair work/group work, question and answer session, debate and language games- Recent trends in teaching of English: Interactive Approach, Communicative Language Teaching, Suggestopaedia, Total Physical Response Approach, The Silent Way and The Natural Approach- Strategies: Team Teaching in English: Origin and growth of team teaching- Objectives of team teaching- Guiding principles of team teaching- Types of team teaching- Organization, Procedure and Steps in team teaching- Advantages, drawbacks and limitations of team teaching- Cooperative Learning: Basic assumptions about Cooperative Learning- Ways of adopting Cooperative Learning as a teaching strategy- Merits and advantages of Cooperative Learning- Obstacles in introducing Cooperative Learning.

Unit IV: Instructional Materials and Resources for teaching of English

Meaning of the term Instructional Material or Teaching Aids- Use and importance of Instructional Material or Teaching Aids in English- Guiding principles for the effective use of audio-visual aids- Classification of audio-visual aids: The first approach, the second modified approach, the technological approach and Edgar Dale's classification- Instructional material or teaching aids employed in teaching of English: SMART Interactive Whiteboard, Black Board or Chalk Board: Black Board, Bulletin Board, Flannel Board, Real Objects and Real Life Situations(Realia), Models, Dioramas, Pictures, Graphs, Charts, Diagrams, Cartoons, Posters, Flash Cards, Slides, Film Strips, Transparencies, Scrap Books, Picture Cards, Picture Sets, Phonic Cards, Letter Cards, Maps, Match-Stick Figures, Reading Cards, Writing Strips, Movable Strips, Cards for Error Correction, Epidiascopes, Projectors, Radio, Tape Recorder, Television, Video Tape/Video Cassette Recorder(VCR), DVD, MP3, VCD, Motion pictures/Movies, Computers, etc - Audio-Tutorial system: Definition-Necessary Ingredients of the Audio-Tutorial Approach-Study Sessions: Independent study session, general assembly session and small assembly session-Advantages and merits of audio-tutorial system- Demerits and limitations of audio-tutorial system- Language laboratory- Need for a Language Laboratory- Types of Language Laboratories and their functioning- Operation of Language

Laboratory- Uses and Applications of Language laboratory -Teleconferencing- Basic Types of Teleconferencing- Educational Advantages of Teleconferencing.

Unit VI: Individualized Instruction in Teaching of English

Importance of Individualized Self Instruction- Types of Individualized Self- Instruction- Learner Controlled Instruction(LCI)- Need and origin- Steps involved in LCI- Advantages of LCI- Limitations of LCI- Programmed learning- Characteristics of programmed learning- Fundamental principles of programmed learning- Styles of programming: Linear/ Extrinsic Programming and Branching/ Intrinsic Programming- Comparison of Linear and Branching Programming- Development of the programmed instruction material in English: Preparatory Stage, Developmental Stage, Evaluating Phase- Advantages and applications of programmed learning.

Unit VI: Development of Teaching Skills through Mini Teaching

Meaning and definitions of Mini Teaching- Mini Teaching Procedure- Phases of Mini Teaching- Advantages of Mini Teaching- Identification of Teaching skills- Core teaching skills: Skill of set induction, skill of introducing the lesson, skill of explaining, skill of using blackboard, skill of illustrating with examples, skill of questioning, skill of probing questions, skill of stimulus variation, skill of reinforcement, skill of classroom management- Practising teaching skills through Mini Teaching.

Suggested references:

- ❖ Agrawal, Rashmi. (2013). *Educational Technology Management and Evaluation*. Delhi: Shipra Publications.
- ❖ Baruah.T.C. (2005). *The English Teacher's Handbook*. New Delhi: Sterling Publishers Private Limited.
- ❖ Bhanot, Suman. (2013). *English Language Teaching – Approaches and Techniques*. New Delhi: Kanishka Publishers.
- ❖ Bharathi, T., Hariprasad, M., & Prakasam,V (Ed). (2005). *Personality Development and Communicative English*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Bhatia, K.K. (1991). *New Techniques of Teaching English as a foreign language*. Jalandhar: New Academic Publishing Company.
- ❖ Dash,B.N. (2004). *Teaching of English*. New Delhi: Dominant Publishers and Distributors.

- ❖ Ediger, Maris. W., Dutt, Bulusu Surya Venkata., & Rao, Digumarti Bhaskara. (2003). *Teaching English successfully*. Delhi: Discovery Publishing House.
- ❖ Hariprasad, M. (2004). *Communicative English*. New Delhi: Neelkamal Publications.
- ❖ Jayanthi, N.L.N. (2004). *Teaching of English*. New Delhi: Neelkamal Publications.
- ❖ Kochhar, S.K. (2007). *Methods and Techniques of Teaching*. New Delhi: Sterling Publishers Pvt. Ltd.
- ❖ Kohli, A.L. (1992). *Techniques of teaching English*. Delhi: Dhanpat Rai and Sons.
- ❖ Mangal, S.K., & Mangal, Uma. (2011). *Essentials of Educational Technolog*. New Delhi: PHI Learning private Limited.
- ❖ Mowla, Shaikh. (2004). *Techniques of teaching English*. Delhi: Neelkamal Publications.
- ❖ Mowla, Shaikh. (2006). *Methods of teaching English*. Delhi: Neelkamal Publications.
- ❖ Mukalel, Joseph, C. (1998). *Approaches to English Language Teaching*. New Delhi: Discovery Publishing House.
- ❖ Muthuja, Babu., Usharani, R., & Agarwal, Sunita. (2009). *Teaching of English-I*. New Delhi: Centrum Press---. (2009). *Teaching of English-II*. New Delhi: Centrum Press.
- ❖ Pahuja, N.P. (2001). *Teaching of English*. New Delhi: Anmol Publications Pvt. Ltd.
- ❖ Shamsi, Nayyer. (2004). *Modern teaching of English*. New Delhi: Anmol Publications Pvt. Ltd.
- ❖ Sharma, K.L. (1970). *Methods of teaching English in India*. Agra: Lakshmi Narain Agarwal Educational Publishers.
- ❖ Sharma, S.P. (2013). *Teaching English- Applications and Lesson Plans*. New Delhi: Kanishka Publishers.
- ❖ Sharma, S.R. (2000). *Effective Classroom teaching: Modern methods, Tools and Techniques*. Jaipur: Mangal Deep Publications.
- ❖ Siddiqui, Mujibul Hasan. (2013). *Challenges of Educational Technology*. New Delhi: APH Publishing Corporation.
- ❖ Singh, Rajinder. (2007). *Teaching of English*. Delhi: Lotus Press
- ❖ Singh, Y.K. (2012). *Teaching of English*. New Delhi: APH Publishing Corporation.
- ❖ Vallabi, J.E. (2012). *Teaching of English-Principles and Practices*, Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Vanaja, M. (2010). *Elements of Educational Technology*. Hyderabad: Neelkamal Publications Pvt. Ltd.

- ❖ Venugopal Rao,K. (2004).*Methods of Teaching English*. Delhi: Neelkamal Publications.
- ❖ Verghese. B.V. (2005). *Teaching of General English*. Delhi: Anmol Publications Pvt. Ltd.

SEMESTER – I**CPS 2a - Part I -PEDAGOGY OF MATHEMATICS****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- explain the nature and scope of Mathematics;
- comprehend the aims and objectives of teaching Mathematics;
- explore in teaching and learning Mathematics;
- recognise different approaches and strategies in teaching and learning of mathematical concepts;
- organise the utility of various learning resources;
- get acquainted with the teaching skills;

Unit I: Nature and Scope of Mathematics

Meaning, Definition and Scope of Mathematics - Importance of learning Mathematics - Structure, Abstractness, Symbolism, Precision - Mathematics as a science of measurement and quantification - Aesthetic sense in Mathematics - Mathematics and its relationship with other disciplines.

Unit II: Aims and Objectives of Teaching Mathematics

Goals and Objectives of teaching mathematics with reference to Revised Bloom's Taxonomy of Educational Objectives - General and Specific Objectives of teaching Mathematics – Writing Objectives in behavioral terms- Aims of teaching Mathematics at different levels: Primary, Secondary and Higher Secondary.

Unit III : Development of Skills through Mini Teaching

Mini Teaching: Meaning, Characteristics, Phases of Mini Teaching, Mini Teaching cycle, Teaching Skills : Skill of set induction, Skill of explaining, Skill of blackboard writing, Skill of illustrating with examples, Skill of probing questions, Skill of fluency in questioning, Skill of stimulus variation, Skill of reinforcement, Skill of achieving closure, Advantages and Limitations of Mini Teaching.

Unit IV: Exploring Learners in Teaching and Learning Mathematics

Gifted children in mathematics - nature, characteristics and enrichment activities, NTSE, Mathematics Olympiad-Slow learners in Mathematics –meaning and definition, characteristics, distinguishing slow learners from mentally retarded and learning disabled, causes and remedial programmes.

Unit V: Methods of Teaching Mathematics

Inductive, Deductive, Analytic, Synthetic, Heuristic, Project, Problem solving and laboratory methods of teaching mathematics- Activity Based Learning (ABL)- Simplified Active Learning Methods (SALM)- Applications of ABL and SALM- Format of a typical lesson plan based on SALM- Introduction; Evocation, Recall, Survey- Understanding; Concept, Teacher and Individual solving Problem-Group Work, Presentation-Evaluation: Reinforcement, Homework, Remedial measures.

Unit VI: Teaching Aids in Mathematics

Edgar dale's cone of experience - Instructional material or teaching aids employed in teaching of Mathematics: SMART Interactive Whiteboard, Black Board or Chalk Board, Bulletin Board, Flannel Board, pictures, Graphs, Charts, Diagrams, Photographs, Cartoons, Posters, Flash cards, Newspapers, Models, Dioramas, Slides, Filmstrips, Transparencies, Scrap Book, Epidiascope, Projectors Radio, Tape Recorder, Television, Closed Circuit Television (CCTV), Video Tape or Cassette Recorder (VCR), DVD, MP-3VCD, Motion Pictures and Computers. Importance of TLMs in classroom transaction - No cost and low cost materials- Contextual and local-specific TLMs - Collection, preparation, storing and use of TLMs.

Suggested references:

- ❖ Aggarwal, J.C. (2008). *Teaching of Mathematics*. Uttar Pradesh: Vikas publishing House Pvt Ltd.
- ❖ Bagyanathan, D. (2007). *Teaching of Mathematics*. Chennai: Tamil Nadu Text Book Society.
- ❖ Bhatia, K.K. (2001). *Foundations of Teaching Learning Process*. Ludhiana: Tandon Publication.
- ❖ Bishop, G.D. (1965). *Teaching Mathematics in Secondary School*. London: Collins publication.
- ❖ Bolt, B. (2003). *Mathematical Pandora's box*. New Delhi: Cambridge University press.
- ❖ Boyer, Carl B. (1969). *A History of Mathematics*. New York: Wiley Publications.
- ❖ Butter, C.H. (1965). *The Teaching of Secondary Mathematics*. London: McGraw Hill book company.
- ❖ Driscoll, M. (1999). *Fostering Algebraic Thinking: A Guide for teachers, grades 5-10*. Portsmouth, NH: Heinemann Publications.
- ❖ Ediger, M., & Bhaskara Rao, D.B. (2004). *Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.
- ❖ Goel, Amit. (2006). *Learn and Teach Mathematics*. Delhi: Authors press.
- ❖ Grouws, D.A. (1992). *Handbook of Research on Mathematics Teaching and Learning*. New York: Macmillan Publishing.
- ❖ Gupta H.N., & Shankaran V. (1984). *Content cum Methodology of Teaching Mathematics*. New Delhi: NCERT.
- ❖ Hoglum, L. (1967). *Mathematics for the Million*. London: Pan Books Limited.
- ❖ Iyengar, K.N. (1964). *Teaching of Mathematics*. New Delhi: A Universal Publication.
- ❖ James, Anice. (2005). *Teaching of Mathematics*. New Delhi: Neelkamal Publication.
- ❖ Joyce, well. (2004). *Models of Teaching*. London: Prentice hall of India.
- ❖ Kapur S.K. (2005). *Learn and Teach Vedic Mathematics*. New Delhi: Lotus Publication.
- ❖ Kulshreshtha, *Teaching of Mathematics*. London: R. Lal and Sons.
- ❖ Kumar Sudhir, *Teaching of Mathematics*. New Delhi: Anmol Publications.
- ❖ Land, F.W. (1966). *New approaches to Mathematics Teaching*. New Delhi: MacMillan and St. Martin's press. .

- ❖ Mangal S.K. (2013). *Teaching of Mathematics*. Ludhiana: Tandon publications.
- ❖ Mangal,S.K.,& Mangal,S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal book depot.
- ❖ Muijs, Daniel., & Reynolds, David. (2005). *Effective Teaching: Evidence and Practice*. London: Sage Publication.
- ❖ Nickson, Marilyn. (2000). *Teaching and Learning Mathematics: A Guide to Recent Research and Its Applications*. New York: Continuum Press.
- ❖ Nunes, T., & Bryant, P. ((1997). *Learning and Teaching Mathematics: An International Perspective*. London: Psychology Press.
- ❖ Parthasarathy,N. (1961). *Kanitham Karpithal*. Chennai: The South India Saiva Sidhantha works. .
- ❖ Pratap,N. (2008). *Teaching of Mathematics*. Meerut:R.Lall Books depot.
- ❖ Schwartz, James E. (1994). *Essentials of Classroom Teaching Elementary Mathematics*. London: Allyn and Bacon Publication.
- ❖ Sharan,R., & Sharma,M. (2006). *Teaching of Mathematics*, New Delhi: APH Publishing Corporation.
- ❖ Sharma,R.A. (2008). *Technological Foundations of Education*. Meerut: R.Lall Books Depot.
- ❖ Siddizui, M.H. (2005). *Teaching of Mathematics*. New Delhi: APH Publishing Corporation.
- ❖ Sidhu,K.S. (2006). *Teaching of Mathematics*. New Delhi: Sterling Publishers private limited.
- ❖ Singh,M. (2006). *Modern Teaching of Mathematics*. New Delhi: Anmol Publications Pvt. Ltd.
- ❖ வாசன் . (2002). கணக்கு கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்.
- ❖ நடராஜன்,வி. (2013). கணிதம் கற்பிக்கும் முறைகள். 1 & 2. சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ நடராஜன்,வி. (2006). கணிதப் பாடப்பொருள் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ தமயந்தி பாக்கியநாதன், என். (2009). கணிதம் கற்பித்தல். சென்னை: சாரதா பதிப்பகம்
- ❖ தமயந்தி பாக்கியநாதன், என். (1978). கணிதம் கற்பித்தல். தமிழ் நாடு அரசு வெளியீடு – பகத் பிரிண்டர்

- ❖ செந்தில் குமார், சு. (2010). கணிதம் கற்பிக்கும் முறைகள். தாள்-1. நாமக்கமல்: சமயுக்தா பதிப்பகம்.
- ❖ பாலகிருஷ்ணன் R. & சரிதா M. (2010). கணிதம் கற்பிக்கும் முறைகள். தாள்-1. சென்னை: ஸ்ரீகோமதி பப்ளிஷர்ஸ்.
- ❖ நல்லாமூர் கோவி. பழனி. (2008): அறிவியல் கணித மேதைகள். சென்னை: வனிதா பதிப்பகம்
- ❖ நல்லாமூர் கோவி. பழனி. (2006): காகித மடிப்புகளில் கணிதம். சென்னை: வனிதா பதிப்பகம்

SEMESTER – I**CPS 2a - Part I -PEDAGOGY OF PHYSICAL SCIENCE****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of this course, the student-teachers will be able to**

- recognise the nature and scope of Physical Science;
- recall the aims and objectives of teaching Physical Science;
- get acquainted with the teaching skills
- classify the diversified needs of students;
- explain the methods of teaching Physical Science;
- recall the various teaching aids;

Unit I: Nature and Scope of Physical Science

Science as a product and a process: a body of knowledge, a way of investigation, a way of thinking – Characteristics of a person with scientific attitude – Interdisciplinary Approach- Implications of the nature of Science for a Science teacher.

Unit II: Aims and Objectives of Teaching Physical Science

Goals and Objectives of teaching Physical Science with reference to Revised Bloom's Taxonomy of Educational Objectives - General and Specific Objectives of teaching Physical Science – Writing Objectives in behavioral terms- Aims of teaching Physical Science at different levels: Primary, Secondary and Higher Secondary.

Unit III : Development of Skills through Mini Teaching

Mini teaching: Meaning, Characteristics, Phases of Mini teaching, Mini teaching cycle, Teaching Skills : Skill of Set Induction, Skill of Explaining, Skill of Blackboard Writing, Skill of Illustrating with Examples, Skill of Probing Questions, Skill of Fluency in

Questioning, Skill of Stimulus Variation, Skill of Reinforcement, Skill of Achieving Closure, Advantages and Limitations of Mini teaching.

Unit IV: Exploring Learners in Teaching and Learning Physical Science

Class as a heterogeneous group- the need for addressing the individual differences of students- Gifted Learners- Needs and Problems of the Gifted- Educational programmes for the Gifted- National Talent Search Examination- Ways of enhancing the abilities of the Gifted in Science- Slow Learners- Needs and Problems of the Slow Learners- Diagnostic Tests- Remedial Teaching.

Unit V: Methods of Teaching Physical Science

Teacher and Student-centered Methods- Lecture Method- Lecture Demonstration Method- Heuristic Method- Project Method- Biographical Method- Inductive-deductive Method- Historical Method-Assignment Method- Significance of employing different Methods in teaching of Physical Science.

Unit VI: Teaching Aids

Concept of Teaching Aids- Importance of using aids in the teaching of Physical Science- Edgar Dale's Cone of Experience- Principles for selection of Teaching Aids- Classification of Teaching Aids- Visual Aids- SMART Interactive Whiteboard, Chalkboard, Bulletin Board, Flannel Board, Chart, Flash Cards, Posters, Models, Specimens, Objects, Diorama, Graphs, Filmstrip Projector, Slide Projector, Epidiascope, Overhead Projector- Audio Aids- Radio, Tape Recorder, Audio-visual Aids- Television, Computer, Documentaries, Motion Pictures – Criteria for selection of appropriate teaching aids.

Suggested references:

- ❖ Anderson, R.D et. al.(1992). *Issues of Curriculum Reform in Science, Mathematics and Higher Order Thinking- Across the Disciplines- The Curriculum Reform Project*. U.S.A.: University of Colorado.
- ❖ Carin., & Sund.R. (1989). *Teaching Modern Science*. U.S.A : Merrill Publishing Co.
- ❖ Chauhan, S.S. (1985). *Innovation in Teaching and Learning Process*. New Delhi: Vikas Publishing House.

- ❖ Falvery, P., Holbrook, J., & Conian, D. (1994). *Assessing Students*. Hongkong: Longman Publications.
- ❖ Gupta, S.K. (1985). *Training of Physical Science in Secondary Schools*. New Delhi: Sterling Publication (Pvt) Limited.
- ❖ Harms, N., & Yager, R. (1981). *What Research Says to the Science Teacher? Vol. 3*, U.S.A: National Science Teachers Association.
- ❖ Heiss, Oboum., & Hoffman. (1961). *Modern Science Teaching*. New York: Macmillan & Co, Limited.
- ❖ Husen, T., & Keeves, J.P., (Ed.). (1991). *Issues in Science Education*. London: Pergamon Press.
- ❖ Jenkins, E.W. (2000). *Innovations in Science and Technology Education. Vol. VII*, Paris: UNESCO.
- ❖ Joseph. (1966). *The Teaching of Science*. London: Harvard University Press.
- ❖ Khana, S.D., Sexena, V.R. Lamba, T.P., & Murthy, V. (1976). *Technology of Teaching*. Doaba Publishing House.
- ❖ Mangal S.K., & Uma Mangal. (1999). *Essentials of Educational Technology*. New Delhi: PHI Learning (P) Ltd.
- ❖ Natrajan, C. (Ed.). (1997). *Activity Based Foundation Course on Science Technology and Society*. Mumbai: Homi Bhaba Centre for Science Education.
- ❖ Nayak. (2003). *Teaching of Physics*. New Delhi: APH Publications.
- ❖ Owen, C.B. (1966). *Method of Science Mastery*. English Language Society and Macmillan Company Limited.
- ❖ Pandey. (2003). *Major Issues in Science Teaching*. New Delhi: Sumit Publications.
- ❖ Paneerselvam, A., & Rajendiran, K. (2005). *Teaching of Physical Science*. Chennai: Shantha Publication.
- ❖ PanneerSelvam, A. (1976). *Teaching of Physical Science (Tamil)*. Chennai: Government of Tamil Nadu.
- ❖ Popham, W.J. (2010). *Classroom Assessment: What teachers need to know (6th ed.)*. New York: Prentice Hall.
- ❖ Radha Mohan. (2007). *Innovative Science Teaching for Physical Science Teachers*. New Delhi: Prentice Hall of India Private Limited.
- ❖ Rao, C.S. (1968). *Science Teachers Handbook*. American Peace Crops.
- ❖ Sampath, K. (1981). *Introduction to Education Technology*. Sterling Publishers.

- ❖ Sharma, P.C. (2006). *Modern Science Teaching*. New Delhi: Dhanpat Rai Publications,
- ❖ Sharma, R.C. (2009). *Modern Science Teaching*. Meerut: Dhanpat Rai and Sons.
- ❖ Siddiqui & Siddiqui. (1985). *Teaching of Science Today and Tomorrow*. New Delhi: Doals House.
- ❖ Sonika Rajan. (2012). *Methodology of Teaching Science*. New Delhi: Dorling Kindersley (India) Pvt.Ltd.
- ❖ Thurber, W.A., & Collette, A.T. (1964). *Teaching Science in Today's Secondary School*. New Delhi: Prentice Hall of India Private Limited.
- ❖ Williams, B., (1999). *Internet for Teachers*. London: John Wiley & Sons.
- ❖ Yadav, M.S. (2003). *Teaching of Science*. New Delhi: Anmol Publications.
- ❖ பன்னீர் செல்வம், அ. (2009), இயற்பியல் வேதியியல் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ உமா பாஸ்கரன், T. (2009). பொருளறிவியல் கற்பித்தல் முறைகள்-I. சென்னை : சாரதா பதிப்பகம்.
- ❖ ராதா மோகன். (2010) பொருளறிவியல் கற்பித்தல் முறைகள். புது டெல்லி: நீல்கமல்
- ❖ செந்தில் குமார், சு. (2010). பொருளறிவியல் தாள்-I: நாமக்கல்: சம்யுக்தா பதிப்பகம்.

SEMESTER – I**CPS 2a - Part I - PEDAGOGY OF BIOLOGICAL SCIENCE****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- explain the nature and scope of Biological Science;
- integrate aims and objectives of teaching of Biological Science;
- get acquainted with the teaching skills
- explore teaching and learning Biology
- recognize the new trends in curriculum transaction;
- organize the teaching aids to support learning;

Unit I: Nature and Scope of Biological Science

Introduction- Development of Science education after Independence, National Policy on Education, and relationship of Biology with other branches of Science.

Unit II: Aims and Objectives of Teaching Biological Science

Goals and Objectives of teaching Biological Science with reference to Revised Bloom's Taxonomy of Educational Objectives - General and Specific Objectives of teaching Biological Science – Writing Objectives in behavioral terms- Aims of teaching Biological Science at different levels: Primary, Secondary and Higher Secondary.

Unit III : Development of Skills through Mini Teaching

Mini teaching: Meaning, Characteristics, Phases of Mini teaching, Mini teaching cycle, Teaching Skills : Skill of set induction, Skill of explaining, Skill of blackboard writing, Skill of illustrating with examples, Skill of probing questions, Skill of fluency in questioning, Skill of Stimulus Variation, Skill of reinforcement, Skill of achieving closure, Advantages and Limitations of Mini teaching.

Unit IV: Exploring Learner in Teaching and Learning Biological Science

Introduction – Class as a heterogeneous group-the need to cater to the individual differences. Gifted learners – Need and identification of gifted children, characteristics of gifted children, enrichment programme for gifted children, National Talent Search Examination, steps to enhance the abilities of the gifted children in science. Slow learners- Need and problem faced by the slow learners, special care to cater to the slow learners, Diagnostic tests, Remedial teaching to help the slow learners.

Unit V: Methods of Teaching Biological Science

Introduction: i) Teacher Centered Method ii) Pupil Centered Method

Teacher Centered Method- Lecture Method; Lecture Demonstration Method, Discussion Method, Supervised Study Method. Pupil Centered Method – Problem-Solving Method, Project Method, Inductive and Deductive Method, Heuristic Method, Discovery Method, Story Telling Method.

Unit VI: Teaching Aids

Introduction: Meaning & Advantages – Edgar Dale's Cone of Learning Experience – Projective and Non Projective aids – current trends in educational technology – Different types of Boards, SMART Interactive Whiteboard, film, filmstrips,OHP, Motion pictures, Documentaries, graphs, internet usage.

Suggested references:

- ❖ Aggarwal .D.D. (2008). *Modern Method of Teaching Biology*. New Delhi: Karanpaper backs.
- ❖ Arulselvi,E. (2007). *Teaching of Science*. Chennai: Saradha Publication.
- ❖ Bhandala, Chadha., & Khanna. (1985). *Teaching Of Science*. New Delhi: Prakash Brothers Educational Publishers.
- ❖ Bhatnagar,A.D. (2004). *Teaching of Science*. Meerut: Surya Publications.
- ❖ Buffaloe, Neal., & Throneberry, J. B. (1972). *Principles of Biology teaching*. New Delhi: Prentice – Hall of India Limited.
- ❖ Frost Jenny., & Turner Tony. (2005). *Learning to teach Science in Secondary school*. New York: Routledge Palmer Publication.

- ❖ Garrett. (1979). *Statistics in Psychology and Education*. Bombay: Vakils, Feffer and Simons Ltd.
- ❖ Green, T. L. (1965). *The teaching of biology in tropical secondary schools*. London: Oxford University Press.
- ❖ Harms, N., & Yager, R. (1981). *What research says to the science teacher* (Vol. 3). Washington: National Science Teachers Association.
- ❖ Heiss. E. D., Obown, S., & Hoftman, C. W. (1961). *Modern science teaching*. New Delhi: Macmillian Company Press.
- ❖ Khana, S.D,et al. (1976). *Technology of science teaching*. New Delhi: Doaba House.
- ❖ Natrajan, C. (1997). *Activity based foundation course on science technology and society*. Mumbai: Homi Bhaba Centre for Science Education.
- ❖ Korde., & Sawant.(1980). *Science and Scientific Method*. New Delhi: Himalaya Publishing House.
- ❖ Passi, B. K. (1976). *Becoming a Better Teacher: Micro teaching approach*. Ahemedabad: Sahitya Mudranalaya.
- ❖ Prasad Janardhan. (1999). *Practical aspects in Teaching of Science*. New Delhi: Kanishka Publication.
- ❖ Saunders, H. N. (1967). *The teaching of general science in tropical secondary school*. London: Oxford University Press.
- ❖ Sharma, Jagdish. (2006). *Models of Teaching Science*. Jaipur: Raj Publishing House.
- ❖ Veena Rani Pandey. (2004). *Major Issues in Science Teaching*. Summit Enterprises.

SEMESTER – I**CPS 2a Part I - PEDAGOGY OF ELEMENTS OF ECONOMICS****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of this course the student teachers will be able to:**

- gain insight into the meaning and nature and scope of Economics;
- determining aims and objectives of teaching-learning Economics;
- reflect upon different requirements of learners;
- explore various strategies and methods in teaching –learning economics;
- effectively utilize the different teaching aids in teaching economics;
- get acquainted with the teaching skills

Unit I: Nature and scope of Teaching Economics

Meaning, definitions, scope and nature of Economics – Importance of Economics education - The nature of subject materials and learning experiences included in the study of Economics. Need for Economics in the School curriculum. Economics as Queen of Arts - Is Economics arts or Science.

Unit II: Aims and Objectives of Teaching Economics

Goals and Objectives of Teaching Economics with reference to Revised Bloom's Taxonomy of Educational Objectives - General and Specific Objectives of teaching Economics– Writing Objectives in behavioral terms- Aims of teaching Economics at different levels: Primary, Secondary and Higher Secondary.

Unit III : Development of Skills through Mini Teaching

Mini teaching: Meaning, Characteristics, Phases of mini teaching, mini teaching cycle, Teaching Skills : Skill of set induction, Skill of explaining, Skill of blackboard writing, Skill of illustrating with examples, Skill of probing questions, Skill of fluency in questioning, Skill

of stimulus variation, Skill of reinforcement, Skill of achieving closure, advantages and Limitations of mini teaching, Link Lesson.

Unit IV: Exploring learners

Focusing on Interest, Attitudes, and Motivation of students. Developing listening, and questioning skill among Teachers and Students. Negotiating with learner's meaning- initial assessment (Entry behavior)- methods of negotiations- process of negotiating goals and targets- advantages of negotiation. Exit behavior. Grouping students based on ability. Individual difference – meaning, identification of gifted and slow learner. Enrichment and remedial teaching methods for differently abled students. Activities to enrich economics learning – Techniques to tackle individually different students: Assistive learning, supplementary text material, summer programmes, correspondence course.

Unit V: Methods, approaches and strategies of teaching Economics

Special features and characteristics of strategies - types of strategies: narration strategy- illustration strategy- questioning- answering strategy- assignment strategy- tutorial strategy - exposition strategy- independent strategy- brain storming strategy. Learner centred methods: Socialized recitation method: discussion, panel discussion, and symposium. Team teaching: Meaning and definition – objectives - Principles - Types –steps and procedure - Advantages and limitations. Individualized Instruction- Computer Assisted instruction- Programmed instruction- types merits and demerits. Project method, Problem solving method, Inductive and Deductive method, Analytic and synthetic method. Teacher centered methods: Lecture method, Oral method. Innovative methods of teaching: Meaning- experiential learning in economics- field trip- work experience- developing economical interest and attitudes. Personalized education- Synetics in teaching economics-Interactive teaching of economics- Blended learning- Flipped classroom- Digital education- mobile learning.

Unit VI: Teaching Aids

Meaning of the term instructional materials - Significance of instructional materials in Teaching of Economics. Principles followed in effective use of instructional materials. Edgar Dale's cone of experiences -classification – Types of conventional and modern instructional aids in Teaching of Economics. Teaching aid as a Learning Material: Meaning of teaching aids, Types of teaching aids (Audio, Visual, Audio-Visual, SMART Interactive Whiteboard and ICT based aids), Importance of teaching aids, self made teaching aids and its importance.

Suggested references:

- ❖ Agarwal J. C. (2006). *Essential of Educational Technology: Teaching and learning*. New Delhi: Vikas Publishing House Pvt. Ltd.
- ❖ Alka Kalra. *Efficient School Management and Role of Principles*. New Delhi: A.P.H.Publishing Corporation.
- ❖ Anitha Yadav. (2003). *Teaching of Economics*. New Delhi: Anmol publication.
- ❖ Balaguruswamy, E., & Sharma, K.D. (1982). *Computer in Education and Training*. New Delhi: NIIT.
- ❖ Bloom, Benjamin. (1974) *Taxonomy of educational objectives, cognitive domain*. longman Green.
- ❖ Chakraborty, A. K. (2004). *Principle & practice of education*. Meerut: R.Lall Books Depot. NIEPA.
- ❖ Chauhan, S.S. (2008). *Innovations in teaching learning process*. New Delhi: Vikas publishing House Pvt. Ltd.
- ❖ Dhand, H. (2009). *Techniques of Teaching*. New Delhi: APH Publishing Corporation.
- ❖ Edgar Dale. *Audio-Visual Methods in Teaching*. Newyork: Thy Dryden Press.
- ❖ Finch, R Curtes., & Crunkitton, R John.(1984). *Curriculum Development in Vocational and Technical, Education, Planning content, and Implementation*.
- ❖ Foshay, A.W. (1980). *Considered action for curriculum improvement: Association for Supervision and curriculum development yearbook*. Alexandria: ASCO.
- ❖ Garrett, H.E. (1979). *Statistics in Psychology and Education*. Bombay: Vakils Feffer and Simons Ltd.
- ❖ Karthick, G. S. (2004). *Teaching of Economics*. New Delhi: Discovery publication house.
- ❖ Krishnamachariyar. *School Management and System of Education*. New Delhi: Neelkamal Publishers.
- ❖ Kumar, J. J. (2001). *Encyclopedia of teaching of economics (Voll-3)*. New Delhi: Anmol Publishers.
- ❖ Mangal, S.K., & Mangal, S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal Book depot.
- ❖ Pathak, R.P. and Jagdeesh Chaudhary. (2012). *Educational Technology*, New Delhi: Anmol Publishers.
- ❖ Rudramamba, B. (2004). *Methods of teaching economics*. New Delhi: Discovery

- ❖ Sampath,K.(1981). *Introduction to Education Technology*. Sterling Publishers
- ❖ Sharma, R.A.(2008). *Technological Foundation of Education*. Meerut: R. Lall Book Depot.
- ❖ Singh, Y.K. (2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ செந்தில் குமார், சு. (2010). பொருளியல் கற்பித்தல். தாள்- I. நாமக்கல்.
- ❖ பொன் மருதவாணன். (2009). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாரதா பதிப்பகம்.
- ❖ பொன் மருதவாணன். (2006). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாரதா பதிப்பகம்.
- ❖ ஸ்ரீபாலாஜி லோகநாதன். (2009). பொருளியல் கற்பிக்கும் முறைகள், தாள்-I. சென்னை: G.V. பப்ளிகேஷன்ஸ்.
- ❖ நடராஜன்,வி. (2006). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிகேஷன்ஸ்.

SEMESTER – I**CPS 2a Part I - PEDAGOGY OF COMPUTER SCIENCE****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of this course, the student-teachers will be able to:**

- gain insight on historical evolution of computer and its hardware, software components;
- determine aims and objectives of teaching computer science in secondary schools;
- plan learning activities according to those objectives;
- explore the varied potential of learners and plan for teaching;
- acquaint with the various methods, approaches and strategies of teaching computer science;
- utilize the various learning resources effectively in the teaching of computer science;
- get acquainted with the teaching skills

Unit I: Historical Perspectives

Historical development of computers – Generation of Computers and their characteristics - Types of computers – Hardware and Software – Type of Software -Operating System – Functions of an operating system- Database – Computer Organization – Principles of programming logic – Network Communication – Computer viruses – Protective measures.

Unit II: Aims and Objectives of Teaching Computer Science

Goals and Objectives of teaching Computer Science with reference to Revised Bloom's Taxonomy of Educational Objectives - General and Specific Objectives of teaching Computer Science – Writing Objectives in behavioral terms- Aims of teaching Computer Science at different levels: Primary, Secondary and Higher Secondary.

Unit III : Development of Skills through Mini Teaching

Mini teaching: Meaning, Characteristics, Phases of mini teaching, mini teaching cycle, Teaching Skills : skill of set induction, skill of explaining, skill of blackboard writing, skill of illustrating with examples, skill of probing questions, skill of fluency in questioning, skill of stimulus variation, skill of reinforcement, skill of achieving closure, advantages and Limitations of mini teaching, Link Lesson.

Unit IV: Exploring learners

Identifying Interest, Attitudes, motivation of students. - Developing listening, and questioning skill among teachers and students - Grouping students based on ability(ability grouping). Individual differences – meaning, nature, characteristics - identification of gifted and Enrichment programmes for the gifted –Causes for slow learning and remedial measures for the backward.

Unit V: Methods and Strategies of Teaching Computer Science

Teacher centered methods: Lecture – Demonstration – Lecture cum demonstration. *Child centered methods* Problem solving, Project method – Heuristic method – Laboratory method
Assignment: Type – Needs – Characteristics of good Assignment -Inductive – Deductive, Analytic –Synthetic methods. *Strategies of Teaching:* Meaning, special features and characteristics of strategies - Types of teaching strategies: Narration strategy- Illustration strategy- Questioning- Answering Teaching strategy- Exposition strategy- Description strategy - Independent study strategy- Assignment strategy- Tutorial strategy - Brainstorming strategy.

Unit VI: Teaching Aids

Concept of Teaching Aids- Importance of using aids in the teaching of Computer Science- Edgar Dale's Cone of Experience- Principles for selection of Teaching Aids- Classification of Teaching Aids- Audio, Visual, Audio-Visual Aids, SMART Interactive Whiteboard and ICT based aids- – Criteria for selection of appropriate teaching aids.

Suggested references:

- ❖ இரத்தின சபாபதி. பி இரெங் பத்மா மொகன். (2008). வினாக்களில் விரிகல்கள். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ இரத்தின சபாபதி. பி. (2008) கல்வியில் தெர்வஜ். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ Agarwal J. C. (2006). *Essential of Educational Technology: Teaching and learning*. New Delhi: Vikas Publishing House Pvt. Ltd.
- ❖ Alexis, M. L. (2001). *Computer for every one*. New Delhi: Vikas Publishing house Ltd.
- ❖ Allison, L. J., & Chris, P. (2007). *Preparing for blended e-learning*. UK: Routledge.
- ❖ Bennett, S., Marsh, D., & Killen, C., (2008). *Handbook of online education continuum*. New York: International publishing group.
- ❖ Chauhan, S. S. (1985). *Innovations in teaching learning process*. New Delhi: Vikas Publishing house Ltd.
- ❖ கணபதி வி. இரத்தின சபாபதி. பி (2008) நுண்நிலை கற்பித்தல். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ பா!கரன். ப. சூ. பத்மப்ரியா. (2007) கலைத்திட்ட வளர்ச்சி . டிசன்னை: சாரதா பதிப்பகம்
- ❖ Goel, H. K. (2005). *Teaching of Computer Science*. New Delhi: R.Lall Book Depot.
- ❖ Krishnamurthy, R. C. (2003). *Educational technology: Expanding our vision*. Delhi: Authors Press.
- ❖ Harley, H. (2007). *The internet: Complete reference*. New Delhi: Tata McGraw Hill Pub.co. Ltd.
- ❖ John, W. (2007). *Learning and teaching using ICT*. New Delhi: Learning Matters Ltd.
- ❖ Joyce, Well. (2004). *Models of teaching*. U.K: Prentice hall of India.
- ❖ Kochhar, S. K. (1992). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Pvt Ltd.
- ❖ Kumar, K. L. (1997). *Educational technology*. New Delhi: Angel International (P) Ltd.
- ❖ Mohanty, L. (2006). *ICT strategies for schools*. New Delhi: Sage Publication.
- ❖ Norton, P. (1998). *Introduction to computers*. New Delhi: Tata McGraw Hill Publishing Co Ltd.
- ❖ Oosterhof, A. C. (1990). *Classroom applications of educational measurement*. Ohio:

Merrill Publishing.

- ❖ Sambath, K., Paneerselvam, A., & Santhanam, S. (2006). *Introduction of educational technology*. New Delhi: Sterling Publishers Private Limited.
- ❖ Sharma, R. A. (2008). *Technological foundation of education*. Meerut: R.Lall Books. Depot
- ❖ Sharma, R. C. (1998). *Modern science teaching*. New Delhi: Dhanpat Raj and Sons.
- ❖ Sharma, R. N. (2008). *Principles and Techniques of Education*. Delhi: Surjeet Publications.
- ❖ Sidhu, K. S. (2006). *Teaching of Mathematics*. New Delhi: Sterling Publishers Private Ltd.
- ❖ Singh, Y. K. (2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ Srinivasan, T. M. (2002). *Use of computers and multimedia in education*. Jaipur: Aavisakar Publication.
- ❖ Stephen, M. A., & Stanely, R. (1985). *Computer based instruction: Methods and development*. New Jercy: Prentice Hall.
- ❖ Stone, E. (1996). *How to use Microsoft access*. California: Emergyville.
- ❖ விகுயலட்சுமி. வ (2007).: நுண்ணிலை கற்பித்தல்.: டிசன்னை: சாரதா பதிப்பகம்.
- ❖ விகுயலட்சுமி.: (2008).: கற்பித்தலில் சிக்கல்கள்-தீர்வள்கள். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ Vanaja, M. (2006). *Educational technology*. Hyderabad: Neelkamal Publications Pvt. Ltd.

SEMESTER – I**CPS 2 a Part I - PEDAGOGY OF HISTORY****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of this course the student teachers will be able to:**

- explain the nature and scope of History;
- comprehend the aims and objectives of teaching History;
- get acquainted with the teaching Skills;
- explore teaching and learning History;
- recognise different methods of teaching History;
- competently utilise teaching aids;

Unit I: Nature and scope of History

Defining history-nature and scope of history-kinds of history-Different conceptions of history-Biographical-Evolutionary-Theistic-Cyclic-Modern concepts. Dimension of History-Time, Place, continuity and Development. Relationship between history and other social science, Geographical foundation of History.

Unit II: Aims and Objectives of Teaching History

Goals and Objectives of teaching History with reference to Anderson's and Krathwohl classification - General and Specific Objectives of teaching History – Writing Objectives in behavioral terms- Aims of teaching History at different levels: Primary, Secondary and Higher Secondary.

Unit III : Development of Skills through Mini Teaching

Mini teaching: Meaning, Characteristics, Phases of mini teaching, mini teaching cycle, Teaching Skills : Skill of Set induction, Skill of explaining, Skill of blackboard writing, Skill of illustrating with examples, Skill of probing questions, Skill of fluency in questioning, Skill

of stimulus variation, Skill of reinforcement, Skill of achieving closure, Advantages and Limitations of mini teaching.

Unit IV: Exploring learner in Teaching and Learning History

Gifted children in History-nature, characteristics and enrichment activities- slow learners in History-meaning and definition, characteristics, distinguishing slow- learners from mentally retarded and learning disabled, causes and remedial programmes. Field visit – Assignment – workshop- seminar- Symposium- project- Group discussion – Brain storming.

Unit V: Methods of teaching History

Different methods of teaching history- Textbook Method, story - telling- types of stories(true stories, Myths, Legends)- Biographical Method, Lecture Method, Conversational Method (or) Question -Answer Method, Supervised study, Discussion Method, Socialized, Recitation Method-The project Method, Source Method (or) Historical Method, Unit Method.

Unit VI: Teaching aids

Concept of Teaching Aids- Importance of using aids in the teaching of History- Edgar Dale's Cone of Experience- Principles for selection of Teaching Aids- Classification of Teaching Aids- Visual Aids- SMART Interactive Whiteboard Chalkboard, Bulletin Board, Flannel Board Chart, Flash Cards, Posters, Models, Maps, Globes, Diagrams, Photography, Newspapers, Graphs, Filmstrip Projector, Slide Projector, Epidiascope, Overhead Projector- Audio Aids- Radio, Tape Recorder(VCR) Audio-visual Aids- Television, Computer, Documentaries, Motion Pictures – Criteria for selection of appropriate teaching aids.

Suggested references:

- ❖ Aggarwal, J.C. (1996). *Teaching of history. A practical approach*. New Delhi: Vikas Publishing House Pvt Ltd.
- ❖ Aggarwal, J.C. (2008). *Principles, method and Techniques of teaching*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Baskaran., & Padmapriya, V.(2007). *Kalaitthitta valarachi*. Chennai: Saratha Publishers.
- ❖ Bloom, Benjamin. (1974). *Taxonomy of educational objectives, cognitive domain*. Longman Green.

- ❖ Chauhan, S.S. (2008). *Innovations in teaching learning process*. Uttar Pradesh: Vikas Publishing House Pvt. Ltd.
- ❖ Durplass, J.A. (2009). *Teaching elementary social studies*. New Delhi: Atlantic Publishers.
- ❖ Geoff, T. (2008). *Teaching and learning history*. New Delhi: SAGE Publications.
- ❖ Kanammall, Raa. (2007). *Varallatru Karpithal*. Chennai: Saradha Publishers.
- ❖ Kochhar, S.K. (2003). *Teaching of history*. New Delhi: Sterling Publishing pvt.Ltd.
- ❖ Mangal S.K., & Uma Mangal. (2011). *Teaching of social science*. New Delhi: PHI learning Private Limited.
- ❖ Mangal, S.K. & Mangal, S.(2005). *Essentials of Education Technology and Management*. Meerut: Loyal Book depot.
- ❖ Nagarajan.K. (2008). *Curriculum and development*. Ram Publishers.
- ❖ NCERT.(1970). *Teaching history in secondary school: A handbook for history teacher*. New Delhi: NCERT Publication.
- ❖ Rathina sabapathy, P. (2008). *Nunnailai Karppithal*. Chennai: Santha Pathipagam.
- ❖ Siddiqui,M.H.(2009). *Techniques of classroom teaching*. New Delhi: APH Publishing Corporation.
- ❖ Singh Y.K.(2009).*Teaching of History: Modern methods*. New Delhi: APH Publishing Corporation.
- ❖ Singh Y.K.(2009).*Teaching practice*. New Delhi: APH Publishing Corporation.
- ❖ Thirugnana sampantham.(2007). *Varallatru Karpithal muraika.*, Chennai: Saradha pathipagam.
- ❖ டாக்டர் : □ ஸ்ரீபாலாஜி லோகநாதன் (2009) : வரலாறு கற்பிக்கும் முறைகள் : தாள். ஐ. சென்னை: பு.ஏ. பப்ளிகேஷன்ஸ்,
- ❖ செந்தில் குமார், சு. (2010). வரலாறு கற்பிக்கும் முறைகள். தாள்- ஐஐ. சேலம் ரோடு. நாமக்கல்.
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): வரலாறு கற்பிக்கும் முறைகள். தாள்- ஐஐ. சென்னை: பு.ஏ. பப்ளிகேஷன்ஸ்.
- ❖ பேராசிரியர் என். செல்லம் (1992) : வரலாறு கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்.
- ❖ கண்ணம்மாள் (2009), வரலாறு கற்பித்தல். சென்னை: சாரதா பதிப்பகம்.
- ❖ திருஞானசம்பந்தம் (2005): வரலாறு கற்பித்தல் முறைகள்.சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): சமூக அறிவியல் கற்பிக்கும் முறைகள். தாள்-ஐ. சென்னை: பு.ஏ. பப்ளிகேஷன்ஸ்,
- ❖ வசந்தி சு. (2007). கற்பித்தல் புதிய அணுகு முறை. சென்னை: வனிதா பதிப்பகம்.

SEMESTER – I**CPS 2a Part I - PEDAGOGY OF GEOGRAPHY****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of this course, the student-teachers will be able to:**

- explain the nature and scope of Geography;
- comprehend the aims and objectives of teaching Geography;
- get acquainted with teaching skills;
- explore in teaching and learning geography;
- recognise methods of teaching geography;
- competently utilize teaching aids;

Unit I: Nature and scope of Geography

Meaning, Definition- Characteristics of geography- Scope of geography-various branches of geography-correlation of geography with other school subjects-Application of geography in understanding people and regions- geographic problems facing India at present and geography as a tool to develop national integration and international understanding.

Unit II: Aims and objectives of teaching Geography

Goals and Objectives of teaching Geography with reference to Anderson's and Krathwohl classification - General and Specific Objectives of teaching Geography – Writing Objectives in behavioral terms- Aims of teaching Geography at different levels: Primary, Secondary and Higher Secondary.

Unit III: Development of Skills through Mini Teaching

Mini teaching: Meaning, Characteristics, Phases of mini teaching, mini teaching cycle, Teaching Skills : Skill of Set induction, Skill of explaining, Skill of blackboard writing, Skill of illustrating with examples, Skill of probing questions, Skill of fluency in questioning, Skill of stimulus variation, Skill of reinforcement, Skill of achieving closure, Advantages and Limitations of mini teaching.

Unit IV: Exploring learner in Teaching and Learning Geography

Gifted children in Geography-nature, characteristics and enrichment activities- slow learners in Geography -meaning and definition, characteristics, distinguishing slow- learners from mentally retarded and learning disabled, causes and remedial programmes. Field visit – Assignment – workshop- seminar- Symposium- project- Group discussion – Brain storming.

Unit V: Methods of teaching Geography

Different methods of teaching Geography- Textbook Method, story - telling- types of stories(true stories, Myths, Legends)- Biographical Method, Lecture Method, Conversational Method (or) Question -Answer Method, Supervised study, Discussion Method, Socialized, Recitation Method-The project Method, Source Method (or) Historical Method, Unit Method.

Unit VI: Teaching aids

Concept of Teaching Aids- Importance of using aids in the teaching of Geography- Edgar Dale's Cone of Experience- Principles for selection of Teaching Aids- Classification of Teaching Aids- Visual Aids- SMART Interactive Whiteboard, Chalkboard, Bulletin Board, Flannel Board, Chart, Flash Cards, Posters, Models, Maps, Globes, Diagrams, Photography, Newspapers, Graphs, Filmstrip Projector, Slide Projector, Epidiascope, Overhead Projector- Audio Aids- Radio, Tape Recorder(VCR) Audio-visual Aids- Television, Computer, sDocumentaries, Motion Pictures – Criteria for selection of appropriate teaching aids.

Suggested references:

- ❖ Aggarwal. (2008). *Principles, method and Techniques of teaching*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Aggarwal. (2008). *Teaching of social studies: A practical approach* (4th ed). Uttar Pradesh: Vikas Publishing House Pvt Ltd.

- ❖ Aurora, M.L. (1979). *Teaching of Geography*. Ludhiana: Prakash Brother.
- ❖ Chauhan, S.S.(2008). *Innovation in teaching learning process*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Chorley P.J.(ed).(1973). *Direction in Geography*. London: Mothuen & Co.
- ❖ Durplass, J.A. (2009). *Teaching elementary social studies*. New Delhi: Atlantic Publishers.
- ❖ Garnett Ohio. (1965). *Fundamental in school Geography*. London: Harrap and Co.
- ❖ Gill D.S. *Educational Administration and Organization Management*. New Delhi: Saurabh Publishing House.
- ❖ Gospil, G.H.(1965). *The Teaching of Geography*. London: Macmillan and Co.
- ❖ Graves, N.J.(1971). *Geography in secondary Education*. London: Geography Association.
- ❖ Haggett, P.(1972). *Geography: A Modern synthesis*. New York: Harper and Row.
- ❖ Hall, D. (1976). *Geography and the Geography Teachers*. London: George Allen & Unwin Ltd.
- ❖ Indian National Committee for Geography. (1968). *Indian Regional Studies*. Calcutta: IGU Publication.
- ❖ Kanammall, Raa.(2007). *Puviyiyal Karpithal*. Chennai: Saradha Publishers.
- ❖ Malid Husain. (2010). *Evolution of Geographical Thought*. Jaipur: Rawat Publication.
- ❖ Mangal S.K., & Uma Mangal. (2011). *Teaching of social studies*. New Delhi: PHI learning Private Limited.
- ❖ Rao M.S.(1999). *Teaching of Geography*. New Delhi: Anmol Publication Pvt. Ltd.
- ❖ Robinson, Aruthur H.(1960). *Elements of Cartography*. New York: John wiley and Sons, Inc.
- ❖ Selvam.N.(2004). *Puviyiyal Karpithal Muraigal*. Chennai: Santha Publication.
- ❖ Sharma, R.A.(2008). *Technological Foundation of Education*. Meerut: R. Lall Books Depot.
- ❖ Siddiqui, M.H.(2009). *Teaching of Geography*. New Delhi: APH Publishing Corporation.
- ❖ Siddiqui, M.H.(2009). *Techniques of Classroom Teaching*. New Delhi: APH Publishing Corporation.
- ❖ Singh, Y.K.(2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ வாசன் (1992) □ புவியியல் கற்பிக்கும் முறைகள் : சாந்தா பப்ளிஷர்ஸ், சென்னை

- ❖ சீனிவாசன். த. (2010): வரலாறு கற்பித்தல் தாள்- ஐஇ சமயுக்தா பதிப்பகம், சேலம் ரோடு, நாமக்கல்.
- ❖ கண்ணம்மாள் (2009), புவியியல் கற்பித்தல்: சாரதா பதிப்பகம், இராயப்பேட்டை, சென்னை
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): சமூக அறிவியல் கற்பிக்கும் முறைகள், தாள்-ஐஇ பு.ஏ. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ வசந்தி சு. (2007). கற்பித்தல் புதிய அணுகு முறை, வனிதா பதிப்பகம், சென்னை.

SEMESTER – I**CPS 2 a Part I - PEDAGOGY OF COMMERCE AND ACCOUNTANCY****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- understand the need and nature of teaching Commerce and Accountancy;
- familiarize with the aims, objectives, goals and values of teaching Commerce;
- get acquainted with the teaching skills;
- explore the individual differences existing among the learners for effective teaching of commerce and accountancy;
- familiarize with the new methods of teaching Commerce and Accountancy;
- understand the instructional materials employed in teaching of Commerce and Accountancy;

Unit I: Nature and Scope of Commerce and Accountancy

Commerce & Accountancy – Introduction, meaning, definition, scope, need and its nature – Classification of Commerce – Trade, Transport, Warehousing, Banking, Insurance, Advertising- Commerce Education – Introduction – Meaning, Scope and its Nature - History of Commerce Education - Relationship of Commerce with other subjects.

Unit II: Aims and Objectives of Teaching Commerce

Goals and Objectives of teaching Commerce with reference to Anderson's and Krathwohl classification - General and Specific Objectives of teaching Commerce – Writing Objectives in behavioral terms- Aims of teaching Commerce at different levels: Primary, Secondary and Higher Secondary.

Unit III : Development of Skills through Mini Teaching

Mini Teaching: Meaning, Characteristics, Phases of Mini Teaching, Mini Teaching Cycle, Teaching Skills : Skill of set induction, Skill of explaining, Skill of blackboard writing, Skill of illustrating with examples, Skill of probing questions, Skill of fluency in questioning, Skill of stimulus variation, Skill of reinforcement, Skill of achieving closure - Advantages and Limitations of Mini Teaching.

Unit IV: Exploring Learners of Commerce and Learning Experience

Concept of Individual differences – Nature and type of differences: Inter Vs. Intra individual differences – Factors of Individual differences - Dealing with Individual differences – Areas of Individual differences – Aptitude, Attitude, Intelligence, Interest, Creativity and social characteristics of commerce learners - Identification of gifted and slow learner - Enrichment and remedial methods of teaching - Exploring Learning Experience: Meaning of Learning Activity and Learning Experience – Types of Learning Experiences – Characteristics of Effective Learning Experience – Sources of Learning Experiences – Emotionalized Learning Experience – Learning Experiences related to different methods of teaching.

Unit V: Methods of teaching Commerce and Accountancy

Introduction – Different methods employed for teaching Commerce & Accountancy: Project Method, Lecture Method, Discussion Method, Question-Answer Method, Observation Method, Text book Method, Survey Method, Problem Solving Method, Dramatization Method, Case Study Method, Demonstration Method, Role playing Method, Review Method and Source Method.

Unit VI: Instructional materials / Teaching Aids in Commerce and Accountancy

Meaning of the term Instructional Material / Teaching Aids – Significance of instructional materials / teaching aids in Commerce & Accountancy – Guiding principles for the effective use of instructional materials – Audio Visual Aids – Classification of Audio Visual Aids: The First Approach, The Second Modified Approach, The Technological Approach – Edger Dale's Classification – Instructional / teaching aids employed in Commerce & Accountancy teaching: SMART Interactive Whiteboard, Black Board / Chart Board, Bulletin Board,

Flannel Board, Real Objects, Pictures, Crafts, Charts, Diagrams, Cartoons, Posters, Flash Cards, Models, Magazines, News Paper Cuttings, Dioramas, Slides, Film Strips, Transparencies, Scrap Books, Epidiroscope, Projectors, Radio, Tape Recorder, Televisions, Video tape / Video Cassette Recorder (VCR), DVD, MP3, VCD, Motion Pictures / Movies and Computers.

Suggested references:

- ❖ Aggarwal, J.C. (2006). *Essentials of Educational Technology Teaching and Learning*. New Delhi: Vikas Publishing House.
- ❖ Allen, O.C., & Francis P.H. (1988). *Curriculum: Foundations, principles and issues*. New Jersey: Prentice Hall.
- ❖ Bining A.C., & Bining D.A. (1962). *Teaching of Social Studies in Secondary Schools*. New York: Mc Graw Hill.
- ❖ Boynton, L.O. (1995). *Methods of Teaching Book-Keeping*. Cincinnati: South Western Publication Company.
- ❖ Chauhan, S.S. (2008). *Innovations in Teaching Learning Process*. Uttar Pradesh: Vikas Publishing House Pvt. Ltd.
- ❖ Douglas, Palnford., & Anderson. (2000). *Teaching Business Subjects*. New York: Prentice Hall.
- ❖ Edward, F.O., Raymond, W.K., & Ronald J.M. (1971). *Programmed Instruction Techniques and Trends*. New York: Century Cropts.
- ❖ Head, G.W. (1988). *Commerce*. London: Heinemann Professional Publishing.
- ❖ Joyce, Well. (2004). *Models of Teaching*. U.K.: Prentice Hall of India.
- ❖ Khan, M.S. (1982). *Commerce Education*. New Delhi: Sterling Publishers Private Limited.
- ❖ Kochhar, S.K. (1992). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Private Limited.
- ❖ Kumar, K.L. (1996). *Educational Technology*. New Delhi: New Age International Publishers.
- ❖ Mangal, S.K., & Mangal, S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal Book Depot.
- ❖ Nagarajan, K.L. (1997). *Principles of Commerce and General Commerce Knowledge*. New Delhi: S.Chand & Company Ltd.

- ❖ Pattanshetti, M.M. (1992). *Designing and organizing tutorials in colleges and universities*. Davangere: You Need Publication.
- ❖ Saylor, J.G. William, M.A., & Hollis. (1956). *Curriculum Planning*. New York: Rinehart and Company Inc.
- ❖ Sharma, R.A. (2008). *Technological Foundation of education*. Meerut: R.Lall Books Depot.
- ❖ Sharma, R.N. (2008). *Principles and Techniques of Education*. New Delhi: Surjeet Publications.
- ❖ Singh, Y.K. (2009). *Teaching of Commerce*. New Delhi: APH Publishing Corporation.

SEMESTER – I**CPS 2 a Part I - PEDAGOGY OF HOME SCIENCE****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of this course the student teachers will be able to:**

- explain the nature and scope of Home Science;
- integrate aims and objectives of teaching of Home Science;
- get acquainted with the teaching skills
- explore teaching and learning Home Science
- recognize the new trends in curriculum transaction;
- organize the teaching aids to support learning;

Unit I: Nature and Scope of Home Science

Nature, Need and Scope of Home Science Education in the world setting, family setting and educational setting-Home Science as a subject in the academic structure-Relationship with other subjects. Career options in Home Science Entrepreneurship in Home Science.

Unit II : Aims and Objectives of Home Science Education

Goals and Objectives of teaching Home Science with reference to Revised Bloom's Taxonomy of Educational Objectives - General and Specific Objectives of teaching Biological Science – Writing Objectives in behavioral terms- Aims of teaching Biological Science at different levels: Primary, Secondary and Higher Secondary.

Unit III: Development of Skills through Mini Teaching

Mini teaching: Meaning, Characteristics, Phases of Mini teaching, Mini teaching cycle, Teaching Skills : Skill of set induction, Skill of explaining, Skill of blackboard writing, Skill

of illustrating with examples, Skill of probing questions, Skill of fluency in questioning, Skill of Stimulus Variation, Skill of reinforcement, Skill of achieving closure, Advantages and Limitations of Mini teaching.

Unit IV: Exploring Learner in Teaching and Learning Home Science

Introduction – Class as a heterogeneous group-the need to cater to the individual differences. Gifted learners – Need and identification of gifted children, characteristics of gifted children, enrichment programme for gifted children, National Talent Search Examination, steps to enhance the abilities of the gifted children in science. Slow learners- Need and problem faced by the slow learners, special care to cater to the slow learners, Diagnostic tests, Remedial teaching to help the slow learners.

Unit V: Methods of Teaching Home Science

Teacher and Student-centered Methods- Lecture Method- Lecture Demonstration Method- Heuristic Method- Project Method- Biographical Method- Inductive-deductive Method- Historical Method-Assignment Method- Significance of employing different Methods in teaching of Home Science.

Unit VI: Teaching Aids

Introduction: Meaning & Advantages – Edgar Dale's Cone of Learning Experience – Projective and Non Projective aids – current trends in educational technology – Different types of Boards, SMART Interactive Whiteboard, film, filmstrips ,OHP, Motion pictures, Documentaries, graphs, internet usage.

Suggested references:

- ❖ Bhatia, K.K. (1990). *Measurement and Evaluation in Education*. Ludhiana: Prakash Brothers.
- ❖ Jha, J.K. (2001). *Encyclopaedia of Teaching of Home Science. (Vol. I & II)*, New Delhi: Anmol Publications Private Limited.
- ❖ Kalra, R. M. (2009). *Teaching of Science*. New Delhi: Rakhi Prakashan Publishers.
- ❖ Lakshmi, K. (2006). *Technology of Teaching of Home Science*. New Delhi: Sonali Publishers.
- ❖ Nibedita, D. (2004). *Teaching of Home Science*. New Delhi: Dominant Publishers and Distributers, New Delhi

- ❖ Seshaih, P.R. (2004). *Methods of Teaching Home Science*. Chennai: Manohar Publishers & Distributors.
 - ❖ Shah, A. Et al. (1990). *Fundamentals of Teaching Home Science*. New Delhi: Sterling Publishers Private Limited.
 - ❖ Shalool, S. (2002). *Modern Methods of Teaching of Home Science*. New Delhi: Sarup & Sons.
 - ❖ Sharma, S. (2009). *Modern Methods of Teaching Home Science*. New Delhi: Rakhi Prakashan Publishers & Distributors.
 - ❖ Yadav , S. (1997). *Text book of Nutrition and Health*. New Delhi: Anmol Publishers.
 - ❖ Yadav, S. (1997). *Teaching of Home Science*. New Delhi: Anmol Publishers.
 - ❖ Yadav, V.K. (2009). *Biochemistry & Biotechnology: A Laboratory Manual*. New Delhi: Pointer Publishers.
-

DISABILITY SPECIALIZATION – VISUAL IMPAIRMENT (C)
SEMESTER - I
C12 IDENTIFICATION OF CHILDREN WITH VISUAL IMPAIRMENT
AND ASSESSMENT OF NEEDS

Credits: 4 Credits: 4

Internal: 40 marks

Hours/Week: Theory-4hrs Practical- 4hrs

External: 60 marks

Total: 100 marks

Introduction

We cannot treat a visually impaired child as ‘a pair of young eyes’. We need to understand the whole child, including his feelings and needs. Having understood the psychological and sociological implications of visual impairment, the learners should be more empathetic to the needs of the visually impaired and address them appropriately in diverse educational settings. There are many eye conditions each with different educational and social implications. The infant must ‘see to learn’ and therefore a visually impaired infant must ‘learn to see’. The course will enable the trainees to be able to identify children who are at risk for visual impairment. The trainees will be able to develop the skills of doing functional vision assessment and enhance the residual vision. The course also focuses on needs and assessment of children with multiple disability and visual impairment.

Objectives

After completing the course student-teachers will be able to

- Describe the structure of eye and common eye defects.
- Explain the etiology of visual impairment.
- Analyse the implications of visual impairment and identify their needs.
- Develop skills to identify and assess children with visual impairment.
- Describe the needs and develop skills to assess children with visual impairment and multiple disabilities (VIMD).

Unit 1: Anatomy and Physiology of Human Eye

Structure and Function of human eye - Normal vision development and process of seeing - Principles of refraction and refractive errors - Concept and definitions of blindness and low vision - Concept of visual acuity, visual field, depth perception and contrast sensitivity

Unit 2: Types of Visual Impairment and Common Eye Disorders

Loss of Visual acuity - Loss of Visual field - Colour vision defect and loss of contrast sensitivity - Refractive errors, Vitamin-A deficiency, Cataract, Glaucoma, Corneal ulcer, trachoma, Albinism, Retinal detachment, Retinitis pigmentosa, Retinopathy of prematurity, Cortical Visual Impairment, Optic Atrophy, Nystagmus, Amblyopia, and Macular degeneration - Educational implications of different Eye disorders

Unit 3: Implications of Visual Impairment and Needs of Visually Impaired

Psychosocial implications of visual impairment - Factors affecting implications of visual impairment: Age of onset, degree of vision, type of vision loss, prognosis, and socio economic status of the family - Effect of visual impairment on growth and development: Physical, Motor, Language, Socio-emotional, and Cognitive development - Educational needs of the visually impaired and need for expanded core curriculum - Implications of low vision and needs of children with low vision.

Unit 4: Identification and Assessment of Visual Impairment

Interpretation of clinical assessment of vision - Functional assessment of vision: Concept, need and methods - Tools of functional assessment of vision and skills: Functional skills inventory for the blind (FSIB), Low Vision Assessment by Jill Keeffe, Lea tests, and Portfolio assessment - Tools for psychological assessment of the visually impaired: Vithoba Paknikar Performance Test, A short Scale IQ measure for the visually impaired based on WISC-R, Adapted EPQ, Adapted Blind Learning Aptitude Test, Concept development for blind children, Reading Preference Test, Cornell Medical Index for Visually Handicapped Children - Report writing

Unit 5: Assessment of Learning Needs of Children with VIMD

Concept and definition of VIMD - Etiology of VIMD - Impact of VIMD on learning and development - Screening, identification, and assessment of Visually Impaired children with associated disabilities - Multidisciplinary assessment of Visually Impaired children with Associated Disabilities

Course Work/ Practical/ Field Engagement

- Present a seminar on implications of visual impairment on the personality of the visually impaired
- Prepare material on early indicators of visual impairment and prevention of visual impairment
- Carry out functional assessment of skills of a blind, a low vision, and a VIMD child and submit a report of their assessment

Suggested Readings

- ❖ Holbrook, M. C., & Koenig, A. J. (2000). Foundations of Education, Vol I: History and Theory of Teaching Children and Youths with Visual Impairments. AFB Press, New York.
- ❖ Kundu, C.L. (2000). Status of Disability in India. RCI, New Delhi.
- ❖ National Institute for the Visually Handicapped (1990). Handbook for Teachers of the Blind. NIVH, Dehradun.
- ❖ Punani, B., & Rawal, N. (1993). Handbook: Visual Impairment. Ashish Publishing House, New Delhi.
- ❖ Bright Hub Education. (2012). Identifying Students with Visual Impairment. Retrieved from <http://www.brighthouseeducation.com/special-edvisualimpairments/69240-early-signs-of-visual-impairment-in-a-child/>

ENHANCING PROFESSIONAL CAPACITIES (EPC)

SEMESTER - I

EPC 2 PHYSICAL EDUCATION, ADAPTED PHYSICAL EDUCATION AND YOGA

Credits: 2

Internal: 50 marks

Hours/Week: 5 hrs

Objectives

At the end of this course, the student-teachers will be able to:

- acquaint with the fundamental skills of games and sports;
 - explore different physical activities;
 - familiarize with general bodily posture;
 - develop leadership, followership and sportsmanship qualities;
 - competently acquire different asanas.
1. **Calisthenics** : Standing, Sitting, Bending, Jumping, Lunging exercises
 2. **Light Apparatus** : Dumb-Bell and Hoop Drill
 3. **Marching** : Attention, Stand-at-Ease, Turns, Quick March, Salute, Turns while marching
 4. **Recreation** : Minor games-Good Morning, Four Corner, Kangaroo Relay, Snatch the Kerchief, Dodge Ball, Zigzag Relay, Tunnel Ball Relay
 5. **Organised Games:** Throw Ball-Dimensions of Court, Rules and Regulations, Fundamental Skills
Tennikoit - Dimensions of Court, Rules and Regulations, Fundamental Skills
 6. **Athletics** : Running-Sprint, Jumping-Long Jump, Throwing- Shot put, Javelin
 7. **Competitions** : Intramural- Organising and conducting, benefits
Extramural- Organising and conducting, benefits
 8. **Yogasana** : Sitting - Padmasana, Yogamuthra, Vajrasana, Pachimuthasana
Lying - Pujangasana, Salabasana, Dhanurasana, Makarasana
Standing - Chakrasana, Vrikshasana, Ardha chakrasana, Trikonasana

9.Adapted physical education : Meaning and Needs for adapted physical education-
Facilities: play area,temporary boundaries,equipments - Suitable activities : Marching,free
hand and light apparatus exercises, Rythmics,minor games, major games and athletics.

Suggested references:

- ❖ Angeline, Sheela Lilly. (2014). *Learning Material on Physical Education*.NKT National College of Education for Women.
- ❖ Tiwari, O.P.(2002). *Asana: why and how?*India: Kanalyadhana.
- ❖ Krishna,G.(1993). *The purpose of Yoga*. New Delhi: UBS Publishers Ltd.
- ❖ Pandit, Laksmi Doss. (2002). *Yogasana for everybody*. Chennai: Balaji Publications.
- ❖ Thomas, J.P.(1954). *Organisation of Physical Education*. Chennai: YMCA College of Physical Education.
- ❖ Dhanajoy.S., & Seema.K. (2007). *Lesson Planning: Teaching methods and class Management in Physical Education*. New Delhi: Khal Sahitya Kendra.
- ❖ Athicha, Pillai.A., & Bevison, Perimbaraj S.(2006). *Methods in Physical Education*. Pravin Publishers.
- ❖ டெவிட்சன் எ!;. இள“கொ வை. (2005). உடற்கல்வியஜம் சுகாதாரக் கல்வியஜம். டிசன்னை :சாந்தா பப்ளிகூர்!;.
- ❖ இரத்தினசபாபதி .பி. டாக்டர். ருக்மணி கொபால் .(2009). உடற்கல்வியஜம் உடல்நலம் கல்வியஜம். டிசன்னை :சாந்தா பப்ளிகூர்!;.
- ❖ Jaimithra.s (1990) “physical education for the blind”. Private circulation, grace printers, madras.

SEMESTER - II

PERSPECTIVES IN EDUCATION (PE)**SEMESTER - II****PE 3b LEARNING AND TEACHING - PART II****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- interpret and manage the learning and teaching process effectively;
- acquire knowledge about principles and maxims of teaching;
- classify the difficulties of the learner and make teaching effectively.

Unit I: Understanding and Management of Learning and Teaching

Nature of learning – Learning as a process and learning as an outcome. Types of learning – Factual, association, conceptual, procedural, generalization, attitude, values, skills. Management of learning – Planning, organizing, executing, controlling and quality of learning.

Unit II: Principles and Maxims of Successful Teaching

Introduction; General principles of teaching; psychological principles of teaching, maxims of teaching.

Unit III: General Learning Difficulties

Need for diagnosis of learning difficulties in the classroom– Common learning difficulties faced by students – Identification – Solutions for the learning difficulties encountered by the students – Remedial teaching – Supervised study method – Tutorial and Drill method - - Individualised Instruction - Quality Circle.

Suggested references:

- ❖ Bob Burkill., & Ray Eaton. (2011). *Developing Teaching and Learning*. London: Cambridge University Press.

- ❖ Derek, Rowntree.(1986).*Teaching through self-instruction*. London: Kogan page.
- ❖ Jaya Pillai, K.(1985). *Effective teaching*. Madurai: Publishing division, Madurai Kamarajar University.
- ❖ Kulkarni,S.S.(1986). *Introduction to Educational technology*. Bombay: Oxford and IBH Publishing Co.
- ❖ Kumaraswamy Pillai, K. (1980). *Curriculum, Teaching and evaluation*. Annamalai Nagar: Sivakami Printers.
- ❖ Mangal,S.K.(1986). *Fundamentals of Educational Technology*. Ludhiana: Prakash Brothers.
- ❖ Mathew, Thomas. (2009). *Effective Teaching*. New Delhi: S. Chand and Company Ltd.
- ❖ NCTE. (1998). *Competency Based and Commitment Oriented Teacher Education for Quality School Education*. New Delhi: NCTE Initiation Document 98/21.
- ❖ Prem Latha, Sharma. (2006). *Learning Readiness*. New Delhi: Roshan Offset Printers.
- ❖ Ramesh Varma., & Suresh Sharma. (1998). *Modern Trends in Teaching Technology*. New Delhi: Anmol Publications.
- ❖ Sampath, K. (1981). *Introduction to Educational Technology*. New Delhi: Sterling Publishing Pvt. Ltd.
- ❖ Sharma, Motilal. (1985). *System Approach: Its Application in Education*. Bombay: Himalaya Publishing House.
- ❖ Sharma, R.A. (1991). *Technology of Teaching*. Meerut: R.Lall Book Depot.
- ❖ Sharma,R.A. (1982). *Programmed Instruction and Instructional Technology*. Meerut: International Publishing House.
- ❖ Siddiqui, M.H., & Khan, M.S. (1991). *Models of Teaching Theory and Research*. New Delhi: Ashish Publishing House.

SEMESTER - II**PE 4 PSYCHOLOGICAL PERSPECTIVES OF LEARNERS****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total:50marks****Objectives****At the end of the course the student-teachers will be able to:**

- gain insight into cognitive process, intelligence and creativity;
- explore various strategies to improve learning;
- expound knowledge about motivation.

Unit I: Cognitive process

Cognitive process- Attention, factors relating to attention- span of attention, inattention, distraction- sensation and perception- theories relating to perception-characteristics of perception-Laws of perceptual organization-errors in perception -Image and imagery-Implication for the teachers: Intelligence and Creativity: Nature, Types- Theories of intelligence – Unitary, Spearman's, Thorndike's, Thurston's and Guildford's theories - Multiple Intelligence Theory - Creativity: Meaning, Nature of creative person- Stages in creative process- Identification of creative children- fostering creativity among children.

Unit II: Learning and Memory process

Nature and importance of learning- Factors affecting learning- Theories of learning- Thorndike, Pavlov, Skinner, Kohler, Gestalt, and Gagne. Transfer of learning. Memory Process: Nature and types- problems associated with memory, retention and recall, remembering and forgetting - Learning Style, Theories of forgetting and forgetting curve

Unit III: Motivation

Motivation and learning – functions of motivation, Kinds of motives, Interest and motivation in education- the relationship between interest , academic motivation and scholastic performance- Motivation in the classroom praise and blame, rewards and punishments- feedback or knowledge of results- Level of aspiration.

Suggested references:

- ❖ Asch, M. (2003). *Creativity and Personality*. New Delhi: Ivy Publishing House.
- ❖ Dash, B.N. (2010). *Psychology of Teaching – Learning Process*. New Delhi: Dominant Publishers and Distributors.
- ❖ Gill, D.S. (2010). *Advanced Educational Psychology*. New Delhi: Saurab Publishing House.
- ❖ Harry, Alder.(2006). *Boost your creative Intelligence*. New Delhi: Kogen Page India Private Limited.
- ❖ Manivannan, M. (2010). *Understanding Educational Psychology*. New Delhi: Neelkamal Publications Pvt. Ltd.
- ❖ Mishra, R.C. (2013). *Advanced Educational Psychology*. New Delhi: A.P.H. Publishing Corporation.
- ❖ Mukta, Rathee. (2015). *Advanced Educational Psychology*. New Delhi: Rajat Publications.
- ❖ Panda, B.N. (2011). *Advanced Educational Psychology*. New Delhi: Discovery Publishing House.
- ❖ Pandey,P., Amita, Bharadwaj., & Asha, Pandey. (2010). *Advanced Educational Psychology*. New Delhi: Shipra Publications.
- ❖ Sundaram, Ramachandran. (2009). *Advanced Educational Psychology*. Chennai: Shantha Publishers.
- ❖ நாகராஜன், கி மற்றும் தேவ. சீத்தாராமன் .(2014): உளவியல் நோக்கில் கற்றலும் மனித மேம்பாடும். சென்னை : ஸ்ரீராம் பதிப்பகம்.
- ❖ நாகராஜன், கி. (2008): கல்வி உளவியல் . சென்னை : இராம் பதிப்பகம்.

CURRICULUM AND PEDAGOGIC STUDIES (CPS)**SEMESTER – II****CPS 2b - Part II - PEDAGOGY OF TAMIL****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****தமிழ் கற்பிக்கும் முறைகள் - பகுதி 2****நோக்கங்கள்****இப்பாடப்பொருளைக் கற்றபின்பு மாணவ-ஆசிரியர்கள்:**

- கல்வியில் இணைக்கலைத்திட்டச் செயல்பாடுகளை மேற்கொள்ளல்;
- மாணவர்களின் தேர்ச்சியை மதிப்பிட வினாப் பண்புகளுக்கேற்ப வினாக்களைத் தயாரித்தல்;
- தமிழ்ப் பாடங்களைத் திறம்படக் கற்பிப்பதற்கான முன்செயல்களைப் பழகுதல்;
- கற்பித்தலின் அடிப்படை விதிகளை அறிந்து அவற்றை பயன்படுத்துதல்;
- வகுப்பறைத் திறன்களை மேம்படுத்துவதில் புதுமைப் போக்குகளை மேற்கொள்ளல்;
- நிறுவன கட்டமைப்பு பற்றி விவரித்தல்;

அலகு 1: இணைக்கலைத்திட்டச் செயல்பாடுகள்

இணைக்கலைத்திட்ட செயல்பாடுகள்: நோக்கம் - இன்றியமையாமை - முக்கியத்துவம் - தமிழ் இலக்கியமன்றம் - நாடகம், பட்டிமன்றம், சொற்பொழிவு, வினாடிவினா - கதை, கவிதை, கட்டுரை எழுதுதல், ஓவியம், நடனம், இசை போட்டிகள் நடத்துதல் - பள்ளி இதழ்கள் தயாரித்தல் - கையெழுத்து பிரதிகள் - உடல் வளர்ச்சிக்கான செயல்கள்: விளையாட்டு பயிற்சி, - பண்பாட்டை வளர்க்கும் செயல்கள்: கல்விச்சுற்றுலா - கல்வி கண்காட்சி அமைத்தல், பொருள்காட்சி - விழாக்களைக் கொண்டாடுதல்.

அலகு 2: தேர்வும் அளவீடும்

தேர்வு வினாக்கள்: அகவயம், புறவயம் - இவ்விரு வினா வகைகளின் அமைப்புக்கள் - ஒவ்வொன்றின் தேர்வுப் பயன்பாடுகள் - இவற்றைப் பற்றிய பிழைபட்ட கருத்துக்கள் - இவற்றை தயாரிக்கும் முறைகள் - நடைமுறையில் காணப்படும் வினாப் பிறழ்வுகள் - அடைவுத் தேர்வு: தேர்வுத் தாள் தயாரித்தல், வினாத்தாள் திட்ட வரைவு, விடைத்தாள்

அளவிடுதல், வினாப்பகுப்பாய்வு, முறைகள், மாணவரின் விடைத்தாள்களுக்கு மதிப்பெண் அளவை வழங்கி அவர்களின் தேர்ச்சித் தன்மையினை மதிப்பிடல் (புள்ளியியல் அளவைகள் கொண்டு).

அலகு 3: பாடம் கற்பித்தல் - முன்தயாரிப்பு நிலை, கற்பித்தல் நிலை

பாடங்கற்பித்தல் திட்டம்: பாடத்திட்டம் - அலகுத் திட்டம் - வருடாந்திரப் பாடத்திட்டம் - பாடங்கற்பிப்புத் திட்டத்தை எழுதும் போது மனதில் கொள்ளத்தக்கன. பாடங்கற்பித்தல் திட்டத்தில் காணப்படவேண்டிய கூறுகள்: பாடத்தலைப்பு - முடித்தற்கான கால அளவு - தேவையான துணைக் கருவிகள் - கற்பித்தல் முறைகள் - கற்பித்தல் நோக்கங்கள் - ஆர்வமுட்டல் - கற்பித்தல் அழுத்தங்கள் (Teaching Points) - மீள்பார்வை - ஒப்படைப்பு தருதல்.

அலகு 4: கற்பித்தலில் ஆசிரியரின் பொறுப்பு மற்றும் ஆசிரியரின் ஈடுபாடு

ஆசிரியரின் ஈடுபாடு: ஆசிரியரின் பண்பு நலன்கள் - பயிற்றலில் அடிப்படை விதிகளைக் கையாளல்: பருவமறிந்து பயிற்றும் பண்பு - பாடப்பொருள்களை தயாரித்தல் - எடுத்துக் கூறும் ஆற்றல் - பயிற்றலின் அடிப்படை விதிகளை அறிந்தவராதல் - மாணாக்கர்களுக்கு நல்ல முன் மாதிரியாக இருத்தல். விழுமியங்களை ஆசிரியர் மாணவர்களுக்கு நடத்தையின் மூலம் உணர்த்தல்: அன்பு, ஆளுமை, ஒழுக்கம், நேரந்தவறாமை, மனிதநேயம், பணிவுடைமை, உதவும் மனப்பான்மை, உண்மையுடைமை, நடுவுநிலைமை, தூய்மை - சிறந்த குடிமக்களை உருவாக்கும் பொறுப்பேற்றல் - சமூக உறவு கொள்ளல் - உலகப் பொது அறிவு பெறுதல்.

அலகு 5: வகுப்பறைச் சூழல் மற்றும் வகுப்பறை மேலாண்மை

வகுப்பறைத் திறன்களை மேம்படுத்துதல்: வகுப்பறையில் கற்றல் சூழல் - ஆக்கமுடைய வகுப்பறைச் சூழல் - விளைபயன்மிக்க கற்றல் சூழலுக்கு உதவும் காரணிகள் - நேர்த்தியான வகுப்பறைச் சூழலை ஏற்படுத்தல். வகுப்பறை மேலாண்மை: பொருள் - விளக்கம் - வகுப்பறை ஒருங்கமைத்தல் - வகுப்பறை ஒழுங்காக நடைபெற மேற்கொள்ளும் முறைகள்: தடுத்தல் - கட்டுப்படுத்துதல் - வகுப்பறைச் செயல்பாடுகள் - வகுப்பறைப் பதிவேடுகளும் விதிகளும் - பிளாண்டரின் இடைவினை பகுப்பாராய்ச்சி.

அலகு 6: பள்ளிக் கட்டமைப்பு

நிறுவன கட்டமைப்பு: பள்ளி இருப்பிடம் - சுற்றுப்புறம் - பள்ளி கட்டிட வகைகள் - கிராமப்புற, நகர்ப்புற பள்ளிக் கட்டமைப்பு - பராமரிப்பு - வகுப்பறை - நூலகம் - ஆய்வக அறை - நுட்பவியல் சாதனங்கள் - பள்ளிப் பதிவேடு - ஆவண அறை - ஓய்வறை -

கழிவறை - குடிநீர்த்தொட்டி - விளையாட்டுத்திடல் - கூட்ட அரங்கம் - அலுவலக அமைப்பு - விடுதி காப்பாளர்.

செய்முறை வேலைகள்

- பாடங்கற்பிப்புத் திட்டத்தினை எழுதுதல்.
- ஒவ்வொரு வகுப்பிற்கும் இரண்டு துணைக்கருவிகளைத் தயாரித்தல்.
- தொழில்நுட்ப உதவியை பயன்படுத்தி துணைக்கருவிகளைத் தயாரித்தல் (Digital lesson Plan).
- ஆசிரியரால் உருவாக்கப்படும் அடைவுத்தேர்வு வினாத்தாள் திட்ட வரைவு அடிப்படையில் உருவாக்கி தேர்வினை நடத்துதல்.
- நீவிர் ஆசிரியர் பயிற்சிக்காக சென்ற பள்ளியின் சூழல் பற்றிய விரிவான அறிக்கை தயாரித்தல்.
- அடைவுத் தேர்வினை எழுதுதல் (முன்அறிவிப்பு தேர்வு மற்றும் முன்அறிவிப்பில்லா தேர்வு) ஒப்படைப்பு எழுதுதல்.

பார்வை நூல்கள்:

- ❖ ரேணு பத்மாமோகன். இ (2008). வினாக்களில் விரிசல்கள். சென்னை: சாந்தா பதிப்பகம்.
- ❖ David, Jacobson., & et al. (2001). *Methods for Teaching: A Skilled Approach*. London: Charles E.Merril Publishing Company.
- ❖ கணபதி வி. (2007). நற்றமிழ் கற்பிக்கும் முறைகள். சென்னை : சாந்தா பதிப்பகம்.
- ❖ Mangal S.K., & Uma Mangal. (2009). *Essentials of Educational Technology*. New Delhi: PHI learning private limited.
- ❖ பெரியண்ணன் கோ. (2004). இனியத்தமிழில் இலக்கண பிழையின்றி எழுதும் முறைகள், சென்னை: வனிதா பதிப்பகம்.
- ❖ பெரியண்ணன் கோ. (2004). தமிழில் பிழையின்றி பேச, எழுத, கற்க உதவும் நூல் சென்னை: அம்சா பதிப்பகம்.
- ❖ Norman, Gronlund E. (1988). *How to construct Achievement Tests*. New Delhi: Prentice Hall Inc.
- ❖ சேதுமணியன். (1990). மொழிபெயர்ப்புக் கோட்பாடுகளும் உத்திகளும், மதுரை: செண்பகம் வெளியீடு.

- ❖ வேணுகோபால் இ. பா. (2009). பைந்தமிழ் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பதிப்பகம்.
- ❖ Principles of preparing textbooks in Mother tongue NCERT Publication. (1970)
- ❖ Thomas Lehmann (1993). A Grammer of Modern Tamil PILC Pondicherry.
- ❖ விஜயா கு., (2008) செயல்வழிக்கற்றல் ஒருவிளக்கம், சென்னை: சாந்தா பதிப்பகம்.
- ❖ விஜயலெட்சுமி, வெ. (2007). நுண்ணிலைக் கற்பித்தல், சென்னை: சாரதா பதிப்பகம்.
- ❖ இரத்தினசபாபதி பி. (2007). செம்மொழிக்கல்வி. சென்னை: சாந்தா பதிப்பகம்.
- ❖ இரத்தினசபாபதி, பி. (2002). வினாக்களில் விரிசல்கள். சென்னை: சாந்தா பதிப்பகம்.
- ❖ கணபதி வி. (2013). பாடப்பொருள் மற்றும் தமிழ்க் கற்பித்தல். சென்னை: சாந்தா பதிப்பகம்.
- ❖ பிரபாகரன் உ. (2012). தமிழ் கற்பித்தல் முறைகள் (பொதுத் தமிழ்). கும்பகோணம்: அரவிந்த் பதிப்பகம்.
- ❖ விஜயா கு. (2013). பாடநூல்களில் தமிழ் இலக்கியத்தின் பங்கு. சென்னை: சாந்தா பதிப்பகம்.
- ❖ வீரப்பன் பா. (2005). தொடக்க நிலையில் தமிழ் கற்பித்தல், சென்னை. ஜோதிப்பிரியா பதிப்பகம்.

வலைதளப்பார்வை

- ❖ <http://www.celt.iastate.edu/teaching-resources/effective-practice/revised-blooms-taxonomy/>
- ❖ <http://goldenwestcollege.edu/wpmu/iec/files/2010/04/Questions-Using-Blooms-Taxonomy.pdf>
- ❖ <https://www.nwea.org/blog/2013/22-easy-formative-assessment-techniques-for-measuring-student-learning/>

SEMESTER - II**CPS 2b – Part II - PEDAGOGY OF ENGLISH****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teacher will be able to:**

- summarise the importance of listening and speaking skill through teaching;
- recognise the importance of teaching reading and the essentials of teaching writing skill;
- describe the methods of teaching grammar and vocabulary for learning the English language;
- explain the role of instructional materials in the syllabus and school curriculum for teaching of language;
- use the skill of planning and write yearly plan, unit plan and daily lesson plan;
- construct test items for evaluating students' and teachers' performance and conduct remedial teaching.

Unit I: Teaching of Listening and Speaking

Types of listening- Sub-skills of listening- The three phases of listening- Listening materials- Tasks for developing listening comprehension- Testing Listening- Sub-skills of speaking- Tasks for developing speaking skill: Language Games, Role Play, Dramatization, Story Telling, Dialogues, Narration, Debates, Interview, Extempore Speeches, Pictures, Objects and Audio/Video- Teaching of English pronunciation: Causes of defective pronunciation in English- Methods of teaching English pronunciation- Types of drills: Substitution drill, Chain drill, Repetition drill, Completion drill, Additional drill, Synthesis drill, Conversion drill & Question and answer drill- Testing Speaking.

Unit II: Teaching of Reading and Writing

Sub-skills of reading- Reading for Perception and Reading for Comprehension- Types of Reading: Loud reading, Silent reading, Intensive reading or Critical reading, Extensive reading, Skimming and Scanning- Mechanics of Reading: Fixations, Eye-span, Regression

and Word-picture- Process of Reading: Recognition Stage, Structuring Stage & Interpretation Stage- Methods of teaching reading to beginners: Alphabet method, Phonic method, Word method, Phrase method, Sentence method, Story method and Eclectic method- Factors affecting reading- Strategies to develop reading- Testing Reading- Sub-skills of Writing- Process of writing: Manipulating, Structuring and Communication- Mechanics of Writing: Handwriting, punctuation and spelling- Characteristics of good hand writing: Distinctiveness, legibility, simplicity, uniformity, spacing, capitalization, punctuation and speed- Writing skills: Mechanical skills, grammatical skills, discourse skills and judgment skills- Qualities of good writing- Teaching of Composition: Types of Composition: Oral and Written: Guided or Controlled Composition and Free composition- Kinds of Composition: Essay Writing, Letter Writing, Precis Writing, Paraphrasing, Dialogue Writing, Paragraph Writing and Report Writing- Correction of composition work- Testing Writing.

Unit III: Teaching of Grammar and Vocabulary

Types of Grammar: Prescriptive/ Formal Grammar and Descriptive/ Functional Grammar- Methods of teaching grammar: Inductive method and Deductive method- Testing Grammar- Selection and Grading of Vocabulary- Kinds of Words: Content and Structure words- Types of Vocabulary: Active and Passive – Strategies to develop Vocabulary- Strategies to develop Spelling Abilities- Testing Vocabulary.

Unit IV: Language Curriculum and Text book

Meaning of the term curriculum- Distinguishing curriculum from syllabus- Principles of curriculum construction- The Syllabus: Different types of language syllabus- Literature teaching- Importance of text books in teaching of English- Characteristics of a good text book- Other Instructional materials: Teacher's Hand books, Work- books, Supplementary readers and e-learning materials.

Unit V: Unit Planning and Daily Lesson Planning in English

Yearly Planning in English- Unit Planning in English- Meaning- Features of Unit planning- Types of units: Subject matter type unit and Experience type unit- Development of a Unit Plan- Importance and advantages of Unit Planning- Demerits and limitations of Unit Planning- Lesson Planning in English: Meaning, concept of lesson planning- Difference between Daily Lesson Planning and Unit Planning- Features of a good lesson plan-Variety approaches in the preparation of daily lesson planning: Herbartian type lesson plan,

Educational objectives based lesson plan and innovative lesson plan- Need and importance of lesson planning- Development of a lesson plan for teaching of English: Prose, Poetry, Supplementary Reader, Grammar and Composition.

Unit VI: Evaluation

Concept of Test, Measurement and Evaluation- Difference between measurement and evaluation- Types of Evaluation: Formative and Summative- Characteristics of a good test- Types of tests- Types of achievement tests, objective tests and written tests- Construction of a good test- Norm-referenced and criterion-referenced evaluation- Diagnostic Testing- Distinguishing Diagnostic tests from the Achievement Tests-Preparation of a Diagnostic Test-Remedial Teaching-Organization of Remedial Teaching.

Suggested references:

- ❖ Agrawal, Rashmi. (2013). *Educational Technology Management and Evaluation*. Delhi: Shipra Publications.
- ❖ Baruah.T.C. (2005). *The English Teacher's Handbook*. New Delhi: Sterling Publishers Private Limited.
- ❖ Bhanot, Suman. (2013). *English Language Teaching – Approaches and Techniques*. New Delhi: Kanishka Publishers.
- ❖ Bharathi, T., Hariprasad, M., & Prakasam,V (Ed). (2005). *Personality Development and Communicative English*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Bhatia, K.K. (1991). *New Techniques of Teaching English as a foreign language*. Jalandhar: New Academic Publishing Company.
- ❖ Dash,B.N. (2004). *Teaching of English*. New Delhi: Dominant Publishers and Distributors.
- ❖ Ediger,Maris.W., Dutt, Bulusu Surya Venkata., & Rao, Digumarti Bhaskara. (2003). *Teaching English successfully*. Delhi: Discovery Publishing House.
- ❖ Hariprasad,M. (2004). *Communicative English*. New Delhi: Neelkamal Publications.
- ❖ Heaton,J.B. (1975). *Writing English Language Tests*. London:Longman Group Ltd.
- ❖ Jayanthi,N.L.N.(2004). *Teaching of English*. New Delhi: Neelkamal Publications.
- ❖ Kochhar,S.K.(2007). *Methods and Techniques of Teaching*. New Delhi: Sterling Publishers Pvt. Ltd.
- ❖ Kohli,A.L. (1992). *Techniques of teaching English*. Delhi: Dhanpat Rai and Sons.
- ❖ Lado, Robert. (1967). *Language Testing*. London: Longmans, Green and Co.Ltd.

- ❖ Mangal,S.K., & Mangal,Uma.(2011).*Essentials of Educational Technolog*. New Delhi:PHI Learning private Limited.
- ❖ Mowla,Shaikh. (2004). *Techniques of teaching English*. Delhi: Neelkamal Publications.
- ❖ Mowla,Shaikh. (2006). *Methods of teaching English*. Delhi: Neelkamal Publications.
- ❖ Mukalel,Joseph,C. (1998). *Approaches to English Language Teaching*. New Delhi: Discovery Publishing House.
- ❖ Muthuja, Babu., Usharani.R., & Agarwal,Sunita.(2009). *Teaching of English-I*. New Delhi: Centrum Press---. (2009). *Teaching of English-II*. New Delhi: Centrum Press.
- ❖ Pahuja,N.P. (2001).*Teaching of English*. New Delhi: Anmol Publications Pvt. Ltd.
- ❖ Shamsi, Nayyer. (2004). *Modern teaching of English*. New Delhi: Anmol Publications Pvt. Ltd.
- ❖ Sharma, K.L. (1970). *Methods of teaching English in India*. Agra: Lakshmi Narain Agarwal Educational Publishers.
- ❖ Sharma, S.P. (2013). *Teaching English- Applications and Lesson Plans*. New Delhi: Kanishka Publishers.
- ❖ Sharma,S.R.(2000).*Effective Classroom teaching:Modern methods, Tools and Techniques*. Jaipur:Mangal Deep Publications.
- ❖ Siddiqui, Mujibul Hasan. (2013). *Challenges of Educational Technology*. New Delhi: APH Publishing Corporation.
- ❖ Singh, Rajinder. (2007). *Teaching of English*. Delhi: Lotus Press
- ❖ Singh, Y.K. (2012). *Teaching of English*. New Delhi: APH Publishing Corporation.
- ❖ Vallabi,J.E.(2012).*Teaching of English-Principles and Practices*, Hyderabad:Neelkamal Publications Pvt. Ltd.
- ❖ Vanaja, M. (2010). *Elements of Educational Technology*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Venugopal Rao,K. (2004).*Methods of Teaching English*. Delhi: Neelkamal Publications.
- ❖ Verghese. B.V. (2005). *Teaching of General English*. Delhi: Anmol Publications Pvt. Ltd.

SEMESTER - II**CPS 2b – Part II - PEDAGOGY OF MATHEMATICS****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- explain the importance of non- scholastic activities in Mathematics;
- implement the process of evaluation;
- acquire competence in teaching mathematics and structuring lesson plan;
- excel the professional growth and commitment of mathematics teacher;
- recognize the importance of classroom climate and acquire the skill of managing classroom effectively;
- explore the skill and competencies to maintain records.

Unit I: Co - Scholastic Activities

Activities in Mathematics: Mathematics Quiz, Mathematics Club activities, Mathematics Exhibition, Planning and Organizing Mathematics laboratory activities, Mathematics outside the classroom organization of field trips and its importance. Organization of Mathematics Olympiad- Appreciation of Aesthetic Structure of Mathematics -Order , Pattern and Sequence.

Unit II: Evaluation of Mathematics Learning

Assessment of Mathematics Learning – Developing blue-print for designing question paper, item construction, marking schemes, question - wise analysis, framing of questions based on concepts and sub-concepts so as to encourage critical thinking, promote logical reasoning and to discourage mechanical manipulation of rote learning, framing of open ended questions providing the scope to learning to give responses in their own words, framing of conceptual questions from simple questions.

Unit III: Planning for Teaching-Learning Mathematics

Macro teaching - Lesson Plan, Unit Plan, Year plan - Herbartian steps - Format of a typical lesson plan – G.I.O's & S.I.O's - Teaching aids - Motivation, Presentation, Application, Recapitulation and Assignment

Unit IV: Teacher Professionalization and Teacher Commitment

Committed teachers, passionate teachers: Dimension of passion associated with teacher commitment and engagement: Teacher commitment as a passion teacher – teacher commitment as a unit of time outside the contact hours with students- teacher commitment as a focus on the individual needs of students. Teacher commitment as a responsibility to impart knowledge, attitudes, values and beliefs- teacher commitment as maintaining ‘ Professional knowledge’- teacher commitment as engagement with school and community- importance of teacher commitment for quality enhancement – Ways and means of enhancing teacher commitment for teaching professionalization. Qualities and skills of Mathematics teachers – General qualities, Personal qualities and Specific qualities.

Unit V: Classroom Climate and Classroom Management

Significance of classroom climate – Teacher dominated, laissez-faire and democratic pattern - Effective classroom management for quality learning: Teacher as facilitators / managers of classroom learning - Components of Classroom Environment: Learning situation, Space and Time, Motivation and Discipline Management of learning situations : Management of group and Individualized learning- Management of space and time : Seating arrangement and Time allocation- Management of Motivation and Discipline.

Unit VI: School Plant

School building and design of the school – Maintenance of the school plant : Playground, Library, Records and Registers.

Suggested references:

- ❖ Aggarwal, J.C. (2008). *Teaching of Mathematics*. Uttar Pradesh: Vikas publishing House Pvt Ltd.
- ❖ Bagyanathan, D. (2007). *Teaching of Mathematics*. Chennai: Tamil Nadu Text Book Society.
- ❖ Bhatia, K.K. (2001). *Foundations of Teaching Learning Process*. Ludhiana: Tandon Publication.
- ❖ Bishop, G.D. (1965). *Teaching Mathematics in Secondary School*. London: Collins publication.
- ❖ Bolt, B. (2003). *Mathematical Pandora's box*. New Delhi: Cambridge University press.
- ❖ Boyer, Carl B. (1969). *A History of Mathematics*. New York, Wiley Publications.
- ❖ Butter, C.H. (1965). *The Teaching of Secondary Mathematics*. London: McGraw Hill book company.
- ❖ Driscoll, M. (1999). *Fostering Algebraic Thinking: A Guide for teachers, grades 5-10*. Portsmouth, NH: Heinemann Publications.
- ❖ Ediger, M., & Bhaskara Rao, D.B. (2004). *Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.
- ❖ Goel, Amit. (2006). *Learn and Teach Mathematics*. Delhi: Authors press.
- ❖ Grouws, D.A. (1992). *Handbook of Research on Mathematics Teaching and Learning*. New York: Macmillan Publishing.
- ❖ Gupta H.N., & Shankaran V. (1984). *Content cum Methodology of Teaching Mathematics*. New Delhi: NCERT.
- ❖ Hoglum, L. (1967). *Mathematics for the Million*. London: Pan Books Limited.
- ❖ Iyengar, K.N. (1964). *Teaching of Mathematics*. New Delhi: A Universal Publication.
- ❖ James, Anice. (2005). *Teaching of Mathematics*. New Delhi: Neelkamal Publication.
- ❖ Joyce, well. (2004). *Models of Teaching*. London: Prentice hall of India.
- ❖ Kapur S.K. (2005). *Learn and Teach Vedic Mathematics*. New Delhi: Lotus Publication.
- ❖ Kulshreshtha, *Teaching of Mathematics*. London: R. Lal and Sons.
- ❖ Kumar Sudhir, *Teaching of Mathematics*. New Delhi: Anmol Publications.
- ❖ Land, F.W. (1966). *New approaches to Mathematics Teaching*. New Delhi: MacMillan and St. Martin's press. .
- ❖ Mangal S.K. (2013). *Teaching of Mathematics*. Ludhiana: Tandon publications.

- ❖ Mangal,S.K.,& Mangal,S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal book depot.
- ❖ Muijs, Daniel., & Reynolds, David. (2005). *Effective Teaching: Evidence and Practice*. London: Sage Publication.
- ❖ Nickson, Marilyn. (2000). *Teaching and Learning Mathematics: A Guide to Recent Research and Its Applications*. New York: Continuum Press.
- ❖ Nunes, T., & Bryant, P. ((1997). *Learning and Teaching Mathematics: An International Perspective*. London: Psychology Press.
- ❖ Parthasarathy,N. (1961). *Kanitham Karpithal*. Chennai: The South India Saiva Sidhantha works. .
- ❖ Pratap,N. (2008). *Teaching of Mathematics*. Meerut:R.Lall Books depot.
- ❖ Schwartz, James E. (1994). *Essentials of Classroom Teaching Elementary Mathematics*. London: Allyn and Bacon Publication.
- ❖ Sharan,R., & Sharma,M. (2006). *Teaching of Mathematics*, New Delhi: APH Publishing Corporation.
- ❖ Sharma,R.A. (2008). *Technological Foundations of Education*. Meerut: R.Lall Books Depot.
- ❖ Siddizui, M.H. (2005). *Teaching of Mathematics*. New Delhi: APH Publishing Corporation.
- ❖ Sidhu,K.S. (2006). *Teaching of Mathematics*. New Delhi: Sterling Publishers private limited.
- ❖ Singh,M. (2006). *Modern Teaching of Mathematics*. New Delhi: Anmol Publications Pvt. Ltd.
- ❖ வாசன் . (2002). கணக்கு கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்.
- ❖ நடராஜன்,வி. (2013). கணிதம் கற்பிக்கும் முறைகள். 1 & 2. சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ நடராஜன்,வி. (2006). கணிதப் பாடப்பொருள் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ தமயந்தி பாக்கியநாதன், என். (2009). கணிதம் கற்பித்தல். சென்னை: சாரதா பதிப்பகம்
- ❖ தமயந்தி பாக்கியநாதன், என். (1978). கணிதம் கற்பித்தல். தமிழ் நாடு அரசு வெளியீடு – பகத் பிரிண்டர்
- ❖ செந்தில் குமார், சு. (2010). கணிதம் கற்பிக்கும் முறைகள். தாள்-1. நாமக்கமல்: சம்யுக்தா பதிப்பகம்.
- ❖ பாலகிருஷ்ணன் R. & சரிதா M. (2010). கணிதம் கற்பிக்கும் முறைகள். தாள்-1.சென்னை: ஸ்ரீகோமதி பப்ளிஷர்ஸ்.
- ❖ நல்லாமூர் கோவி. பழனி. (2008): அறிவியல் கணித மேதைகள். சென்னை: வனிதா பதிப்பகம்
- ❖ நல்லாமூர் கோவி. பழனி. (2006): காகித மடிப்புகளில் கணிதம். சென்னை: வனிதா பதிப்பகம்

SEMESTER - II**CPS 2b – Part II - PEDAGOGY OF PHYSICAL SCIENCE****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course, the student teachers will be able to:**

- classify the co-scholastic activities in Physical Science;
- explain the process of evaluation in Physical Science;
- recognize the significance of planning and teaching Physical Science;
- explain the importance of classroom climate and acquire the skill of managing the classroom effectively;
- integrate the picture of an ideal Physical Science teacher;
- recall the organization of the school plant.

Unit I: Co-scholastic Activities

Definition, Need and Importance of co-scholastic activities- Criteria for the selection of co-scholastic activities in Physical Science- Science Club- Science Exhibition- Science Fairs- Field Trips and Excursions- Organization of co-scholastic activities related to Physical Science

Unit II: Evaluation in Physical Science

Concept of Evaluation- Purpose of Evaluation- Continuous and Comprehensive Evaluation- Formative and Summative Evaluation- Achievement tests- Steps in construction- Preparation of Blue print- Preparation of an Achievement Tests in Physical Science-Item Analysis- Administering the test- Various types of Test items- Essay type, Short answer type, Objective type: Completion type, Matching type, Multiple Choice- Merits and limitations of Essay, Short answer and Objective type- Diagnostic Tests- Steps in constructing a Diagnostic test- Teacher made and Standardized tests

Unit III: Planning and Teaching

Significance of planning for effective teaching- Year Plan: importance and mode of planning- Unit Plan: definition, characteristics, steps in unit planning, importance of unit planning- Lesson Plan: definition, criteria of a good lesson plan, steps involved in lesson planning (Herbartian Steps), advantages of lesson planning.

Unit IV: Teacher Professionalization and Teacher Commitment

Committed teachers, passionate teachers: Dimensions of passion associated with teacher commitment and engagement: Teacher commitment as a passion-teacher – Teacher commitment as a unit of time outside the contact hours with students - Teacher commitment as focus on the individual needs of students. Teacher commitment as responsibility to impart knowledge, attitudes, values and beliefs- teacher commitment as maintaining ‘ Professional knowledge’ - Teacher commitment as engagement with school and community- Importance of teacher commitment for quality enhancement – Ways and means of enhancing teacher commitment for teaching professionalization. Academic and Professional Qualifications for a Science teacher- Qualities of a good Science Teacher- Need for Pre-service and In-service training- Professional development of Science Teachers.

Unit V: Classroom Climate and Classroom Management

Significance of conducive classroom climate- Types of classroom climate: Teacher-dominated, Laissez-faire and Democratic pattern- Classroom Management: meaning, significance of effective classroom management, management of human and material resources

Unit VI: School Plant

Norms in setting up a school - Maintenance of the school plant - Scholastic and Co-scholastic requirements- School shapes - Ideal shape of a school.

Suggested references:

- ❖ Anderson, R.D et. al.(1992). *Issues of Curriculum Reform in Science, Mathematics and Higher Order Thinking- Across the Disciplines- The Curriculum Reform Project*. U.S.A.: University of Colorado.
- ❖ Carin., & Sund.R. (1989). *Teaching Modern Science*. U.S.A : Merrill Publishing Co.

- ❖ Chauhan, S.S. (1985). *Innovation in Teaching and Learning Process*. New Delhi: Vikas Publishing House.
- ❖ Falvery, P., Holbrook, J., & Conian, D. (1994). *Assessing Students*. Hongkong: Longman Publications.
- ❖ Gupta, S.K. (1985). *Training of Physical Science in Secondary Schools*. New Delhi: Sterling Publication (Pvt) Limited.
- ❖ Harms, N., & Yager, R. (1981). *What Research Says to the Science Teacher? Vol. 3*, U.S.A: National Science Teachers Association.
- ❖ Heiss, Oboum., & Hoffman. (1961). *Modern Science Teaching*. New York: Macmillan & Co, Limited.
- ❖ Husen, T., & Keeves, J.P., (Ed.). (1991). *Issues in Science Education*. London: Pergamon Press.
- ❖ Jenkins, E.W. (2000). *Innovations in Science and Technology Education. Vol. VII*, Paris: UNESCO.
- ❖ Joseph. (1966). *The Teaching of Science*. London: Harvard University Press.
- ❖ Khana, S.D., Sexena, V.R. Lamba, T.P., & Murthy, V. (1976). *Technology of Teaching*. Doaba Publishing House.
- ❖ Mangal S.K., & Uma Mangal. (1999). *Essentials of Educational Technology*. New Delhi: PHI Learning (P) Ltd.
- ❖ Natrajan, C. (Ed.). (1997). *Activity Based Foundation Course on Science Technology and Society*. Mumbai: Homi Bhaba Centre for Science Education.
- ❖ Nayak. (2003). *Teaching of Physics*. New Delhi: APH Publications.
- ❖ Owen, C.B. (1966). *Method of Science Mastery*. English Language Society and Macmillan Company Limited.
- ❖ Pandey. (2003). *Major Issues in Science Teaching*. New Delhi: Sumit Publications.
- ❖ Paneerselvam, A., & Rajendiran, K. (2005). *Teaching of Physical Science*. Chennai: Shantha Publication.
- ❖ PanneerSelvam, A. (1976). *Teaching of Physical Science (Tamil)*. Chennai: Government of Tamil Nadu.
- ❖ Popham, W.J. (2010). *Classroom Assessment: What teachers need to know (6th ed.)*. New York: Prentice Hall.
- ❖ Radha Mohan. (2007). *Innovative Science Teaching for Physical Science Teachers*. New Delhi: Prentice Hall of India Private Limited.
- ❖ Rao, C.S. (1968). *Science Teachers Handbook*. American Peace Crops.

- ❖ Sampath,K.(1981). *Introduction to Education Technology*. Sterling Publishers.
- ❖ Sharma, P.C. (2006). *Modern Science Teaching*. New Delhi: Dhanpat Rai Publications,
- ❖ Sharma, R.C. (2009). *Modern Science Teaching*. Meerut: Dhanpat Rai and Sons.
- ❖ Siddiqui & Siddiqui. (1985). *Teaching of Science Today and Tomorrow*. New Delhi: Doals House.
- ❖ Sonika Rajan. (2012). *Methodology of Teaching Science*. New Delhi: Dorling Kindersley (India) Pvt.Ltd.
- ❖ Thurber,W.A., & Collette,A.T.(1964). *Teaching Science in Today's Secondary School*. New Delhi: Prentice Hall of India Private Limited.
- ❖ Williams, B., (1999). *Internet for Teachers*. London: John Wiley & Sons.
- ❖ Yadav, M.S. (2003). *Teaching of Science*. New Delhi: Anmol Publications.
- ❖ பன்னீர் செல்வம், அ. (2009), இயற்பியல் வேதியியல் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ உமா பாஸ்கரன், T. (2009). பொருளறிவியல் கற்பித்தல் முறைகள் I. சென்னை : சாரதா பதிப்பகம்.
- ❖ ராதா மோகன். (2010 பொருளறிவியல் கற்பித்தல் முறைகள். புது டெல்லி: நீல்கமல்
- ❖ செந்தில் குமார், சு. (2010). பொருளறிவியல் தாள்-I: நாமக்கல் : சமயுக்தா பதிப்பகம்.

SEMESTER - II**CPS 2b – Part II - PEDAGOGY OF BIOLOGICAL SCIENCE****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- appreciate the importance of non scholastic activities in biological science;
- recognise the purpose of evaluation in Biological Science;
- accept the need for planning before teaching of Biological science;
- acquire an interest to enhance the teacher professionalism and teacher commitment as Biological Science teachers;
- explain the classroom climate and classroom management;
- recall the importance of organization and maintenance of the institute.

Unit I: Co- Scholastic Activities

Introduction-Formal and informal methods of teaching and learning to strengthen Science education – exhibitions ,field trips, excursion , Science fair-Celebrate science Day, Earth Day and Environmental Day-organize Science club, eco club activities.

Unit II: Evaluation in Biological Science

Introduction-Concept of evaluation- formative, summative evaluation, construction of achievement tests and its types- Diagnostic, Prognostic tests, criterion and norm referenced tests –Item Analysis- Principle of test construction -blue print - question bank- Tools of Evaluation, Written Examination, Online Examination- Grading system.

Unit III: Planning and Teaching

Introduction- Yearly planning in Biological Science, Importance of unit plan in Biological Science, Unit formulation in Biological Science, steps involved in unit planning, Merits and Demerits of unit plan. Major differences between unit plan and lesson plan, Importance of

lesson planning- writing instructional objectives and planning for specific behavioural changes Herbatian Approach in writing lesson plan.

Unit IV: Teacher Professionalization and Teacher Commitment

Introduction- Committed teachers, passionate teachers: Dimension of passion associated with teacher commitment and engagement: Teacher commitment as passion- teacher – teacher commitment as a unit of time outside the contact hours with students- teacher commitment as focus on the individual needs of students. Teacher commitment as responsibility to impart knowledge, attitudes, values and beliefs- teacher commitment as maintaining ‘ Professional knowledge’- teacher commitment as engagement with school and community- importance of teacher commitment for quality enhancement – ways and means of enhancing teacher commitment for teaching professionalization. Need and types of professional growth, role in fostering creativity, equipment maintenance, attending pre - service and in-service training by NCERT and allied agencies. Qualities and competencies of Science teachers - Academic Qualification, Professional training and special qualities required for Biology teachers

Unit V: Classroom Climate and Classroom Management

Introduction- Definition, importance of classroom climate, factors influencing classroom climate, Management of class room climate. Classroom Management: Definition, Techniques, classroom management as time management

Unit VI: School Plant

Introduction- School Building, Design of the school, maintenance of the school, Play ground, Library, Laboratories, Classrooms, Role of Headmaster- Parent- Teacher association in maintenance of school- Time Table- Co-curricular activities, Discipline, records and registers maintained in the School.

Suggested references:

- ❖ Aggarwal .D.D. (2008). *Modern Method of Teaching Biology*. New Delhi: Karanpaper backs.
- ❖ Arulsevi,E. (2007). *Teaching of Science*. Chennai: Saradha Publication.
- ❖ Bhandala, Chadha., & Khanna. (1985). *Teaching Of Science*. New Delhi: Prakash Brothers Educational Publishers.
- ❖ Bhatnagar,A.D. (2004). *Teaching of Science*. Meerut: Surya Publications.
- ❖ Buffaloe, Neal., & Throneberry, J. B. (1972). *Principles of Biology teaching*. New Delhi: Prentice – Hall of India Limited.
- ❖ Frost Jenny., & Turner Tony. (2005). *Learning to teach Science in Secondary school*. New York: Routledge Palmer Publication.
- ❖ Garrett. (1979). *Statistics in Psychology and Education*. Bombay: Vakils, Feffer and Simons Ltd.
- ❖ Green, T. L. (1965). *The teaching of biology in tropical secondary schools*. London: Oxford University Press.
- ❖ Harms, N., & Yager, R. (1981). *What research says to the science teacher* (Vol. 3). Washington: National Science Teachers Association.
- ❖ Heiss. E. D., Obown, S., & Hoftman, C. W. (1961). *Modern science teaching*. New Delhi: Macmillian Company Press.
- ❖ Khana, S.D,et al. (1976). *Technology of science teaching*. New Delhi: Doaba House.
- ❖ Natrajan, C. (1997). *Activity based foundation course on science technology and society*. Mumbai: Homi Bhaba Centre for Science Education.
- ❖ Korde., & Sawant.(1980). *Science and Scientific Method*. New Delhi: Himalaya Publishing House.
- ❖ Passi, B. K. (1976). *Becoming a Better Teacher: Micro teaching approach*. Ahemedabad: Sahitya Mudranalaya.
- ❖ Prasad Janardhan. (1999). *Practical aspects in Teaching of Science*. New Delhi: Kanishka Publication.
- ❖ Saunders, H. N. (1967). *The teaching of general science in tropical secondary school*. London: Oxford University Press.
- ❖ Sharma, Jagdish. (2006). *Models of Teaching Science*. Jaipur: Raj Publishing House.
- ❖ Veena Rani Pandey. (2004). *Major Issues in Science Teaching*. Summit Enterprises.
- ❖

- ❖ வேணு கோபால்.கோ, நாகராஜன் கி. (2012). உளவியல் கற்பித்தல். சென்னை
- ❖ ரா. உமா பாஸ்கரன். (2007). உளவியல் கற்பித்தல். சென்னை: சாரதா பதிப்பகம்.
- ❖ ஆர்.திருவேங்கடசாமி. (2007). உயிர் வாழ்வதும் உளவி வேதியயலும். சென்னை: கௌரா ஏஜென்ஸி.
- ❖ கே. ராஜம்மாள் .(2005). உளவியல் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பதிப்பகம்.
- ❖ மா. மலர்விழி, மா. உமாமகேஸ்வரி. (2008).உளவியல் கற்பித்தல். மதுரை: மாபிலா பப்ளிஸர்.

SEMESTER – II**CPS 2b – Part II - PEDAGOGY OF ELEMENTS OF ECONOMICS****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- acquire competencies to execute non scholastic activities in teaching economics;
- determine the various steps in assessing learners;
- explore the steps in planning;
- appreciate teacher commitment to improve professionalisation;
- familiarize with appropriate classroom climate for better management;
- expound appropriate knowledge about school plant.

Unit I: Co-Scholastic activities

Meaning- importance-principles in organizing co-curricular activities- classification: indoor activities, outdoor activities. Type of co curricular activities: Library Activities, Cultural Development Activities, Civic Development Activities, Social Welfare Activities.

Unit II: Evaluation in Economics

Relationship between objectives, learning experiences and evaluation-Qualities of good tests- Steps in construction of achievement tests- Construction of good test items. Types of tests: formative and summative test- Oral, observation, and written. Preparation of Blue print- types of questions: Essay- short answer type-Objective type- types of objective test items: short answer type, multiple choice type, fill-in-blanks- true or false, matching type - merits and demerits. Characteristics of good test items - Item Analysis - Diagnostic tests and their constructions , Criterion referenced test- Norm referenced tests- Computer Aided Evaluation : On line examination – Grading system.

Unit III: Planning for Teaching

Year Plan- difference between lesson plan and unit plan- steps in preparation of year plan- advantages and disadvantages. Unit planning- meaning, difference between lesson plan and unit plan- characteristics of good unit- steps in preparation of unit- advantages and disadvantages. Meaning – difference between lesson plan and unit plan – importance of lesson plan – various approaches in planning lesson- Herbartian approach in planning lesson – stages in lesson plan.

Unit IV: Teacher professionalization and teacher commitment

Committed teachers, passionate teachers: Dimension of passion associated with teacher commitment and engagement: Teacher commitment as passion- teacher – teacher commitment as unit of time outside the contact hours with students- teacher commitment as focus on the individual needs of students. Teacher commitment as responsibility to impart knowledge, attitudes, values and beliefs- teacher commitment as maintaining ‘ Professional knowledge’- teacher commitment as a engagement with school and community- importance of teacher commitment for quality enhancement – ways and means of enhancing teacher commitment for teaching professionalization. Teacher of Economics: Duties: and responsibilities of the economics teachers- Traits of successful economics teachers – Recommendations of Kothari Commission. Professional development and growth of teachers: Economics Teacher -pre-service and in-service education. Perception of in-service training- need –functions- types of in service programme- specialized in service programme – advantages over pre- service programme. Need for refresher and summer programmes for teachers.

Unit V: Classroom Climate and Classroom Management

Meaning, Types of classroom climate- Ideal classroom climate- role of teachers to maintain ideal climate. Classroom Management: Meaning- concept- The set of strategies that teachers and students use to ensure productive, harmonious learning environment to prevent disruptions in the learning process. Classroom management styles - advantages and disadvantages - role of teachers.

Unit VI: School Plant

Norms in setting up schools- prerequisites for school structure- scholastic and Co-Scholastic requirements- School shapes- ideal shape of school.

Suggested references:

- ❖ Agarwal J. C. (2006). *Essential of Educational Technology: Teaching and learning*. New Delhi: Vikas Publishing House Pvt. Ltd.
- ❖ Alka Kalra. *Efficient School Management and Role of Principles*. New Delhi: A.P.H.Publishing Corporation.
- ❖ Anitha Yadav. (2003). *Teaching of Economics*. New Delhi: Anmol publication.
- ❖ Balaguruswamy, E., & Sharma, K.D. (1982). *Computer in Education and Training*. New Delhi: NIIT.
- ❖ Bennett, S., Marsh, D., & Killen, C., (2008). *Handbook of online education continuum*. New York: International publishing group.
- ❖ Bloom, Benjamin. (1974) *Taxonomy of educational objectives, cognitive domain*. longman Green.
- ❖ Chakraborty, A. K. (2004). *Principle & practice of education*. Meerut: R.Lall Books Depot. NIEPA.
- ❖ Chauhan, S.S. (2008). *Innovations in teaching learning process*. New Delhi: Vikas publishing House Pvt. Ltd.
- ❖ Dhand, H. (2009). *Techniques of Teaching*. New Delhi: APH Publishing Corporation.
- ❖ Edgar Dale. *Audio-Visual Methods in Teaching*. Newyork: Thy Dryden Press.
- ❖ Finch, R Curtes., & Crunkitton, R John.(1984). *Curriculum Development in Vocational and Technical, Education, Planning content, and Implementation*.
- ❖ Foshay, A.W. (1980). *Considered action for curriculum improvement: Association for Supervision and curriculum development yearbook*. Alexandria: ASCO.
- ❖ Garrett, H.E. (1979). *Statistics in Psychology and Education*. Bombay: Vakils Feffer and Simons Ltd.
- ❖ Karthick, G. S. (2004). *Teaching of Economics*. New Delhi: Discovery publication house.
- ❖ Kochhar, S. K. (1992). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Pvt Ltd.
- ❖ Krishnamachariyar. *School Management and System of Education*. New Delhi: Neelkamal Publishers.
- ❖ Kumar, J. J. (2001). *Encyclopedia of teaching of economics (Voll-3)*. New Delhi: Anmol Publishers.
- ❖ Kumar, K. L. (1997). *Educational technology*. New Delhi: Angel International (P) Ltd.

- ❖ Mangal, S.K., & Mangal, S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal Book depot.
- ❖ Mohanty, L. (2006). *ICT strategies for schools*. New Delhi: Sage Publication.
- ❖ Pathak, R.P. and Jagdeesh Chaudhary. (2012). *Educational Technology*, New Delhi: Anmol Publishers.
- ❖ Rudramamba, B. (2004). *Methods of teaching economics*. New Delhi: Discovery
- ❖ Sharma, R.A.(2008). *Technological Foundation of Education*. Meerut: R. Lall Book Depot.
- ❖ Singh, Y.K. (2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ செந்தில் குமார், சு. (2010). பொருளியல் கற்பித்தல். தாள்- I. நாமக்கல்.
- ❖ பொன் மருதவாணன். (2009). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாரதா பதிப்பகம்.
- ❖ பொன் மருதவாணன். (2006). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாரதா பதிப்பகம்.
- ❖ ஸ்ரீபாலாஜி லோகநாதன். (2009). பொருளியல் கற்பிக்கும் முறைகள், தாள்-I. சென்னை: G.V. பப்ளிகேஷன்ஸ்.
- ❖ நடராஜன்,வி. (2006). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிகேஷன்ஸ்.

SEMESTER - II**CPS 2b – Part II - PEDAGOGY OF COMPUTER SCIENCE****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- acquire knowledge on various approaches of teaching Computer Science;
- explore the process of evaluation;
- acquire skills relating to planning lessons and presenting them effectively;
- appreciate the significance the professional growth and commitment of Computer Science teacher;
- acquaint with the importance of classroom climate and acquire skill of managing classroom effectively;
- determine appropriate school plant.

Unit I: Approaches of Teaching Computer Science

Conference - Seminar- Symposium – Workshop - discussion, and panel discussion, Individualized Instruction - Programmed Instruction-: meaning, fundamental principles, types, merits and demerits - Computer Assisted instruction (CAI) : meaning and definition, basic assumptions, different modes, limitations – Computer Managed Instruction (CMI). Innovative Approaches: E –Learning : Introduction – What is e-learning – Nature and characteristics of e-learning – The contemporary concept of e-learning – Modes and Styles – Promotion and arrangement for e-learning in our Educational Institutions – Advantages of e-learning - Online Learning - Mobile Learning (M - Learning) : Background – Approaches : Classroom, at work, lifelong and self learning – Analysis of M-learning : value, challenges, growth. Innovative Practices in Teacher-Education: Team teaching: Meaning and definition – objectives - Principles - Types –steps and procedure - Advantages and limitations.

Unit II: Evaluation in Computer Science

Concept of Evaluation- Relationship between objectives, learning experiences and evaluation, -Purpose of Evaluation- Continuous and Comprehensive Evaluation (CCE) -

Formative and Summative Evaluation- Preparation of Blue print- construction of an achievement test - Various types of Test items- Objective type: Completion type, Matching, Multiple Choice- Alternative response – Essay type and short answer question - Merits and limitations - Characteristics of good test items - Item Analysis - Steps in constructing Diagnostic tests – Computer Aided Evaluation : On line examination – Grading System.

Unit III: Planning for Teaching

Lesson Planning: Meaning – Functions of good lesson plan – Important features of good lesson plan –various approaches in planning lesson : Unit Approach (Morrison’s Approach), Bloom’s Evaluation-based Approach – RCEM Approach - Herbartian approach in preparing lesson plan. Unit planning: Meaning, - characteristics of good unit plan- steps in preparation of unit plan- advantages and disadvantages of unit plan- distinction between lesson plan and unit plan. Year Plan: Need and Significance – Steps in the Year Plan – Advantages and disadvantages of year plan.

Unit IV: Teacher Professionalization and Teacher Commitment

Committed teachers, passionate teachers: Dimension of passion associated with teacher commitment and engagement: Teacher commitment as passion teachers – teacher commitment as unit of time outside the contact hours with students- teacher commitment as focus on the individual needs of students. Teacher commitment as a responsibility to impart knowledge, attitudes, values and beliefs- teacher commitment as maintaining ‘ Professional knowledge’- teacher commitment as engagement with school and community- importance of teacher commitment for quality enhancement – ways and means of enhancing teacher commitment for teaching professionalization. Academic and Professional Qualifications for Computer Science teachers- Qualities of good Computer Science Teacher.

Unit V: Classroom Climate and Classroom Management

Meaning and significance of Types of classroom climate: Teacher dominated, laissez-faire and democratic pattern. Classroom Management: Meaning- concept- The set of strategies that teachers and students use to ensure productive, harmonious learning environment to prevent disruptions in the learning process. Classroom management styles - advantages and disadvantages - role of teachers.

Unit VI: School Plant

Norms in setting up school- pre-requisites for school structure- scholastic and Co-Scholastic requirements- School shapes- ideal shape of school.

Suggested references:

- ❖ இரத்தின சபாபதி. பி இரெங் பத்மா மொகன். (2008). வினாக்களில் விரிகல்கள். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ இரத்தின சபாபதி. பி. (2008) கல்வியில் தெர்வஜ. டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ Agarwal J. C. (2006). *Essential of Educational Technology: Teaching and learning*. New Delhi: Vikas Publishing House Pvt. Ltd.
- ❖ Alexis, M. L. (2001). *Computer for every one*. New Delhi: Vikas Publishing house Ltd.
- ❖ Allison, L. J., and Chris, P. (2007). *Preparing for blended e-learning*. UK: Routledge.
- ❖ Bennett, S., Marsh, D., & Killen, C., (2008). *Handbook of online education continuum*. New York: International publishing group.
- ❖ Chauhan, S. S. (1985). *Innovations in teaching learning process*. New Delhi: Vikas Publishing house Ltd.
- ❖ கணபதி வி. இரத்தின சபாபதி. பி (2008) நுண்ணிலை கற்பித்தல். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ பா!கரன். ப. சூ. பத்மப்ரியா. (2007) கலைத்திட்ட வளர்ச்சி . டிசன்னை: சாரதா பதிப்பகம்
- ❖ Goel, H. K. (2005). *Teaching of Computer Science*. New Delhi: R.Lall Book Depot.
- ❖ Krishnamurthy, R. C. (2003). *Educational technology: Expanding our vision*. Delhi: Authors Press.
- ❖ Harley, H. (2007). *The internet: Complete reference*. New Delhi: Tata McGraw Hill Pub.co., Ltd.
- ❖ John, W. (2007). *Learning and teaching using ICT*. New Delhi: Learning Matters Ltd.
- ❖ Joyce, Well., (2004). *Models of teaching*. U.K: Prentice hall of India.
- ❖ Kochhar, S. K. (1992). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Pvt Ltd.
- ❖ Kumar, K. L. (1997). *Educational technology*. New Delhi: Angel International (P) Ltd.

- ❖ Mohanty, L. (2006). *ICT strategies for schools*. New Delhi: Sage Publication.
- ❖ Norton, P. (1998). *Introduction to computers*. New Delhi: Tata McGraw Hill Publishing Co Ltd.
- ❖ Oosterhof, A. C. (1990). *Classroom applications of educational measurement*. Ohio: Merrill Publishing.
- ❖ Sambath, K., Paneerselvam, A., & Santhanam, S. (2006). *Introduction of educational technology*. New Delhi: Sterling Publishers Private Limited.
- ❖ Sharma, R. A. (2008). *Technological foundation of education*. Meerut: R.Lall Books. Depot
- ❖ Sharma, R. C. (1998). *Modern science teaching*. New Delhi: Dhanpat Raj and Sons.
- ❖ Sharma, R. N. (2008). *Principles and Techniques of Education*. Delhi: Surjeet Publications.
- ❖ Sidhu, K. S. (2006). *Teaching of Mathematics*. New Delhi: Sterling Publishers Private Ltd.
- ❖ Singh, Y. K. (2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ Srinivasan, T. M. (2002). *Use of computers and multimedia in education*. Jaipur: Aavisakar Publication.
- ❖ Stephen, M. A., & Stanely, R. (1985). *Computer based instruction: Methods and development*. New Jercy: Prentice Hall.
- ❖ Stone, E. (1996). *How to use Microsoft access*. California: Emergyville.
- ❖ விக்யலட்சுமி. வ (2007).: நுண்ணிலை கற்பித்தல்.: டிசன்னை: சாரதா பதிப்பகம்.
- ❖ விக்யலட்சுமி.: (2008).: கற்பித்தலில் சிக்கல்கள்-தீர்வல்கள். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ Vanaja, M. (2006). *Educational technology*. Hyderabad: Neelkamal Publications Pvt. Ltd.

SEMESTER - II**CPS 2b – Part II - PEDAGOGY OF HISTORY****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- explain the importance of co - scholastic activities in history;
- implement the purpose of evaluation;
- appreciate the significance of planning and teaching history;
- appreciate the qualities associated with an ideal history teachers;
- recognize the importance of classroom climate and acquire the required skill for managing classroom situation effectively;
- implement the organization of the school plant;

Unit I: Co- Scholastic activities in History

Meaning and Importance of Co-Scholastic activities – various Co-Scholastic activities related to History : Experiments and resources, Collateral reading literacy, Exhibitions, organization thought provoking programmes like quizzes, word searches, Field trips , Educational tour etc.

Unit II: Evaluation in History

Concept of Evaluation- Purpose of Evaluation- Continuous and Comprehensive Evaluation- Formative and Summative Evaluation- Achievement tests- Steps in construction- Preparation of Blue print- Preparation of an Achievement Tests in History-Item Analysis- Administering the test- Various types of Test items- Essay type, Short answer type, Objective type: Completion type, Matching type, Multiple Choice- Merits and limitations of Essay, Short answer and Objective type- Diagnostic Tests- Steps in constructing a Diagnostic test- Teacher made and Standardized tests

Unit III: Planning and teaching History

Macro teaching –lesson plan, Unit plan, Year plan- Herbartian steps- Format of a typical lesson plan – General Instructional Objectives and Specific Instructional Objectives- Teaching aids, Motivation presentation, Application, Recapitulation and Home Assignment.

Unit IV: Teacher Professionalization and Teacher Commitment

Committed teachers, passionate teachers: Dimension of passion associated with teacher commitment and engagement: Teacher commitment as passion- teacher – Teacher commitment as unit of time outside the contact hours with students- teacher commitment as focus on the individual needs of students. Teacher commitment as responsibility to impart knowledge, attitudes, values and beliefs- teacher commitment as maintaining ‘ Professional knowledge’- teacher commitment as engagement with school and community- importance of teacher commitment for quality enhancement – ways and means of enhancing teacher commitment for teaching professionalization Role of school teachers in character building. Teaching for character building- teacher as manager, norm builders, facilitator, maintaining community relations- guidance- role-Qualities of effective History teachers: Mastery of the subject, mastering of techniques.

Unit –V: Classroom climate and classroom management

Meaning of classroom climate. – Factors influencing – types – autocratic, democratic and Laissez Faire – Significance of classroom climate- classroom management – concept- principles of classroom management – factors influencing classroom management- Techniques of classroom management.

Unit VI: School plant in History

School building and design of the school --: Play ground, Library, Classrooms, Records and Registers. Role of Headmaster- Parent- Teacher association in maintenance of school- Time Table- Co-curricular activities, -Discipline.

Suggested references:

- ❖ Aggarwal, J.C.(1996). *Teaching of history. A practical approach*. New Delhi: Vikas Publishing House Pvt Ltd.
- ❖ Aggarwal, J.C.(2008). *Principles, method and Techniques of teaching*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Baskaran., & V.Padmapriya.(2007). *Kalaithitta valarachi*. Chennai: Saratha Publishers.
- ❖ Bloom, Benjamin. (1974).*Taxonomy of educational objectives, cognitive domain*. Longman Green.
- ❖ Chauhan, S.S.(2008). *Innovations in teaching learning process*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Durplass, J.A.(2009). *Teaching elementary social studies*. New Delhi: Atlantic Publishers.
- ❖ Geoff, T.(2008). *Teaching and learning history*. New Delhi: SAGE Publications.
- ❖ Kanammall, Raa. (2007). *Varallatru Karpithal*. Chennai: Saradha Publishers.
- ❖ Kochhar, S.K. (2003). *Teaching of history*. New Delhi: Sterling publishing pvt.Ltd.
- ❖ Mangal S.K., & Uma Mangal. (2011). *Teaching of social science*. New Delhi: PHI learning Private Limited.
- ❖ Mangal, S.K. & Mangal, S.(2005). *Essentials of Education Technology and Management*. Meerut: Loyal Book depot.
- ❖ Nagarajan.K. (2008). *Curriculum and development*. Ram Publishers.
- ❖ NCERT.(1970). *Teaching history in secondary school: A handbook for history teacher*. New Delhi: NCERT Publication.
- ❖ Rathina sabapathy, P. (2008). *Nunnailai Karppithal*. Chennai: Santha Pathipagam.
- ❖ Siddiqui,M.H.(2009). *Techniques of classroom teaching*. New Delhi: APH Publishing Corporation.
- ❖ Singh Y.K.(2009).*Teaching of History: Modern methods*. New Delhi: APH Publishing Corporation.
- ❖ Singh Y.K.(2009).*Teaching practice*. New Delhi: APH Publishing Corporation.
- ❖ Thirugnana sampantham.(2007). *Varallatru Karpithal muraika.*, Chennai: Saradha pathipagam.

- ❖ டாக்டர் : ஸ்ரீபாலாஜி லோகநாதன் (2009) : வரலாறு கற்பிக்கும் முறைகள் : தாள் - I. G.V. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ செந்தில் குமார், சு. (2010). வரலாறு கற்பிக்கும் முறைகள். தாள்- II, சேலம் ரோடு, நாமக்கல்.
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): வரலாறு கற்பிக்கும் முறைகள். தாள்- II, G.V. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ பேராசிரியர் என். செல்லம் (1992) : வரலாறு கற்பிக்கும் முறைகள். சாந்தா பப்ளிஷர்ஸ், சென்னை.
- ❖ கண்ணம்மாள் (2009), வரலாறு கற்பித்தல் : சாரதா பதிப்பகம், இராயப்பேட்டை, சென்னை
- ❖ திருஞானசம்பந்தம் (2005): வரலாறு கற்பித்தல் முறைகள், சாந்தா பப்ளிஷர்ஸ், சென்னை.
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): சமூக அறிவியல் கற்பிக்கும் முறைகள், தாள்-I, G.V. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ வசந்தி சு. (2007). கற்பித்தல் புதிய அணுகு முறை, வனிதா பதிப்பகம், சென்னை.

SEMESTER - II**CPS 2b – Part II - PEDAGOGY OF GEOGRAPHY****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- explain the importance of co - scholastic activities in geography;
- implement the purpose of evaluation;
- appreciate the significance of planning and teaching geography;
- appreciate the qualities associated with an ideal geography teachers;
- recognize the importance of classroom climate and acquire the required skill for managing classroom situation effectively;
- implement the organization of the school plant;

Unit I: Non Scholastic Activities in Geography

Meaning of the term Co-curricular activities - Importance of Co-curricular activities – Guiding principles for the organization of Co-curricular activities- various Co-curricular activities related to Geography teaching - community resources, Excursion – social science club- nature calendar- Exhibitions and Field trips.

Unit II: Evaluation in Geography

Concept of Evaluation- Purpose of Evaluation- Continuous and Comprehensive Evaluation- Formative and Summative Evaluation- Achievement tests- Steps in construction- Preparation of Blue print- Preparation of an Achievement Tests in Geography-Item Analysis- Administering the test- Various types of Test items- Essay type, Short answer type, Objective type: Completion type, Matching type, Multiple Choice- Merits and limitations of Essay, Short answer and Objective type- Diagnostic Tests- Steps in constructing a Diagnostic test- Teacher made and Standardized tests.

Unit III: Planning and teaching Geography

Macro teaching –lesson plan, Unit plan, year plan- Herbartian steps- Format of a typical lesson plan – General instructional objectives and specific instructional objectives. Teaching aids, Motivation presentation, Application, Recapitulation and home assignment.

Unit IV: Teacher Professionalization and Teacher Commitment

Committed Geography teachers, passionate teachers: Dimension of passion associated with teacher commitment and engagement: Teacher commitment as passion- teacher – teacher commitment as unit of time outside the contact hours with students- teacher commitment as a focus on the individual needs of students. Teacher commitment as responsibility to impart knowledge, attitudes, values and beliefs- teacher commitment as maintaining ‘ Professional knowledge’- teacher commitment as an engagement with school and community- importance of teacher commitment for quality enhancement – ways and means of enhancing teacher commitment for teaching professionalization. The Geography teachers – Qualities and competencies, Academic qualification professional training and special qualities required for Geography teachers.

Unit V: Classroom climate and classroom management

Meaning – Factors influencing – types – autocratic, democratic and Laissez Faire – Significance of classroom climate- classroom interaction analysis- classroom management – concept- principles of classroom management – factors influencing classroom management- Techniques of classroom management.

Unit VI: School plant in Geography

School building and design of the school - Play ground, Library, Classroom, Records and Registers. Role of headmaster- Parent-Teacher association- Time Table- Co-curricular activities, Discipline.

Suggested references:

- ❖ Aggarwal. (2008). *Principles, method and Techniques of teaching*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Aggarwal. (2008). *Teaching of social studies: A practical approach* (4th ed). Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Aurora, M.L.(1979). *Teaching of Geography*. Ludhiana: Prakash Brother.
- ❖ Chauhan, S.S.(2008). *Innovation in teaching learning process*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Chorley P.J.(ed).(1973). *Direction in Geography*. London: Mothuen & Co.
- ❖ Durplass, J.A. (2009). *Teaching elementary social studies*. New Delhi: Atlantic Publishers.
- ❖ Garnett Ohio. (1965). *Fundamental in school Geography*. London: Harrap and Co.
- ❖ Gill D.S. *Educational Administration and Organization Management*. New Delhi: Saurabh Publishing House.
- ❖ Gospil, G.H.(1965). *The Teaching of Geography*. London: Macmillan and Co.
- ❖ Graves, N.J.(1971). *Geography in secondary Education*. London: Geography Association.
- ❖ Haggett, P.(1972). *Geography: A Modern synthesis*. New York: Harper and Row.
- ❖ Hall, D. (1976). *Geography and the Geography Teachers*. London: George Allen & Unwin Ltd.
- ❖ Indian National Committee for Geography. (1968). *Indian Regional Studies*. Calcutta: IGU Publication.
- ❖ Kanammall, Raa.(2007). *Puviyiyal Karpithal*. Chennai: Saradha Publishers.
- ❖ Malid Husain. (2010). *Evolution of Geographical Thought*. Jaipur: Rawat Publication.
- ❖ Mangal S.K., & Uma Mangal. (2011). *Teaching of social studies*. New Delhi: PHI learning Private Limited.
- ❖ Rao M.S.(1999). *Teaching of Geography*. New Delhi: Anmol Publication Pvt. Ltd.
- ❖ Robinson, Aruthur H.(1960). *Elements of Cartography*. New York: John wiley and Sons, Inc.
- ❖ Selvam.N.(2004). *Puviyiyal Karpithal Muraigal*. Chennai: Santha Publication.
- ❖ Sharma, R.A.(2008). *Technological Foundation of Education*. Meerut: R. Lall Books Depot.

- ❖ Siddiqui, M.H.(2009). *Teaching of Geography*. New Delhi: APH Publishing Corporation.
- ❖ Siddiqui, M.H.(2009). *Techniques of Classroom Teaching*. New Delhi: APH Publishing Corporation.
- ❖ Singh, Y.K.(2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ வாசன் (1992) – புவியியல் கற்பிக்கும் முறைகள் : சாந்தா பப்ளிஷர்ஸ், சென்னை
- ❖ சீனிவாசன். த. (2010): வரலாறு கற்பித்தல் தாள்- I, சமயுக்தா பதிப்பகம், சேலம் ரோடு, நாமக்கல்.
- ❖ கண்ணம்மாள் (2009), புவியியல் கற்பித்தல்: சாரதா பதிப்பகம், இராயப்பேட்டை, சென்னை
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): சமூக அறிவியல் கற்பிக்கும் முறைகள், தாள்-I, G.V. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ வசந்தி ச. (2007). கற்பித்தல் புதிய அணுகு முறை, வனிதா பதிப்பகம், சென்னை.

SEMESTER - II**CPS 2b – Part II - PEDAGOGY OF COMMERCE AND ACCOUNTANCY****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- understand the essence of co-curricular activities and organise different socialized activities;
- acquire competencies to construct, conduct, apply and evaluate the achievement of objectives in teaching through achievement tests;
- understand present and interpret test scores;
- have in depth insight about the art of professional development, traits, commitment, duties and responsibilities about commerce teachers and motivate themselves to internalise the same;
- define classroom climate and understand ,analyse, compare , contrast the different kinds of classroom climate and develop competencies to create conducive classroom climate and classroom management;
- understand and recommend the features of good school plant.

Unit I: Co-Scholastic Activities in Commerce

Meaning of the term Co-curricular activities – Importance of Co-curricular activities in commerce teaching – Guiding principles for the organization of Co-curricular activities – Various Co-curricular activities related to commerce - Organization of few Co-curricular activities related to commerce: Organizing Club and Socialized activities: Donating camps, Competitions, Panel Discussion, Group Discussion, Symposium, Workshop, Seminar – Merits and Demerits – NCC & NSS activities –

Unit II: Evaluation in teaching of Commerce and Accountancy

Evaluation: Meaning and Purpose of Evaluation - Steps involved in the construction of achievement tests – Design of an achievement tests in Commerce and Accountancy –

Administration of tests - Steps in constructing question papers – Interpretation of test scores - Types of test items: Objective types and subjective types – Formative, Summative, and Continuous and Comprehensive Evaluation (CCE) - Diagnostic and Prognostic Tests in Commerce.

Unit III: Unit Planning and Daily Lesson Planning in Commerce and Accountancy

Introduction – Yearly Planning in Commerce – Unit Planning in Commerce: Meaning – Unit Formation in Commerce – Procedures / Steps in Unit Planning – Importance and advantages of Unit Planning – Demerits and limitations of Unit Planning – Lesson Planning in Commerce & Accountancy: Meaning, - Need and importance of lesson planning, how to plan lessons for teaching of Commerce & Accountancy, various approaches in the preparation of daily lesson planning- Difference between Unit Planning and Lesson Planning.

Unit IV: Teacher Professionalization and Teacher Commitment

Committed teachers, passionate teachers: Dimension of passion associated with teacher commitment and engagement- Teacher commitment as passion teacher: teacher commitment as unit of time outside the contact hours with students, teacher commitment as focus on the individual needs of students, teacher commitment as responsibility to impart knowledge, attitudes, values and beliefs, teacher commitment as maintaining ‘ Professional knowledge’, teacher commitment as engagement with school and community- importance of teacher commitment for quality enhancement – ways and means of enhancing teacher commitments for teaching professionalization. Professional development and growth of Commerce Teachers: Qualifications: Academic Qualifications and Professional Education - pre-service education – Professional ethics and competencies of commerce teachers - General Qualities and personality traits – Regular duties and responsibilities to be taken up by commerce teachers – Registers and Records to be maintained by Commerce Teachers - Types of teachers based on leadership style, dominated pattern, laissez faire pattern and democratic pattern and its significance

Unit V: Commerce Room, Classroom Climate and Classroom Management

Commerce Room: Introduction – Meaning and Definition, Objectives of having Commerce Room, List of Materials to be kept in Commerce Room, Suggestions for effective

maintenance of Commerce Room - Classroom Climate: Meaning, Types, ideal classroom climate, significance of classroom climate – Commerce class room management: Meaning and techniques of Commerce classroom management

Unit VI: School Plant

School Building and Design of the School - Maintenance of the School Plant: Play Ground, Library, Classroom, Records and Registers.

Suggested references:

- ❖ Aggarwal, J.C. (2006). *Essentials of Educational Technology Teaching and Learning*. New Delhi: Vikas Publishing House.
- ❖ Allen, O.C., & Francis P.H. (1988). *Curriculum: Foundations, principles and issues*. New Jersey: Prentice Hall.
- ❖ Bining A.C., & Bining D.A. (1962). *Teaching of Social Studies in Secondary Schools*. New York: Mc Graw Hill.
- ❖ Boynton, L.O. (1995). *Methods of Teaching Book-Keeping*. Cincinnati: South Western Publication Company.
- ❖ Chauhan, S.S. (2008). *Innovations in Teaching Learning Process*. Uttar Pradesh: Vikas Publishing House Pvt. Ltd.
- ❖ Douglas, Palnford., & Anderson. (2000). *Teaching Business Subjects*. New York: Prentice Hall.
- ❖ Edward, F.O., Raymond, W.K., & Ronald J.M. (1971). *Programmed Instruction Techniques and Trends*. New York: Century Cropts.
- ❖ Head, G.W. (1988). *Commerce*. London: Heinemann Professional Publishing.
- ❖ Joyce, Well. (2004). *Models of Teaching*. U.K.: Prentice Hall of India.
- ❖ Khan, M.S. (1982). *Commerce Education*. New Delhi: Sterling Publishers Private Limited.
- ❖ Kochhar, S.K. (1992). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Private Limited.
- ❖ Kumar, K.L. (1996). *Educational Technology*. New Delhi: New Age International Publishers.
- ❖ Mangal, S.K., & Mangal, S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal Book Depot.

- ❖ Nagarajan, K.L. (1997). *Principles of Commerce and General Commerce Knowledge*. New Delhi: S.Chand & Company Ltd.
- ❖ Pattanshetti, M.M. (1992). *Designing and organizing tutorials in colleges and universities*. Davangere: You Need Publication.
- ❖ Saylor, J.G. William, M.A., & Hollis. (1956). *Curriculum Planning*. New York: Rinehart and Company Inc.
- ❖ Sharma, R.A. (2008). *Technological Foundation of education*. Meerut: R.Lall Books Depot.
- ❖ Sharma, R.N. (2008). *Principles and Techniques of Education*. New Delhi: Surjeet Publications.
- ❖ Singh, Y.K. (2009). *Teaching of Commerce*. New Delhi: APH Publishing Corporation.

SEMESTER - II**CPS 2b – Part II - PEDAGOGY OF HOME SCIENCE****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- appreciate the importance of non scholastic activities in Home science;
- recognise the purpose of evaluation in Home Science;
- accept the need for planning before teaching of Home science;
- acquire an interest to enhance the teacher professionalism and teacher commitment as Home Science teachers;
- explain the classroom climate and classroom management;
- recall the importance of organization and maintenance of the institute.

Unit I: Co- Scholastic Activities

Introduction-Formal and informal methods of teaching and learning to strengthen Home Science education – exhibitions ,field trips, excursion , Science fair-Celebrate science Day, Earth Day and Environmental Day-organize Science club, eco club activities.

Unit II: Evaluation in Home Science

Introduction-Concept of evaluation- formative, summative evaluation, construction of achievement tests and its types- Diagnostic, Prognostic tests, criterion and norm referenced tests –Item Analysis- Principle of test construction -blue print - question bank- Tools of Evaluation, Written Examination, Online Examination- Grading system.

Unit III: Planning and Teaching

Introduction- Yearly planning in Home Science, Importance of unit plan in Home Science, Unit formulation in Home Science, steps involved in unit planning, Merits and Demerits of unit plan. Major differences between unit plan and lesson plan, Importance of lesson

planning- writing instructional objectives and planning for specific behavioural changes, Approaches in writing lesson plan.

Unit IV: Teacher Professionalization and Teacher Commitment

Introduction- Committed teachers, passionate teachers: Dimension of passion associated with teacher commitment and engagement: Teacher commitment as passion- teacher – teacher commitment as unit of time outside the contact hours with students- teacher commitment as focus on the individual needs of students. Teacher commitment as responsibility to impart knowledge, attitudes, values and beliefs- teacher commitment as maintaining ‘ Professional knowledge’- teacher commitment as engagement with school and community- importance of teacher commitment for quality enhancement – ways and means of enhancing teacher commitment for teaching professionalization. Need and types of professional growth, role in fostering creativity, equipment maintenance, attending pre-service and in-service training by NCERT and allied agencies. Qualities and competencies of Science teacher - Academic Qualification, Professional training and special qualities required for Home science teachers.

Unit V: Classroom Climate and Classroom Management

Introduction- Definition, importance of classroom climate, factors influencing classroom climate. Classroom Management: Definition, Techniques and importance of classroom management.

Unit VI: School Plant

Introduction- School Building, Design of the school, maintenance of the school, Play ground, Library, Laboratories, Classrooms, Role of Headmaster- Parent- Teacher association in maintenance of school- Time Table- Co-curricular activities, Discipline, records and registers maintained in the School.

Suggested references:

Bhatia, K.K. (1990). *Measurement and Evaluation in Education*. Ludhiana: Prakash Brothers.

- ❖ Jha, J.K. (2001). *Encyclopaedia of Teaching of Home Science. (Vol. I & II)*, New Delhi: Anmol Publications Private Limited.

- ❖ Kalra, R. M. (2009). *Teaching of Science*. New Delhi: Rakhi Prakashan Publishers.
- ❖ Lakshmi, K. (2006). *Technology of Teaching of Home Science*. New Delhi: Sonali Publishers.
- ❖ Nibedita, D. (2004). *Teaching of Home Science*. New Delhi: Dominant Publishers and Distributers, New Delhi
- ❖ Seshaih, P.R. (2004). *Methods of Teaching Home Science*, Chennai: Manohar Publishers & Distributors.
- ❖ Shah, A. Et al. (1990). *Fundamentals of Teaching Home Science*. New Delhi: Sterling Publishers Private Limited.
- ❖ Shalool, S. (2002). *Modern Methods of Teaching of Home Science*. New Delhi: Sarup & Sons.
- ❖ Sharma, S. (2009). *Modern Methods of Teaching Home Science*. New Delhi: Rakhi Prakashan Publishers & Distributors.
- ❖ Yadav , S. (1997). *Text book of Nutrition and Health*. New Delhi: Anmol Publishers.
- ❖ Yadav, S. (1997). *Teaching of Home Science*. New Delhi: Anmol Publishers.
- ❖ Yadav, V.K. (2009). *Biochemistry & Biotechnology: A Laboratory Manual*. New Delhi: Pointer Publishers.

SEMESTER - II**CPS 3 EVALUATION OF LEARNERS****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- acquire in depth knowledge about the concept and approaches of evaluation;
- infer qualities of good testing tool and techniques of evaluation;
- competently utilise steps in construction and administration of an achievement test;
- determine the meaning of test scores through quantitative analysis;
- internalise the art of Continuous and Comprehensive Evaluation, Portfolio, Internal Assessment as learners evaluation;
- construct appropriate assessment tools for evaluating special needs of children with special needs.
- acquaint with various assessing scales.

Unit I: Introduction and Approaches of evaluation

Teaching Learning Process and Evaluation- Definition of Evaluation – Role of Evaluation – Need and Importance of Evaluation — Characteristics of good evaluation – Evaluation, Assessment and Measurement. Formative Evaluation, - Summative Evaluation – Distinction between Summative and Formative Evaluation – External Evaluation – Internal Evaluation – Norm Referenced and Criterion – Referenced Evaluation.

Unit II: Criteria of a good tool and types of tests

Essential criteria of an effective tool of evaluation – validity – reliability – objectivity – usability – Parameters concerning an evaluation item: Item analysis – difficulty level – discriminatory power. Rating Scales – Numerical Scale – Graphic scale rating by cumulative points – Rubric for assessment - Meaning - Benefits - Challenges - Diagnostic Test and

Prognostic Test– Speed Vs Power tests – Individual Vs group tests – Aptitude tests – Teacher made and Standardized tests.

Unit III: Construction and Administration of Achievement Test

Achievement test: Meaning-Purpose of Achievement tests – Construction of achievement tests – Instructional objectives – Design – Blue print – Writing of questions – Marking Scheme – Highlights of good marking scheme - Question-wise Analysis – Standardized achievement tests. Types of questions: Short Answer Questions – Extended Answer Type – Completion type – Objective type questions – Multiple Choice – True-False Matching Block –Merits and Demerits of each type. Administration of achievement test: infrastructural requirements- manpower requirement. Scoring and Recording of test results – Order of Scoring - Z score, T score and C score - Maintaining Records – norms and Interpretation of test scores – Grades. Objective Based Tests- Differences among objective type test-objectivity of tests and objective based tests.

Unit IV: Quantitative Analysis and Interpretation of Test Scores

Meaning – functions and significance – Applications of Education statistics – Tabulation – Frequency Table, Measures of Central Tendency – Arithmetic Mean, Median, Mode, Quartiles and Percentiles – Measures of Variability – Range, Quartile Deviation and Standard Deviation. The normal distribution and its properties – Concepts of Skewness and Kurtosis – Correlation: Definition, meaning and uses - Computing the Co – efficient of Correlation by the Rank Difference method – Graphical representation of data – Bar Diagram, Histogram, Frequency polygon – its interpretations and implications.

Unit V:Continuous and Comprehensive Evaluation (CCE) and Portfolio Assessment

Concept, Uses, Process Involved, Assignments in CCE - Advantages and Drawbacks of Continuous and Comprehensive Evaluation (CCE). Continuous and Comprehensive Evaluation (CCE) of Curricular and Co – Curricular Activities. Portfolio Assessment: Meaning, Steps involved in developing - Strength and Weaknesses – Guidelines for Portfolio Entries – Examples of Classroom Portfolio.

Unit VI: Test for children with special Needs, Grading System, Feed back as assessment mechanism for quality assurance

Performance Test, Pre – School Testing – Assessment of Mentally Retarded – System of Multicultural Pluralistic Assessment (SOMPA) – Testing the Physically Handicapped. Drawbacks of Traditional Scoring System and Traditional Grading System – Grading System – Comparative / Relative Grading, Advantages and Limitations – Absolute Grading: Pre – Established Percentage scores, Criterion – Referenced Grading, Numerical Grading – Guidelines for Effective Grading. Importance – Feedback cycle – implication – types of feedback – students — Peers – superiors.

Suggested references:

- ❖ Agarwal, Y.P. (1990). *Statistical Methods – Concepts, Applications and Computation*. New Delhi: Sterling Publishers Pvt.Ltd.
- ❖ Aggarwal, Y.P. (1992). *Research in Emerging Fields of Education: Concepts, trends and prospects*. New Delhi: Sterling Publishers.
- ❖ Aggarwal, Y.P. (1994). *Better sampling*. New Delhi: Sterling Publishers.
- ❖ Anand, S.P. (1996). *RCEB Tools for secondary class students*. Bhubaneswar: Shovan.
- ❖ Anastasi, Anne, (1976). *Psychological Testing*, 4th ed., New York: Macmillan Publishing Co.Inc .
- ❖ Belok, Michael. V. (1993). *Naturalistic Research Paradigms*. Meerut: Anu Books.
- ❖ Bertrand, Arthur & Cebuls, Joseph P.,(1980). *Tests, Measurement and Evaluation A Development Approach*. U.S.A: Addison-Wesley.
- ❖ Best, John. W. (1988). *Research in Education*. New Delhi: Prentice Hall of India (P) Ltd.
- ❖ Bhatia, K. K. (1985). *Measurement and Evaluation in Education*. Ludhiana: Parkash Brothers.
- ❖ Bloom, Benjamin S., et.al (1971). *Handbook on Formative and Summative Evaluation in Student Learning*. U.S.A: McGraw Hill.
- ❖ Buch, M.B. (1991). *Fourth Survey of Research in Education. Vol I and II*. New Delhi: NCERT.
- ❖ Cronback, L.J., (1970), *Essentials of Psychological Testing 3rd ed.*, New York; Harper and Row.
- ❖ Ebel Robert L.,(1966): *Measuring Educational achievement*, Prentice-Hall of India, New Delhi.
- ❖ Ebel, Robert. L.and Frisbie, David. A.,(1991): *Essential of Education Achievements*, New Delhi: Prentice Hall of India.

- ❖ Ebel, Robert. L.(1979). *Essentials of Educational Measurement*, London: Prentice Hall International Inc.
- ❖ *Fifth Survey of Research in Education*. (1997). New Delhi: NCERT.
- ❖ Fredrick, Davis.B.(1981), *Educational Measurement and their interpretation*, California: Woodworth Publishing Company .
- ❖ Garret, Henry.E.(1972). *Statistics in Psychology and Education*. Bombay: Vakils, Fetter & Simons (P) Ltd.
- ❖ Garrett.H.E.(1956). *Elementary Statistics*, New York: Longmans, Green & Co.
- ❖ Gronlund E. Norman. (1970). *Reading in Measurement and Evaluation*. London: The Macmillan Company,Ltd.
- ❖ Hannagan, T.J.(1982). *Mastering Statistics*, The Macmillan Press Ltd.,
- ❖ Harper, A.,Edwin J. and Harper, Erika S.(1992).*Preparing Objectives Examinations, A Handwork for Teachers, Students and Examiners*, New Delhi: Prentice-Hall of India.
- ❖ Kerlinger, F.N.(1973). *Foundations of Behavioural Research*, 1st ed., New York: Holt, Rinehart and Winston Inc.
- ❖ Khan, MohdArif.(1995). *School Evaluation*, New Delhi: Ashish Publishing House,
- ❖ Kumar, Anil. (2007). *Readings in Assessment and Evaluation*. New Delhi: Mahamaya Publishing House.
- ❖ Lindgren,B.W.(1975).*Basic Ideas of Statistics*.New York: Macmillan Publishing Co, Inc.,
- ❖ Linn, Robert L. (1989) *Educational Measurement*, U.S.A.: Macmillan.
- ❖ Martyn, Hammersley.(1996).*Case Studies in classroom research*. Philadelphia: Open University Press.
- ❖ Merriam, Sharan. B.(1988). *Case Study Research in Education*. San Francisco: Jossey bass Publishers.
- ❖ Mrunalini,T.(2011). *Educational Evaluation*. New Delhi: Neelkamal Publication Pvt. Ltd.
- ❖ Nunnally, Jume.(1964). *Educational Measurement and Evaluation*. New York; McGraw Hill Book Company.
- ❖ Pal,S.K. and Saxena,P.C. (1995). *Quality Control in Educational Research*. Metropolitan Book Co.
- ❖ Patel,R.N.(1978). *Educational Evaluation-Theory and Practice*, Bombay: Himalaya Publishing House.
- ❖ Popham,W.James. (1990).*Modern Educational Measurement: Practitioners Perspectives* U.S.A: Prentice-Hall.

- ❖ Shukla,S.P.(1996). *Elements of Educational Research*. Bombay: Allied Publishers (P) Ltd.
- ❖ Singh, Pritam.(1989).*Handbook of Pupil Evaluation*, New Delhi: Allied Publishers.
- ❖ Singh.P.(1989). *Scheme of Continuous Comprehensive Evaluation for Novodaya Vidyalayas*,. New Delhi.
- ❖ Smith, D. (2005). *Theory of Educational Measurement*. New Delhi: Commonwealth Publishers.
- ❖ Smith, D.(2007). *Encyclopedia of Educational Measurement and Evaluation Vol IV*. New Delhi: Commonwealth Publishers.
- ❖ Srivastava, H.S.(1989) .*Comprehensive Evaluation in School*.New Delhi: NCERT
- ❖ Srivastava,H.S. and Pritamn Singh (1977): *Use of Test Material in Teaching*. New Delhi: NCERT.
- ❖ Stodola Quentin & Stordhal Kalmer. (1972). *Basic Educational Tests and Measurement*. New Delhi:Thomson Press.
- ❖ Thorndike, R.L.& Hagen, EP.,(1969). *Measurement and Evaluation in Psychology and Education*, 3rd ed. New York: John Wiley & Sons Inc.
- ❖ Vanaja,M. and Rajasekar, S.(2007).*Educational Technology and Computer Education*. New Delhi: Neelkamal Publication Pvt. Ltd.
- ❖ Walberg, Herbert. J and Haertel, Geneva. D. (1990). *The International Encyclopedia of Educational Evaluation*. Pergamon Press
- ❖ Wine, R.L.(1976).*Beginning Statistics*.Massachusetts: Winthrop Publishers Inc.
- ❖ Young,Pauline.V.(1992).*Scientific Social Surveys and Research*. Bombay: Asia Publishing House.

CROSS DISABILITY AND INCLUSION (B)**SEMESTER – II****B 1 INTRODUCTION TO PERSONS WITH DISABILITIES****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- Name the different types of sensory impairments and its prevalence and describe the process of hearing and implications of various types of hearing loss
- Describe the nature, characteristics and assessment of students with low-vision and visual impairment.
- Explicate the impact of deaf-blindness and practices for functional development .
- Describe the tools, area of assessment and apply intervention strategies to enhance learning
- Describe the characteristics and types, tools, areas of assessment and prepare and apply intervention strategies for independent living of intellectual disability
- Explain the characteristics and types of autism Spectrum Disorder
- Identify the person with Locomotor Disabilities such as Cerebral palsy, amputees, polio, Leprosy Cured, Muscular Dystrophies, Neural and Spinal Defects and Multiple Disabilities.

Unit 1 – Blindness and Low Vision

1.1 Definition , Classification and Characteristics

1.2 Processing of seeing and common Eye Disorder in India

1.3 Demographic information – NSSO and census 2011

1.4 Tools and functional Assessment procedure, Importance of Early identification and intervention

1.5 Educational Implication – Strategies and Curricular adaptation , Teaching Principles, Expanded Core Curriculum, Used Low cost and advanced Assistive Devices.

Unit 2- Hearing Impairment and Deaf Blindness

1.1 Definition , Classification and Characteristics

1.2 Processing of hearing and Impediment leading to different types of hearing loss.

1.3 Incidence and prevalence , Language and communication issues attributes to hearing loss and need of early intervention .

1.4 Educational Implication - Strategies and curricular adaptation, Resorting Techniques arise human (interprets) and technical support (hearing aid)

1.5 Deaf Blindness – Definition, Classification, Characteristics , Assessment and early identification and intervention , Educational implication – Strategies and curricular adaptation, Assistive Devices and addressing O& M.

Unit 3- Intellectual Disability

1.1 Definition , Classification and Incidence and prevalence

1.2 Characteristics – Mild, Moderate , Severe and Profound

1.3 Tools and Area of Assessment , importance of EARLY identification and intervention

1.4 Educational Implication – Strategies Functional Academics and Social Skills and curricular Adaptation , Individualized Education Plan, Person Centered Plan, Developing TLM and. Assistive Devices,

1.5 Vocational Training – Life Skill Education and Independent Living.

Unit 4- Neuro Developmental Disabilities – Learning Disability and Autism Spectrum Disorder

1.1 Learning disabilities - Definition , Types and Characteristics

1.2 Tools and Area of Assessment , Importance of EARLY identification and intervention

1.3 Educational Implication – Strategies and curricular Adaptation , IEP, Developing TLM and assistive Devices.

1.4 Autism Spectrum Disorder - Definition , Types and Characteristics and Tools and Area of Assessment ,

1.5 Importance of Early identification and intervention , Educational Implication – Strategies and curricular Adaptation , IEP, Developing TLM and assistive Devices.

Unit -5 Loco motor and Multiple Disabilities

5.1 Cerebral palsy – Definition , Nature , Type ,Assessment of CP, Educational Implication – Strategies , Curricular adaptation and Assistive Devices and Therapeutic intervention

5.2 Amputees, Polio, Spinal Cord Injuries Spinal-bifida and Muscular Dystrophy: Definition, Meaning and Classification - Assessment of Functional Difficulties - Provision of Therapeutic Intervention and Referral.

5.3 Multiple Disabilities – Definition, classification, nature, Various Combination of Multiple Disabilities and Tools and Area of Assessment

5.4 Educational Implication : Strategies and curricular Adaptation , IEP, facilitating teaching-learning , Developing TLM and Assistive Technology to Facilitate Learning and Functional Activities.

5.5 Therapeutic intervention Creating Prosthetic Environment in School and Home: Seating Arrangements, Positioning and Handling Techniques at Home and School and Vocational Training

Course Work/Practical/Field Engagement

(Any two of the following)

- Develop a checklist for screening of children for Hearing Impairment and Deafblindness
- Plan an educational program on the basis of an assessment report of a child with ID/Autism.
- Undertake a case study after identifying a child with cerebral palsy/ Multiple Disabilities. Assess the child's difficulties in activities of daily living and academic activities and develop an intervention plan.
- Prepare an album for Assistive devices of children with Sensory Disabilities, Neuro Disabilities, Locomotor Disabilities and Multiple Disabilities.

References:

- ❖ Auditory-Verbal International (1991). Auditory-verbal position statement. *Auricle* 4:11-12.
- ❖ Harp, B. (2006). *The handbook of literacy assessment and evaluation*, (3rdEds). Norwood, M.A.: Christopher-Gordon Publishers, Inc.
- ❖ Katz, J. (1985). *Handbook of Clinical Audiology*. (4th Ed.) Baltimore: Williams and Wilkins.
- ❖ Loreman, T., Deppeler, J., & Harvey, D. (2005). *Inclusive education – A practical guide to supporting diversity in the classroom*. (2nd Eds.). U.K. Routledge.

- ❖ Norris, G.H., & Romer, L.T. (1995). Welcoming students who are deafblind to typical classrooms. U.S: Paul H. Brookes.
- ❖ Pandey, R.S., & Advani, L. (1995). Perspectives in Disability and Rehabilitation. New Delhi: Vikas Publishing House Pvt.Ltd.
- ❖ Proceedings from National Conference on Centenary for work for the Blind in India (1987). All India Conferderation of the Blind and ChristoffelBlinden Mission; Delhi: R.K. Printers.
- ❖ Scholl, G.T. (1986). Foundations of Education for Blind and Visually Handicapped Children and youth. New York: American Foundation for the Blind.
- ❖ Tucker, I., & Nolan, M. (1984). Educational Audiology, London: Croom Helm.
- ❖ Tye-Murray, N. (1998). Intervention Plans for Children. IN Tye-Murray N. (Eds) Foundations of Aural Rehabilitation. San Diego: Singular. P.381-413.
- ❖ Higgins, J. (2003) Practical Ideas that Really Work for Students with Dyslexia and Other Reading Disorders, PRO-ED, Austin.
- ❖ Moyes, R.A. (2010). Building Sensory Friendly Classrooms to Support Children with Challenging Behaviours: Implementing Data Driven Strategies, Sensory World, Texas.
- ❖ Pierangelo, R., & Giuliani G.A. (2003). Transition services in Special Education, Allyn & Bacon. 14.Reddy G.L., & Rama, R. (2000). Education of Children with Special Needs, New Delhi – Discovery Pub.
- ❖ Simpson, R.L., & Myles, B.S. (2008). Educating Children and Youth with Autism: Strategies for Effective Practice. (2nd edition) Pro Ed. Texas.
- ❖ Smith, D.D (2003). Introduction to special education teaching in an age of opportunity, Allyn & Bacon.
- ❖ Strichart, S.S. (1993)/ Teaching Study Strategies to Students with Learning Disabilities, Allyn & Bacon, Boston.

ENHANCING PROFESSIONAL CAPACITIES (EPC)**SEMESTER - II****EPC3 - READING AND REFLECTING ON TEXTS****Credits: 2****Internal: 50 marks****Hours/Week: 5hrs****Objectives****At the end of the course the student teachers will be able to:**

- Read and respond to a variety of texts in different ways;
- Enhance their capacities as readers and writers by becoming participants in the process of reading;
- Read interactively- individually and in small groups;
- Frame questions to think about, while preparing to read something;
- Read empirical, conceptual, and historical work, policy documents, studies about schools, teaching and learning, about different people's experiences, narrative texts, expository texts, autobiographical narratives, field notes, ethnographies, etc.;
- Write with a sense of purpose and audience with one's own opinions or write within the context of others' ideas.

Activities: Student-teachers are expected to sit in the library regularly and to review at least 10-books of different categories in about 500 words each. These may be as follows:

1. Review of reference books related to core courses
2. Review of Text Books related to Pedagogy courses
3. Review of Reference Books related to Pedagogy courses.
4. Review of Policy Documents, Autobiography, Commission Reports, etc.
5. Review of studies about school, historical books and other educational miscellaneous books.

Suggested Reference:

- ❖ Ahuja, G.C. & Ahuja, Pramila. (1996). *How to Increase Your Reading Speed*. New Delhi: Sterling Publishers Pvt. Ltd.
- ❖ Ahuja, Pramila & Ahuja. G.C. (1991). *Learning to Read Effectively and Efficiently*. New Delhi: Sterling Publishers Private Limited.
- ❖ Cooper, David.J., Warncke, Edna.W. & Shipman, Dorothy.A. (1988). *The WHAT and HOW of Reading Instruction*. Columbus: Merrill Publishing Company.
- ❖ Donna, Gorrell. (1994). *A Writer's Handbook from A to Z*. Boston: Allyn & Bacon.
- ❖ Dudley, Geoffrey.A. (1979). *Rapid Reading: The High Speed Way to Increase Your Learning Power*. Bombay: Jaico Publishing House.
- ❖ Iyer, Venkata. (1997). *Dynamic Reading Skills*. New Delhi: Sterling Paperbacks.
- ❖ Michigan, E.A. (2004). *Speed Reading – With Word Power*. New Delhi: Infinity Books.
- ❖ Tierney, Robert., Readeence, John. & Dishner, Ernest. (1990). *Reading Strategies and Practices*. Boston: Allyn & Bacon.
- ❖ Zakaria, Matthew.T. (2009). *Successful Writing Skills*. New Delhi: Commonwealth Publishers Pvt. Ltd.

SEMESTER - III

CURRICULUM AND PEDAGOGIC STUDIES (CPS)**SEMESTER – III****CPS 2c - Part III - PEDAGOGY OF TAMIL****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****தமிழ் கற்பிக்கும் முறைகள் - பகுதி 3****நோக்கங்கள்****இப்பாடப்பொருளைக் கற்றபின்பு மாணவ-ஆசிரியர்கள்:**

- கற்றல் வளமூலங்களை பயன்படுத்துதல்;
- தொழில்நுட்ப உதவியை பயன்படுத்தி துணைக்கருவிகளைத் தயாரித்தல்.
- மாணவ-ஆசிரியர்களை ஆசிரியர் துறைக்கு ஆற்றப்படுத்துதல்

அலகு 1: கற்றல் வளமூலங்கள்

பாடநூல்கள்: சிறந்த பாடநூல்களை தயாரிக்கும் பொழுது மனதில் கொள்ளத்தக்க வேண்டியவை - பாடநூலின் நல்லியல்புகள் நடைமுறையிலுள்ள பாடநூல்கள் பற்றிய அறிவு - பார்வை நூல்கள் - கலைகளஞ்சியங்கள் - அகராதிகள் - நிகண்டுகள் அபிதான சிந்தாமணி - நூலகம் - பயன்கள் - பயன்படுத்தும் முறைகள் - வகைகள் - வகுப்பு நூலகம், பள்ளி நூலகம், கருவி நூலகம் - நூலகப் படிப்பும் மொழியாசிரியர் கடமையும் - வலைத்தளம் - தமிழ்ப்பாடத்தோடு தொடர்புடைய வலைத்தளங்கள்

அலகு 2 : செயல் ஆராய்ச்சி

செயல் ஆராய்ச்சி: பொருள், நோக்கங்கள் - செயல் ஆராய்ச்சியின் பயன்கள் - வகுப்பறை ஆராய்ச்சியின் தேவை - அடிப்படை ஆராய்ச்சி மற்றும் செயல் ஆராய்ச்சியின் படிநிலைகள் - வகுப்பறை ஆராய்ச்சியின் முடிவுகளை தெரிவு செய்தல் - செயல் ஆராய்ச்சியின் நன்மை தீமைகள்.

அலகு 3 : மாணவ-ஆசிரியர்களை ஆசிரியர் துறைக்கு ஆற்றப்படுத்துதல்

(Tasks of Student-Teachers during internship)

- வழிகாட்டி ஆசிரியர்கள் மற்றும் சக மாணவ-ஆசிரியர்களின் கற்பித்தலை உற்றுநோக்கதல்

- நிறுவாக மற்றும் தனியாள் ஆய்வு
- பாடங்கற்பிப்புத் திட்டம், அலகுத் திட்டம் எழுதுதல். கற்றல்-கற்பித்தல் துணைக்கருவிகளைத் தயாரித்தல்.
- வினாத்தாள் மற்றும் பிற கருவிகளின் மதிப்பீடு
- பள்ளி வேலைகளை பிரதிபலிக்கும் நாட்குறிப்பு.
- இணைக்கலைத்திட்டச் செயல்பாடுகள்
- மாற்று ஆசிரியராக கற்பித்தல்

செய்முறை வேலைகள்

- தமிழ் கற்பித்தல் தொடர்பான வலைத்தள முகவரிகளைத் திரட்டி அவற்றின் உள்ளடக்கம் பற்றிய அறிக்கை தயாரித்தல்.
- செயல்முறை ஆய்வை மேற்கொள்ளுதல். (Action Research)
- அடைவுத் தேர்வினை எழுதுதல் (முன்அறிவிப்பு தேர்வு மற்றும் முன்அறிவிப்பில்லா தேர்வு)
- ஒப்படைப்பு எழுதுதல்.

பார்வை நூல்கள்

- ❖ அபிதான சிந்தாமணி. சாரதா பதிப்பகம், சென்னை.
- ❖ அறிவழகன் இ. வாசு. (2014). தமிழ் இலக்கியத்தில் உளப்பகுப்பாய்வு, தமிழகக்கல்வி ஆராய்ச்சி வளர்ச்சி நிறுவனம், சென்னை -24.
- ❖ இலக்கண நூல்கள்: நன்னூல், யாப்பருங்கலக்காரிகை, புறப்பொருள் வெண்பாமாலை, நம்பியகப்பொருள்.
- ❖ இரத்தினசபாபதி பி. (2006). ஆசிரியர் அருமையும் மாணவர் மாண்பும், வனிதா பதிப்பகம், சென்னை.
- ❖ நிகண்டுகள். சூடாமணி, பிங்கலம், திவாகரம்.
- ❖ பாடநூல் பனுவல்கள் சார்ந்த இலக்கியங்களின் உரைநூல்கள் (உரையாசிரியர்கள்)
- ❖ சேதுப்பாண்டியன் தூ. (2010). தமிழ் ஆய்வுச் சிந்தனைகள், தமிழகக் கல்வி ஆராய்ச்சி பயிற்சி நிறுவனம்.
- ❖ Sangam Literature Learning, Teaching and Evaluation (November -2013).

வலைதளப்பார்வை

- ❖ <http://www.celt.iastate.edu/teaching-resources/effective-practice/revised-blooms-taxonomy/>
- ❖ <https://www.nwea.org/blog/2013/22-easy-formative-assessment-techniques-for-measuring-student-learning/>
- ❖ <http://mycbseguide.com/blog/continuous-and-comprehensive-evaluation-cce/>

SEMESTER - III**CPS 2c – Part III - PEDAGOGY OF ENGLISH****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- explain the need for teaching study and reference skills for learning of language;
- compare the art of teaching intensive and extensive readers;
- use the ways of evaluating oneself for effective teaching behaviour.

Unit I: Teaching of Study and Reference Skills

Study skills: SQ3R method of reading- Note taking and Note making- Reference skills: Consulting a dictionary and its advantages- Referring to a thesaurus and its advantages- Encyclopaedias and its advantages- Bibliography and Annotated Bibliography.

Unit II: Teaching Intensive and Extensive Readers

Intensive and Extensive Readers- Aims and Procedure for teaching intensive reader- Aims and procedure for teaching prose- Aims and procedure for teaching poetry- Difference between teaching of prose and teaching of poetry- Aims and procedure for teaching extensive reader.

Unit III: Modification of Teacher Behaviour

Modification of Teaching or Teacher Behaviour- Techniques for the modification- Action Research: Objectives of Action Research and Action Research Procedure- Teacher Evaluation: Evaluation of teachers by their students- Evaluation by the peers- Evaluation by the Superiors- Evaluation by the members of the community- Evaluation on the basis of teacher's contribution to institutional improvement.

Suggested references:

- ❖ Agarwal, Rashmi. (2013). *Educational Technology Management and Evaluation*. Delhi: Shipra Publications.
- ❖ Baruah.T.C. (2005). *The English Teacher's Handbook*. New Delhi: Sterling Publishers Private Limited.
- ❖ Bhanot, Suman. (2013). *English Language Teaching – Approaches and Techniques*. New Delhi: Kanishka Publishers.
- ❖ Bharathi, T., Hariprasad, M., &Prakasam,V (Ed). (2005). *Personality Development and Communicative English*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Bhatia, K.K. (1991). *New Techniques of Teaching English as a foreign language*. Jalandhar: New Academic Publishing Company.
- ❖ Dash,B.N. (2004). *Teaching of English*. New Delhi: Dominant Publishers and Distributors.
- ❖ Ediger,Maris.W., Dutt, Bulusu Surya Venkata., & Rao, DigumartiBhaskara. (2003). *Teaching English successfully*. Delhi: Discovery Publishing House.
- ❖ Ganihar, Noorjehan . N. (2009). *Performance Appraisal of Teachers*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Hariprasad,M. (2004).*Communicative English*. New Delhi: Neelkamal Publications.
- ❖ Heaton,J.B. (1975). *Writing English Language Tests*. London:Longman Group Ltd.
- ❖ Jayanthi,N.L.N.(2004). *Teaching of English*. New Delhi: Neelkamal Publications.
- ❖ Kochhar,S.K.(2007).*Methods and Techniques of Teaching*. New Delhi: Sterling Publishers Pvt. Ltd.
- ❖ Kohli,A.L. (1992).*Techniques of teaching English*. Delhi: Dhanpat Rai and Sons.
- ❖ Lado, Robert. (1967). *Language Testing*. London: Longmans, Green andCo.Ltd.
- ❖ Mangal,S.K., &Mangal,Uma.(2011).*Essentials of Educational Technolog*. New Delhi:PHI Learning private Limited.
- ❖ Mowla,Shaikh. (2004). *Techniques of teaching English*. Delhi: Neelkamal Publications.
- ❖ Mowla,Shaikh. (2006). *Methods of teaching English*. Delhi: Neelkamal Publications.
- ❖ Mukalel,Joseph,C. (1998). *Approaches to English Language Teaching*. New Delhi: Discovery Publishing House.
- ❖ Muthuja, Babu., Usharani.R., &Agarwal,Sunita.(2009). *Teaching of English-I*. New Delhi: Centrum Press---. (2009). *Teaching of English-II*. New Delhi: Centrum Press.
- ❖ Pahuja,N.P. (2001).*Teaching of English*. New Delhi: Anmol Publications Pvt. Ltd.
- ❖ Shamsi, Nayyer. (2004). *Modern teaching of English*. New Delhi: Anmol Publications Pvt. Ltd.
- ❖ Sharma, K.L. (1970). *Methods of teaching English in India*. Agra: Lakshmi Narain Agarwal Educational Publishers.

- ❖ Sharma, S.P. (2013). *Teaching English- Applications and Lesson Plans*. New Delhi: Kanishka Publishers.
- ❖ Sharma,S.R.(2000).*Effective Classroom teaching:Modern methods, Tools and Techniques*. Jaipur:Mangal Deep Publications.
- ❖ Siddiqui, Mujibul Hasan. (2013). *Challenges of Educational Technology*. New Delhi: APH Publishing Corporation.
- ❖ Singh, Rajinder. (2007). *Teaching of English*. Delhi: Lotus Press
- ❖ Singh, Y.K. (2012). *Teaching of English*. New Delhi: APH Publishing Corporation.
- ❖ Vallabi,J.E.(2012).*Teaching of English-Principles and Practices*, Hyderabad:Neelkamal Publications Pvt. Ltd.
- ❖ Vanaja, M. (2010). *Elements of Educational Technology*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Venugopal Rao,K. (2004).*Methods of Teaching English*. Delhi: Neelkamal Publications.
- ❖ Verghese. B.V. (2005). *Teaching of General English*. Delhi: Anmol Publications Pvt. Ltd.

SEMESTER - III**CPS 2c – Part III - PEDAGOGY OF MATHEMATICS****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student-teacher will be able to:**

- integrate the importance of various learning resources;
- conduct action research and disseminate the results;
- gain clarity on the various tasks to be executed during field immersion;

Unit I: Learning Resources in Mathematics

Library Management and Use of Library books as learning resources Learning beyond textbooks – other sources of learning ;Types of learning resources - Print Resources : Textbooks, Workbooks, Self-instructional materials and Supplementary reading material- Audio Resources : Educational Radio Broadcast and Audio Programmes, Audio CD- Visual Resources—non projected visual resources (Graph, map, chart, poster, models and materials): Projected visual resources (Still Visuals such as Slide, Transparency and Film Strip; Moving Visuals such as Film, Video -Organizing mathematics laboratory - its uses.

Unit II: Action research

Action Research- Meaning, need for classroom research- difference between action research and fundamental research- steps in action research- journaling the results of classroom research.

Unit III : Field Immersion

Tasks of student-teachers during internship :

- Observation of the teaching of mentor teachers and peer student-teachers
- Institutional and Individual case study,

- Lesson plan, Unit plan and teaching- learning materials,
- Question paper and other tools of assessment,
- Reflective diary of school internship,
- Co-Scholastic activities,
- Teaching as a substitute teacher

Suggested references:

- ❖ Aggarwal, J.C. (2008). *Teaching of Mathematics*. Uttar Pradesh: Vikas publishing House Pvt Ltd.
- ❖ Bagyanathan, D. (2007). *Teaching of Mathematics*. Chennai: Tamil Nadu Text Book Society.
- ❖ Bhatia, K.K. (2001). *Foundations of Teaching Learning Process*. Ludhiana: Tandon Publication.
- ❖ Bishop, G.D. (1965). *Teaching Mathematics in Secondary School*. London: Collins publication.
- ❖ Bolt, B. (2003). *Mathematical Pandora's box*. New Delhi: Cambridge University press.
- ❖ Boyer, Carl B. (1969). *A History of Mathematics*. New York, Wiley Publications.
- ❖ Butter, C.H. (1965). *The Teaching of Secondary Mathematics*. London: McGraw Hill book company.
- ❖ Driscoll, M. (1999). *Fostering Algebraic Thinking: A Guide for teachers, grades 5-10*. Portsmouth, NH: Heinemann Publications.
- ❖ Ediger, M., & Bhaskara Rao, D.B. (2004). *Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.
- ❖ Goel, Amit. (2006). *Learn and Teach Mathematics*. Delhi: Authors press.
- ❖ Grouws, D.A. (1992). *Handbook of Research on Mathematics Teaching and Learning*. New York: Macmillan Publishing.
- ❖ Gupta H.N., & Shankaran V. (1984). *Content cum Methodology of Teaching Mathematics*. New Delhi: NCERT.
- ❖ Hoglum, L. (1967). *Mathematics for the Million*. London: Pan Books Limited.
- ❖ Iyengar, K.N. (1964). *Teaching of Mathematics*. New Delhi: A Universal Publication.
- ❖ James, Anice. (2005). *Teaching of Mathematics*. New Delhi: Neelkamal Publication.

- ❖ Joyce, well. (2004). *Models of Teaching*. London: Prentice hall of India.
- ❖ Kapur S.K. (2005). *Learn and Teach Vedic Mathematics*. New Delhi: Lotus Publication.
- ❖ Kulshreshtha, *Teaching of Mathematics*. London: R. Lal and Sons.
- ❖ Kumar Sudhir, *Teaching of Mathematics*. New Delhi: Anmol Publications.
- ❖ Land,F.W.(1966). *New approaches to Mathematics Teaching*. New Delhi: MacMillan and St.Martin's press. .
- ❖ Mangal S.K. (2013). *Teaching of Mathematics*. Ludhiana: Tandon publications.
- ❖ Mangal,S.K.,& Mangal,S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal book depot.
- ❖ Muijs, Daniel., & Reynolds, David. (2005). *Effective Teaching: Evidence and Practice*. London: Sage Publication.
- ❖ Nickson, Marilyn. (2000). *Teaching and Learning Mathematics: A Guide to Recent Research and Its Applications*. New York: Continuum Press.
- ❖ Nunes, T., & Bryant, P. ((1997). *Learning and Teaching Mathematics: An International Perspective*. London: Psychology Press.
- ❖ Parthasarathy,N. (1961). *Kanitham Karpithal*. Chennai: The South India Saiva Sidhantha works. .
- ❖ Pratap,N. (2008). *Teaching of Mathematics*. Meerut:R.Lall Books depot.
- ❖ Schwartz, James E. (1994). *Essentials of Classroom Teaching Elementary Mathematics*. London: Allyn and Bacon Publication.
- ❖ Sharan,R., & Sharma,M. (2006). *Teaching of Mathematics*, New Delhi: APH Publishing Corporation.
- ❖ Sharma,R.A. (2008). *Technological Foundations of Education*. Meerut: R.Lall Books Depot.
- ❖ Siddizui, M.H. (2005). *Teaching of Mathematics*. New Delhi: APH Publishing Corporation.
- ❖ Sidhu,K.S. (2006). *Teaching of Mathematics*. New Delhi: Sterling Publishers private limited.
- ❖ Singh,M. (2006). *Modern Teaching of Mathematics*. New Delhi: Anmol Publications Pvt. Ltd.
- ❖ வாசன் . (2002). கணக்கு கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்.
- ❖ நடராஜன்,வி. (2013). கணிதம் கற்பிக்கும் முறைகள். 1 & 2. சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ நடராஜன்,வி. (2006). கணிதப் பாடப்பொருள் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ தமயந்தி பாக்கியநாதன், என். (2009). கணிதம் கற்பித்தல். சென்னை: சாரதா பதிப்பகம்

- ❖ தமயந்தி பாக்கியநாதன், என். (1978). கணிதம் கற்பித்தல். தமிழ் நாடு அரசு வெளியீடு – பகத் பிரிண்டர்
- ❖ செந்தில் குமார், சு. (2010). கணிதம் கற்பிக்கும் முறைகள். தாள்-1. நாமக்கமல்: சம்யுக்தா பதிப்பகம்.
- ❖ பாலகிருஷ்ணன் R. & சரிதா M. (2010). கணிதம் கற்பிக்கும் முறைகள். தாள்-1. சென்னை: ஸ்ரீகோமதி பப்ளிஷர்ஸ்.
- ❖ நல்லாமூர் கோவி. பழனி. (2008): அறிவியல் கணித மேதைகள். சென்னை: வனிதா பதிப்பகம்
- ❖ நல்லாமூர் கோவி. பழனி. (2006): காகித மடிப்புகளில் கணிதம். சென்னை: வனிதா பதிப்பகம்

SEMESTER - III**CPS 2c – Part III - PEDAGOGY OF PHYSICAL SCIENCE****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course, the student-teachers will be able to:**

- classify the various learning resources to support effective teaching;
- execute action research and disseminate the results;
- gain clarity on the various tasks to be executed during field immersion.

Unit I: Learning Resources

Physics and Chemistry Laboratory- Structure and Design- Organization and maintenance of the Physical Science Laboratory- Maintenance of various Registers: Accession, Consumable, Non-consumable, Issue and Breakage Registers-Storage of Apparatus and Chemicals. Science Textbooks- Qualities of a good Science textbook- Science Library: Encyclopedias, Dictionaries, Magazines, Journals, Activity books, Science fiction, Science learning books. Web-based Learning- Multimedia, use of the internet, e-learning, Tele and Video conferencing

Unit II: Action research

Action Research- Meaning, need for classroom research- difference between action research and fundamental research- steps in action research- journaling the results of classroom research

Unit III : Field Immersion

Tasks of student-teachers during internship :

- Observation of the teaching of mentor teachers and peer student-teachers,
- Institutional and Individual case study,
- Lesson plan, Unit plan and teaching- learning materials,

- Question paper and other tools of assessment,
- Reflective diary of school internship,
- Co-Scholastic activities,
- Teaching as a substitute teacher.

Suggested references:

- ❖ Anderson, R.D et. al.(1992). *Issues of Curriculum Reform in Science, Mathematics and Higher Order Thinking- Across the Disciplines- The Curriculum Reform Project*. U.S.A.: University of Colorado.
- ❖ Carin., & Sund.R. (1989). *Teaching Modern Science*. U.S.A : Merill Publishing Co.
- ❖ Chauhan, S.S. (1985). *Innovation in Teaching and Learning Process*. New Delhi: Vikas Publishing House.
- ❖ Falvery, P., Holbrook, J.,& Conian, D. (1994). *Assessing Students*. Hongkong: Longman Publications.
- ❖ Gupta,S.K.(1985). *Training of Physical Science in Secondary Schools*. New Delhi: Sterling Publication (Pvt) Limited.
- ❖ Harms, N., & Yager, R. (1981). *What Research Says to the Science Teacher? Vol. 3*, U.S.A: National Science Teachers Association.
- ❖ Heiss, Oboum., & Hoffman.(1961).*Modern Science Teaching*. New York: Macmillan & Co, Limited.
- ❖ Husen, T., & Keeves, J.P., (Ed.). (1991). *Issues in Science Education*. London: Pergamon Press.
- ❖ Jenkins, E.W. (2000). *Innovations in Science and Technology Education. Vol. VII*, Paris: UNESCO.
- ❖ Joseph. (1966). *The Teaching of Science*. London: Harvard University Press.
- ❖ Khana, S.D., Sexena, V.R. Lamba, T.P., & Murthy, V. (1976). *Technology of Teaching*. Doaba Publishing House.
- ❖ Mangal S.K., & Uma Mangal. (1999). *Essentials of Educational Technology*. New Delhi: PHI Learning (P) Ltd.
- ❖ Natrajan,C. (Ed.). (1997). *Activity Based Foundation Course on Science Technology and Society*. Mumbai: Homi Bhaba Centre for Science Education.

- ❖ Nayak. (2003). *Teaching of Physics*. New Delhi: APH Publications.
- ❖ Owen, C.B. (1966). *Method of Science Mastery*. English Language Society and Macmillan Company Limited.
- ❖ Pandey. (2003). *Major Issues in Science Teaching*. New Delhi: Sumit Publications.
- ❖ Paneerselvam, A., & Rajendiran, K. (2005). *Teaching of Physical Science*. Chennai: Shantha Publication.
- ❖ PanneerSelvam, A. (1976). *Teaching of Physical Science (Tamil)*. Chennai: Government of Tamil Nadu.
- ❖ Popham, W.J. (2010). *Classroom Assessment: What teachers need to know (6th ed.)*. New York: Prentice Hall.
- ❖ Radha Mohan. (2007). *Innovative Science Teaching for Physical Science Teachers*. New Delhi: Prentice Hall of India Private Limited.
- ❖ Rao, C.S.(1968). *Science Teachers Handbook*. American Peace Crops.
- ❖ Sampath, K.(1981). *Introduction to Education Technology*. Sterling Publishers.
- ❖ Sharma, P.C. (2006). *Modern Science Teaching*. New Delhi: Dhanpat Rai Publications,
- ❖ Sharma, R.C. (2009). *Modern Science Teaching*. Meerut: Dhanpat Rai and Sons.
- ❖ Siddiqui & Siddiqui. (1985). *Teaching of Science Today and Tomorrow*. New Delhi: Doals House.
- ❖ Sonika Rajan. (2012). *Methodology of Teaching Science*. New Delhi: Dorling Kindersley (India) Pvt.Ltd.
- ❖ Thurber, W.A., & Collette, A.T.(1964). *Teaching Science in Today's Secondary School*. New Delhi: Prentice Hall of India Private Limited.
- ❖ Williams, B., (1999). *Internet for Teachers*. London: John Wiley & Sons.
- ❖ Yadav, M.S. (2003). *Teaching of Science*. New Delhi: Anmol Publications.
- ❖ பன்னீர் செல்வம், அ. (2009), இயற்பியல் வேதியியல் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ உமா பாஸ்கரன், T. (2009). பொருளறிவியல் கற்பித்தல் முறைகள் -I. சென்னை : சாரதா பதிப்பகம்.
- ❖ ராதா மோகன். (2010) பொருளறிவியல் கற்பித்தல் முறைகள். புது டெல்லி: நீல்கமல் .
- ❖ செந்தில் குமார், சு. (2010). பொருளறிவியல் தாள்- I: நாமக்கல் : சமயுக்தா பதிப்பகம்.

SEMESTER - III**CPS 2c – Part III - PEDAGOGY OF BIOLOGICAL SCIENCE****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student-teacher will be able to:**

- comprehend various learning resources to support effective teaching;
- conduct action research and disseminate the results;
- gain clarity on the various tasks to be executed during field immersion;

Unit I: Learning Resources

Introduction-Biology and Zoology Laboratory-Structure and design-Organization and maintenance of the Biological Science-Laboratory-Maintenance of various Registers-Improvised Apparatus-Science Text book, Qualities of a good science text book- Science Library-Web Based learning- Multimedia, Use of the internet, e-learning, Tele and Video-Conferencing.

Unit II: Action research

Action Research- Meaning, need for classroom Research- difference between Action Research and fundamental Research- steps in Action Research- journaling the results of classroom Research.

Unit III : Field Immersion

Tasks of student-teachers during internship :

- Observation of the teaching of mentor teachers and peer student-teachers
- Institutional and Individual case study,
- Lesson plan, Unit plan and teaching- learning materials,

- Question paper and other tools of assessment,
- Reflective diary of school internship,
- Co-Scholastic activities,
- Teaching as a substitute teacher

Suggested references:

- ❖ Aggarwal .D.D. (2008). *Modern Method of Teaching Biology*. New Delhi: Karanpaper backs.
- ❖ Arulselvi,E. (2007). *Teaching of Science*. Chennai: Saradha Publication.
- ❖ Bhandala, Chadha., & Khanna. (1985). *Teaching Of Science*. New Delhi: Prakash Brothers Educational Publishers.
- ❖ Bhatnagar,A.D. (2004). *Teaching of Science*. Meerut: Surya Publications.
- ❖ Buffaloe, Neal., & Throneberry, J. B. (1972). *Principles of Biology teaching*. New Delhi: Prentice – Hall of India Limited.
- ❖ Frost Jenny., & Turner Tony. (2005). *Learning to teach Science in Secondary school*. New York: Routledge Palmer Publication.
- ❖ Garrett. (1979). *Statistics in Psychology and Education*. Bombay: Vakils, Feffer and Simons Ltd.
- ❖ Green, T. L. (1965). *The teaching of biology in tropical secondary schools*. London: Oxford University Press.
- ❖ Harms, N., & Yager, R. (1981). *What research says to the science teacher* (Vol. 3). Washington: National Science Teachers Association.
- ❖ Heiss. E. D., Obown, S., & Hoftman, C. W. (1961). *Modern science teaching*. New Delhi: Macmillian Company Press.
- ❖ Khana, S.D,et al. (1976). *Technology of science teaching*. New Delhi: Doaba House.
- ❖ Natrajan, C. (1997). *Activity based foundation course on science technology and society*. Mumbai: Homi Bhaba Centre for Science Education.
- ❖ Korde., & Sawant.(1980). *Science and Scientific Method*. New Delhi: Himalaya Publishing House.
- ❖ Passi, B. K. (1976). *Becoming a Better Teacher: Micro teaching approach*. Ahemedabad: Sahitya Mudranalaya.s

- ❖ Prasad Janardhan. (1999). *Practical aspects in Teaching of Science*. New Delhi: Kanishka Publication.
- ❖ Saunders, H. N. (1967). *The teaching of general science in tropical secondary school*. London: Oxford University Press.
- ❖ Sharma, Jagdish. (2006). *Models of Teaching Science*. Jaipur: Raj Publishing House.
- ❖ Veena Rani Pandey. (2004). *Major Issues in Science Teaching*. Summit Enterprises.
- ❖ வெளுகொபால்.கொஇ நாகராகுன் கி. (2012). உயிரியல் கற்பித்தல். டிசன்னை
- ❖ இரா உமா பாஸ்கரன். (2007). உயிரியல் கற்பித்தல். டிசன்னை: சாரதா பதிப்பகம்
- ❖ கெ.ஆர்.திருவெங்கடசாமி. (2007). உயிர் வாழ்வதும் உயிரி வெதியியலும். டிசன்னை: டிகளரா ஏடிசூன்ஸிஸ்.
- ❖ கெ. ராகும்மாள் .(2005). உயிரியல் கற்பிக்கும் முறைகள். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ மா. மலர்விழிஇ மா. உமாமகெஸ்வரி. (2008).உயிரியல் கற்பித்தல். மதுரை: மாநிலா பப்ளிஜர்ஸ்.

SEMESTER - III**CPS 2c – Part III - PEDAGOGY OF ELEMENTS OF ECONOMICS****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student-teacher will be able to:**

- sensitize student teachers on various learning resources;
- conduct action research and disseminate the results;
- gain clarity on the various tasks to be executed during field immersion

Unit I: Learning Resources

Maintenance of Economics Classroom –Economics laboratory, and its effective use, recreational activities - Participation in economics decision making activities. Economics department library: Need and importance of economics library- prerequisites of economic library- Hints for effective use of library .Contents of Economics library Instructional materials ,text book periodicals, journals , reference materials ,technical documents – surveys . Economics Club: Concept, Aims and Establishment, Activities, Importance, Requirement and different activities. Economics Exhibition: Concept, objectives, planning and organization, Importance of exhibition

Unit II: Action research

Action Research- Meaning, need for classroom research- difference between action research and fundamental research- steps in action research- journaling the results of classroom research.

Unit III : Field Immersion

Tasks of student-teachers during internship :

- Observation of the teaching of mentor teachers and peer student-teachers
- Institutional and Individual case study,
- Lesson plan, Unit plan and teaching- learning materials,

- Question paper and other tools of assessment,
- Reflective diary of school internship,
- Co-Scholastic activities,
- Teaching as a substitute teacher

Suggested references:

- ❖ Alka Kalra. *Efficient School Management and Role of Principals*. New Delhi: A.P.H.Publishing Corporation.
- ❖ Anitha Yadav. (2003). *Teaching of Economics*. New Delhi: Anmol publication.
- ❖ Balaguruswamy, E., & Sharma, K.D. (1982). *Computer in Education and Training*. New Delhi: NIIT.
- ❖ Bloom, Benjamin. (1974) *Taxonomy of educational objectives, cognitive domain*. longman Green.
- ❖ Chakraborty, A. K. (2004). *Principle & practice of education*. Meerut: R.Lall Books Depot. NIEPA.
- ❖ Chauhan, S.S. (2008). *Innovations in teaching learning process*. New Delhi: Vikas publishing House Pvt. Ltd.
- ❖ Edgar Dale. *Audio-Visual Methods in Teaching*. Newyork: Thy Dryden Press.
- ❖ Mangal, S.K., & Mangal, S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal Book depot.
- ❖ Pathak, R.P. and Jagdeesh Chaudhary. (2012). *Educational Technology*, New Delhi: Anmol Publishers.
- ❖ Sharma, R.A.(2008). *Technological Foundation of Education*. Meerut: R. Lall Book Depot.
- ❖ Singh, Y.K. (2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ இரத்தின சபாபதி. பி இரெங் பத்மா மொகன். (2008):. வினாக்களில் விரிகல்கள்.: டிசன்னை:: சாந்தா பதிப்பகம்.
- ❖ இரத்தின சபாபதி.: பி. (2008) கல்வியில் தொவஜ. டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ கணபதி வி. இரத்தின சபாபதி. பி (2008) நுண்ணிலை கற்பித்தல். டிசன்னை: . சாந்தா பதிப்பகம்.
- ❖ பா!கரன். ப. சூ. பத்மப்ரியா.: (2007) கலைத்திட்ட வளர்ச்சி .: டிசன்னை: சாரதா பதிப்பகம்
- ❖ விகுயலட்சுமி. வ (2007):. நுண்ணிலை கற்பித்தல்.: டிசன்னை: சாரதா பதிப்பகம்.
- ❖

- ❖ விக்யலட்சுமி. (2008). கற்பித்தலில் சிக்கல்கள்-தீர்வங்கள். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ செந்தில் குமார், சு. (2010). பொருளியல் கற்பித்தல். தாள்- ஐ. நாமக்கல்.
- ❖ பொன் மருதவாணன். (2009). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாரதா பதிப்பகம்.
- ❖ பொன் மருதவாணன். (2006). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாரதா பதிப்பகம்.
- ❖ ஸ்ரீபாலாஜி லோகநாதன். (2009). பொருளியல் கற்பிக்கும் முறைகள், தாள்-ஐ. சென்னை: பு.ஏ. பப்ளிகேஷன்ஸ்.
- ❖ நடராஜன்,வி. (2006). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிகேஷன்ஸ்.

SEMESTER - III**CPS 2c – Part III - PEDAGOGY OF COMPUTER SCIENCE****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student-teacher will be able to:**

- know the importance of various learning resources;
- conduct action research and disseminate the results;
- gain clarity on the various tasks to be executed during field immersion

Unit I: Learning Resources

Introduction – Need for planning a computer laboratory – Planning and maintenance of a computer laboratory – Special features of a computer laboratory – essential infrastructure – lab management – organization of practical's for pupils – maintenance of records – discipline rules in the laboratory for the teacher and laboratory staff – rules for the students in the laboratory – cybercrime – clubs – Computer Science Textbook : Meaning – Qualities of good Computer Science Textbook – use of text book in and outside the classroom – criteria for evaluation of Computer Science Textbook – value of the Computer Science Library.

Unit II: Action Research

Action Research- Meaning, need for classroom research- difference between action research and fundamental research- steps in action research- journaling the results of classroom research.

Unit III : Field Immersion

Tasks of student-teachers during internship :

- Observation of the teaching of mentor teachers and peer student-teachers
- Institutional and Individual case study,

- Lesson plan, Unit plan and teaching- learning materials,
- Question paper and other tools of assessment,
- Reflective diary of school internship,
- Co-Scholastic activities,
- Teaching as a substitute teacher

Suggested references:

- ❖ இரத்தின சபாபதி. பி இரெங் பத்மா மொகன். (2008). வினாக்களில் விரிகல்கள். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ இரத்தின சபாபதி. பி. (2008) கல்வியில் தொ்வஜ. டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ Agarwal J. C. (2006). *Essential of Educational Technology: Teaching and learning*. New Delhi: Vikas Publishing House Pvt. Ltd.
- ❖ Alexis, M. L. (2001). *Computer for every one*. New Delhi: Vikas Publishing house Ltd.
- ❖ Allison, L. J., and Chris, P. (2007). *Preparing for blended e-learning*. UK: Routledge.
- ❖ Bennett, S., Marsh, D., & Killen, C., (2008). *Handbook of online education continuum*. New York: International Publishing group.
- ❖ Chauhan, S. S. (1985). *Innovations in teaching learning process*. New Delhi: Vikas Publishing house Ltd.
- ❖ கணபதி வி. இரத்தின சபாபதி. பி (2008) நுண்நிலை கற்பித்தல். சென்னை: சாந்தா பதிப்பகம்.
- ❖ பால்கரன். ப. ஷ. பத்மபிரியா, (2007) கலைத்திட்ட வளர்ச்சி , சென்னை: சாரதா பதிப்பகம்
- ❖ Goel, H. K. (2005). *Teaching of Computer Science*. New Delhi: R.Lall Book Depot.
- ❖ Krishnamurthy, R. C. (2003). *Educational technology: Expanding our vision*. Delhi: Authors Press.
- ❖ Harley, H. (2007). *The internet: Complete reference*. New Delhi: Tata McGraw Hill Pub.co., Ltd.
- ❖ John, W. (2007). *Learning and teaching using ICT*. New Delhi: Learning Matters Ltd.
- ❖ Joyce, Well., (2004). *Models of teaching*. U.K: Prentice hall of India.
- ❖ Kochhar, S. K. (1992). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Pvt Ltd.

- ❖ Kumar, K. L. (1997). *Educational technology*. New Delhi: Angel International (P) Ltd.
- ❖ Mohanty, L. (2006). *ICT strategies for schools*. New Delhi: Sage Publication.
- ❖ Norton, P. (1998). *Introduction to computers*. New Delhi: Tata McGraw Hill Publishing Co Ltd.
- ❖ Oosterhof, A. C. (1990). *Classroom applications of educational measurement*. Ohio: Merrill Publishing.
- ❖ Sambath, K., Paneerselvam, A., & Santhanam, S. (2006). *Introduction of educational technology*. New Delhi: Sterling Publishers Private Limited.
- ❖ Sharma, R. A. (2008). *Technological foundation of education*. Meerut: R.Lall Books Depot
- ❖ Sharma, R. C. (1998). *Modern science teaching*. New Delhi: Dhanpat Raj and Sons.
- ❖ Sharma, R. N. (2008). *Principles and Techniques of Education*. Delhi: Surjeet Publications.
- ❖ Sidhu, K. S. (2006). *Teaching of Mathematics*. New Delhi: Sterling Publishers Private Ltd.
- ❖ Singh, Y. K. (2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ Srinivasan, T. M. (2002). *Use of computers and multimedia in education*. Jaipur: Aavisakar Publication.
- ❖ Stephen, M. A., & Stanely, R. (1985). *Computer based instruction: Methods and development*. New Jersey: Prentice Hall.
- ❖ Stone, E. (1996). *How to use Microsoft access*. California: Emeryville.
- ❖ விக்ஷயலட்சுமி. வ (2007).: நுண்ணிலை கற்பித்தல்.: டிசன்னை: சாரதா பதிப்பகம்.
- ❖ விக்ஷயலட்சுமி.: (2008).: கற்பித்தலில் சிக்கல்கள்-தீர்வுகள். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ Vanaja, M. (2006). *Educational technology*. Hyderabad: Neelkamal Publications Pvt. Ltd.

SEMESTER - III**CPS 2c – Part III - PEDAGOGY OF HISTORY****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of this course the student-teachers will be able to:**

- integrate the use of learning resources in History;
- conduct action research and disseminate the results;
- gain clarity on the various tasks to be executed during field immersion;

Unit I: Learning resources

Text books- Libraries –Journals and periodicals- Newspaper – reference materials, surveys-net based resources- arranging field trips, guest- lectures – Excursions – workshops, activities, Collection of specimens- stamps, coins.

Unit II: Action research

Action Research- Meaning, need for classroom research- difference between action research and fundamental research- steps in action research- journaling the results of classroom research.

Unit III : Field Immersion

Tasks of student-teachers during internship :

- Observation of the teaching of mentor teachers and peer student-teachers
- Institutional and Individual case study,
- Lesson plan, Unit plan and teaching- learning materials,
- Question paper and other tools of assessment,
- Reflective diary of school internship,

- Co-Scholastic activities,
- Teaching as a substitute teacher

Suggested references:

- ❖ Aggarwal, J.C.(1996). *Teaching of history. A practical approach*. New Delhi: Vikas Publishing House Pvt Ltd.
- ❖ Aggarwal, J.C.(2008). *Principles, method and Techniques of teaching*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Baskaran., & V.Padmapriya.(2007). *Kalaithitta valarachi*. Chennai: Saratha Publishers.
- ❖ Bloom, Benjamin. (1974).*Taxonomy of educational objectives, cognitive domain*. Longman Green.
- ❖ Chauhan, S.S.(2008). *Innovations in teaching learning process*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Durplass, J.A.(2009). *Teaching elementary social studies*. New Delhi: Atlantic Publishers.
- ❖ Geoff, T.(2008). *Teaching and learning history*. New Delhi: SAGE Publications.
- ❖ Kanammall, Raa. (2007). *Varallatru Karpithal*. Chennai: Saradha Publishers.
- ❖ Kochhar, S.K. (2003). *Teaching of history*. New Delhi: Sterling Publishing pvt.Ltd.
- ❖ Mangal S.K., & Uma Mangal. (2011). *Teaching of social science*. New Delhi: PHI learning Private Limited.
- ❖ Mangal, S.K. & Mangal, S.(2005). *Essentials of Education Technology and Management*. Meerut: Loyal Book depot.
- ❖ Nagarajan.K. (2008). *Curriculum and development*. Ram Publishers.
- ❖ NCERT.(1970). *Teaching history in secondary school: A handbook for history teacher*. New Delhi: NCERT Publication.
- ❖ Rathina sabapathy, P. (2008). *Nunnailai Karppithal*. Chennai: Santha Pathipagam.
- ❖ Siddiqui,M.H.(2009). *Techniques of classroom teaching*. New Delhi: APH Publishing Corporation.
- ❖ Singh Y.K.(2009).*Teaching of History: Modern methods*. New Delhi: APH Publishing Corporation.
- ❖ Singh Y.K.(2009).*Teaching practice*. New Delhi: APH Publishing Corporation.

- ❖ Thirugnana sampantham.(2007). *Varallatru Karpithal muraika.*, Chennai: Saradha pathipagam.
- ❖ டாக்டர். ஸ்ரீபாலாஜி லோகநாதன் (2009) : வரலாறு கற்பிக்கும் முறைகள் : தாள் - I. G.V. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ செந்தில் குமார், சு. (2010). வரலாறு கற்பிக்கும் முறைகள். தாள்- II, சேலம் ரோடு, நாமக்கல்.
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): வரலாறு கற்பிக்கும் முறைகள். தாள்- II, G.V. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ பேராசிரியர் என். செல்லம் (1992) : வரலாறு கற்பிக்கும் முறைகள். சாந்தா பப்ளிஷர்ஸ், சென்னை.
- ❖ கண்ணம்மாள் (2009), வரலாறு கற்பித்தல் : சாரதா பதிப்பகம், இராயப்பேட்டை, சென்னை
- ❖ திருஞானசம்பந்தம் (2005): வரலாறு கற்பித்தல் முறைகள், சாந்தா பப்ளிஷர்ஸ், சென்னை.
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): சமூக அறிவியல் கற்பிக்கும் முறைகள், தாள்-I, G.V. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ வசந்தி சு. (2007). கற்பித்தல் புதிய அணுகு முறை, வனிதா பதிப்பகம், சென்னை.

SEMESTER - III**CPS 2c – Part III - PEDAGOGY OF GEOGRAPHY****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of this course, the student-teachers will be able to:**

- integrate the use of learning resources in geography;
- conduct action research and disseminate the results;
- gain clarity on the various tasks to be executed during field immersion;

Unit I: Learning resources

Text books- Libraries –Journals and periodicals- Newspaper – reference materials, surveys-net based resources- arranging field trips, guest- lectures – Excursions – workshops, activities, and Encyclopaedia net based resources- use of internet and e-learning-identification of website for learning.

Unit II: Action research

Action Research- Meaning, need for classroom research- difference between action research and fundamental research- steps in action research- journaling the results of classroom research.

Unit III: Field Immersion

Tasks of student-teachers during internship:

- Observation of the teaching of mentor teachers and peer student-teachers
- Institutional and Individual case study,
- Lesson plan, Unit plan and teaching- learning materials,

- Question paper and other tools of assessment,
- Reflective diary of school internship,
- Co-Scholastic activities,
- Teaching as a substitute teacher

Suggested references:

- ❖ Aggarwal. (2008). *Principles, method and Techniques of teaching*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Aggarwal. (2008). *Teaching of social studies: A practical approach* (4th ed). Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Aurora, M.L.(1979). *Teaching of Geography*. Ludhiana: Prakash Brother.
- ❖ Chauhan, S.S.(2008). *Innovation in teaching learning process*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Chorley P.J.(ed).(1973). *Direction in Geography*. London: Mothuen & Co.
- ❖ Durplass, J.A. (2009). *Teaching elementary social studies*. New Delhi: Atlantic Publishers.
- ❖ Garnett Ohio. (1965). *Fundamental in school Geography*. London: Harrap and Co.
- ❖ Gill D.S. *Educational Administration and Organization Management*. New Delhi: Saurabh Publishing House.
- ❖ Gospil, G.H.(1965). *The Teaching of Geography*. London: Macmillan and Co.
- ❖ Graves, N.J.(1971). *Geography in secondary Education*. London: Geography Association.
- ❖ Haggett, P.(1972). *Geography: A Modern synthesis*. New York: Harper and Row.
- ❖ Indian National Committee for Geography. (1968). *Indian Regional Studies*. Calcutta: IGU Publication.
- ❖ Kanammall, Raa.(2007). *Puviyiyal Karpithal*. Chennai: Saradha Publishers.
- ❖ Malid Husain. (2010). *Evolution of Geographical Thought*. Jaipur: Rawat Publication.
- ❖ Mangal S.K., & Uma Mangal. (2011). *Teaching of social studies*. New Delhi: PHI learning Private Limited.
- ❖ Rao M.S.(1999). *Teaching of Geography*. New Delhi: Anmol Publication Pvt. Ltd.
- ❖ Robinson, Aruthur H.(1960). *Elements of Cartography*. New York: John wiley and Sons, Inc.

- ❖ Selvam.N.(2004). *Puviyiyal Karpithal Muraigal*. Chennai: Santha Publication.
- ❖ Sharma, R.A.(2008). *Technological Foundation of Education*. Meerut: R. Lall Books Depot.
- ❖ Siddiqui, M.H.(2009). *Teaching of Geography*. New Delhi: APH Publishing Corporation.
- ❖ Siddiqui, M.H.(2009). *Techniques of Classroom Teaching*. New Delhi: APH Publishing Corporation.
- ❖ Singh, Y.K.(2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ வாசன் (1992) – புவியியல் கற்பிக்கும் முறைகள் : சாந்தா பப்ளிஷர்ஸ், சென்னை
- ❖ சீனிவாசன். த. (2010): வரலாறு கற்பித்தல் தாள்- I, சமயுக்தா பதிப்பகம், சேலம் ரோடு, நாமக்கல்.
- ❖ கண்ணம்மாள் (2009), புவியியல் கற்பித்தல்: சாரதா பதிப்பகம், இராயப்பேட்டை, சென்னை
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): சமூக அறிவியல் கற்பிக்கும் முறைகள், தாள்-I, G.V. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ வசந்தி சு. (2007). கற்பித்தல் புதிய அணுகு முறை, வனிதா பதிப்பகம், சென்னை.

SEMESTER - III**CPS 2c – Part III - PEDAGOGY OF COMMERCE AND ACCOUNTANCY****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teacher will be able to:**

- understand the different learning resources employed in teaching of Commerce and Accountancy;
- conduct action research and disseminate the results;
- gain clarity on the various tasks to be executed during field immersion;

Unit I: Learning Resources

Maintenance of Commerce Classroom –Commerce laboratory, and its effective use, recreational activities - Participation in Commerce decision making activities - Commerce department library: Need and importance of Commerce library - prerequisites of Commerce library- Hints for effective use of library -Contents of Commerce library Instructional materials ,text book periodicals, journals , reference materials , technical documents, survey reports - Commerce Club: Concept, Aims and Establishment, Activities, Importance, Requirement and different activities - Commerce Exhibition: Concept, objectives, planning and organization, importance of exhibition.

Unit II: Action research

Action Research- Meaning, need for classroom research- difference between action research and fundamental research- steps in action research- journaling the results of classroom research.

Unit III : Field Immersion

Tasks of student-teachers during internship :

- Observation of the teaching of mentor teachers and peer student-teachers
- Institutional and Individual case study,
- Lesson plan, Unit plan and teaching- learning materials,
- Question paper and other tools of assessment,
- Reflective diary of school internship,
- Co-Scholastic activities,
- Teaching as a substitute teacher

Suggested references:

- ❖ Aggarwal, J.C. (2006). *Essentials of Educational Technology Teaching and Learning*. New Delhi: Vikas Publishing House.
- ❖ Allen, O.C., & Francis P.H. (1988). *Curriculum: Foundations, principles and issues*. New Jersey: Prentice Hall.
- ❖ Bining A.C., & Bining D.A. (1962). *Teaching of Social Studies in Secondary Schools*. New York: Mc Graw Hill.
- ❖ Boynton, L.O. (1995). *Methods of Teaching Book-Keeping*. Cincinnati: South Western Publication Company.
- ❖ Chauhan, S.S. (2008). *Innovations in Teaching Learning Process*. Uttar Pradesh: Vikas Publishing House Pvt. Ltd.
- ❖ Douglas, Palnford., & Anderson. (2000). *Teaching Business Subjects*. New York: Prentice Hall.
- ❖ Edward, F.O., Raymond, W.K., & Ronald J.M. (1971). *Programmed Instruction Techniques and Trends*. New York: Century Cropts.
- ❖ Head, G.W. (1988). *Commerce*. London: Heinemann Professional Publishing.
- ❖ Joyce, Well. (2004). *Models of Teaching*. U.K.: Prentice Hall of India.
- ❖ Khan, M.S. (1982). *Commerce Education*. New Delhi: Sterling Publishers Private Limited.

- ❖ Kochhar, S.K. (1992). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Private Limited.
- ❖ Kumar, K.L. (1996). *Educational Technology*. New Delhi: New Age International Publishers.
- ❖ Mangal, S.K., & Mangal, S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal Book Depot.
- ❖ Nagarajan, K.L. (1997). *Principles of Commerce and General Commerce Knowledge*. New Delhi: S.Chand & Company Ltd.
- ❖ Pattanshetti, M.M. (1992). *Designing and organizing tutorials in colleges and universities*. Davangere: You Need Publication.
- ❖ Saylor, J.G. William, M.A., & Hollis. (1956). *Curriculum Planning*. New York: Rinehart and Company Inc.
- ❖ Sharma, R.A. (2008). *Technological Foundation of education*. Meerut: R.Lall Books Depot.
- ❖ Sharma, R.N. (2008). *Principles and Techniques of Education*. New Delhi: Surjeet Publications.
- ❖ Singh, Y.K. (2009). *Teaching of Commerce*. New Delhi: APH Publishing Corporation.

SEMESTER - III**CPS 2c – Part III - PEDAGOGY OF HOME SCIENCE****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical- 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teacher will be able to:**

- classify various learning resources to support effective teaching;
- execute action research and disseminate the results;
- explain the recent developments.

Unit I: Learning Resources

Introduction-Home Science- Laboratory-Structure and design-Organization and maintenance of the Home Science-Laboratory-Maintenance of various registers- Improvised Apparatus- Science Text book, Qualities of a good science text book- Science Library-Web Based learning- Multimedia, Use of the internet, e-learning, Tele and Video-Conferencing.

Unit II: Action research

Action Research- Meaning, need for classroom research- difference between action research and fundamental research- steps in action research- journaling the results of classroom research.

Unit III: ICT and Cybernetics in Education

ICT meaning- growth and origin of ICT - traditional and modern ICT application of ICT in – teaching. Cybernetics- meaning- definition- theory and mechanism- use in the development of instrumental design- application in Computer Science Education- advantages and disadvantages.

Suggested references:

- ❖ Bhatia, K.K. (1990). *Measurement and Evaluation in Education*. Ludhiana: Prakash Brothers.
- ❖ Jha, J.K. (2001). *Encyclopaedia of Teaching of Home Science. (Vol. I & II)*, New Delhi: Anmol Publications Private Limited.
- ❖ Kalra, R. M. (2009). *Teaching of Science*. New Delhi: Rakhi Prakashan Publishers.
- ❖ Lakshmi, K. (2006). *Technology of Teaching of Home Science*. New Delhi: Sonali Publishers.
- ❖ Nibedita, D. (2004). *Teaching of Home Science*. New Delhi: Dominant Publishers and Distributers, New Delhi
- ❖ Seshaih, P.R. (2004). *Methods of Teaching Home Science*, Chennai: Manohar Publishers & Distributors.
- ❖ Shah, A. Et al. (1990). *Fundamentals of Teaching Home Science*. New Delhi: Sterling Publishers Private Limited.
- ❖ Shalool, S. (2002). *Modern Methods of Teaching of Home Science*. New Delhi: Sarup & Sons.
- ❖ Sharma, S. (2009). *Modern Methods of Teaching Home Science*. New Delhi: Rakhi Prakashan Publishers & Distributors.
- ❖ Yadav , S. (1997). *Text book of Nutrition and Health*. New Delhi: Anmol Publishers.
- ❖ Yadav, S. (1997). *Teaching of Home Science*. New Delhi: Anmol Publishers.
- ❖ Yadav, V.K. (2009). *Biochemistry & Biotechnology: A Laboratory Manual*. New Delhi: Pointer Publishers.

DISABILITY SPECIALIZATION (C)
SEMESTER - III
C13 CURRICULUM, ADAPTATION AND STRATEGIES FOR
TEACHING EXPANDED CURRICULUM

Credits: 4

Hours/Week: Theory-4hrs Practical- 4hrs

Internal: 40 marks

External: 60 marks

Total: 100 marks

Introduction

Curriculum is the heart of any educational system. As is the curriculum, so is the educative process. This course will provide basic understanding of the concept of curriculum approaches to curriculum development. The course content shows a strong commitment to the notion that children with visual impairment should have access to the regular core curriculum for which they need to learn an expanded core curriculum unique to visual impairment. Apart from that certain curricular adaptations and modifications are required to be done to enable the students to access visually oriented concepts. Adapted physical education and creative arts also form a part of this course of study.

Objectives

After completing the course student-teachers will be able to

- Define curriculum, its types and explain its importance.
- Demonstrate techniques of teaching functional academic skills.
- Explain importance and components of independent living skills.
- Explain curricular adaptations with reasonable accommodations.
- Illustrate how physical education and creative arts activities can be adapted for the children with visual impairment.

Unit 1: Concept and Types of Curriculum

Concept, Meaning and Need for Curriculum - Curricular Approaches in Special Education – Developmental, Functional, Eclectic and Universal design for learning Approach- Types of Curriculum – need based, knowledge based, activity based, skill based and hidden curriculum Curriculum Planning, Implementation and Evaluation; Role of Special teachers of the Visually Impaired - Core Curriculum and Expanded Core Curriculum- Meaning, Need and Components.

Unit 2: Teaching Functional Academics Skills

Learning media assessment - Braille reading readiness - Techniques of teaching Braille - Techniques of Teaching print to children with low vision - Braille aids and devices, optical devices for print reading and writing.

Unit 3: Teaching of Independent Living Skills

Independent living skills – Meaning, Importance, Components - Orientation and Mobility – need and importance, techniques of teaching mobility, sighted guide and pre-cane, cane techniques and mobility aids - Daily living skills – assessment of needs and techniques of teaching age appropriate daily living skills - Sensory efficiency – importance and procedures for training auditory, tactile, olfactory, gustatory, kinaesthetic senses and residual vision - Techniques of teaching social interaction skills, leisure and recreation skills and self – determination.

Unit 4: Curricular Adaptation

Curricular adaptation – Need, Importance and Process - Reasonable accommodation – Need and Planning - Planning of lessons for teaching Expanded Core Curriculum – Individualized Education Program writing - Pedagogical Strategic – Cooperative learning, Peer tutoring, reflective teaching, multisensory teaching - Preparation of Teaching Learning Material for ECC – Reading Readiness kit, Flash Cards, Sensory Kits, and Mobility Maps

Unit 5: Curricular Activities

Curricular activities – Meaning and Need for Adaptation - Adaptation of Physical education activities and Yoga - Adaptation of Games and Sports – both Indoor and Outdoor - Creative Arts for the children with visual impairment - Agencies/Organisations promoting – Sports, Culture and Recreation activities for the Visually Impaired in India – Indian Blind Sports Association, Chess Federation of India, Paralympic Committee of India, Abilympics, World Blind Cricket.

Course Work/ Practical/ Field Engagement

- Prepare reading readiness material for pre-school children with visual impairment
- Preparation and presentation of a kit to develop sensory efficiency
- Select one chapter from a primary level text book of your choice and adapt it for learners with visual impairment
- Adapt one diagram and one map from secondary classes into non-visual format

Suggested Readings

- ❖ Ashcroft, S. C., & Henderson, F. (1963). Programmed Instruction in Braille. Stanwick House, Pittsburgh.
- ❖ Barraga, N. C. (1986). 'Sensory Perceptual Development'.in: G.T. Scholl (ed.) Foundations of the education for blind and visually handicapped children and youth: Theory and Practice. AFB Press, New York.
- ❖ National Curriculum Framework. (2005). Position paper National focus group in Education of Children with Special needs. NCERT, New Delhi.
- ❖ Status of Disability in India. (2012). Rehabilitation Council of India, New Delhi.
- ❖ Hodapp, R. M. (1998). Developmental and disabilities: Intellectual, sensory and motor impairment. Cambridge Uni. Press, New York.
- ❖ The expanded Core Curriculum. (2013). Retrieved from [http:// www.afb.org](http://www.afb.org)
- ❖ Wright, L. (2013). The Skills of Blindness: What should students know and when students know. Retrieved from [http:// www.lofob.org](http://www.lofob.org)

SEMESTER - IV

PERSPECTIVES IN EDUCATION (PE)**SEMESTER - IV****PE5 KNOWLEDGE AND CURRICULUM****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical - 4hrs****External: 60 marks****Total: 100 marks****Objectives****At the end of the course the student teachers will be able to:**

- recognise the epistemological basis of knowledge;
- explain the perspectives of curriculum;
- implement the curriculum development and teaching learning process;
- recall with the various curriculum practices;
- explain the innovations in curriculum development;
- integrate the knowledge on the basis of evaluating curriculum.

Unit I: Knowledge

Epistemology: meaning, philosophical basic of knowledge according to Indian and Western Philosophy - Knowledge: meaning, definition, characteristics - Types of knowledge: Three divisions of knowledge – Implications of knowledge for Teaching and Learning - Sources of knowledge Education: situational, conceptual and strategic - Differences between: knowledge and skill, teaching and training, knowledge and information, reason and belief.

Unit II: Curriculum Perspective

Curriculum: definition and scope - Perspectives of Curriculum - Curriculum and instruction - Course designing – Guidelines - Creating a syllabus - Role of representation and non representation of various social groups in curriculum planning - Curriculum transaction.

Unit III: Curriculum Development and Teaching Learning Process

Stages in the process of curriculum development - Assessing learner needs and characteristics- Implementing the curriculum - Understanding of hidden and enacted

curriculum - Models of curriculum development: Grass Root Model, Taylor's Model , Hilda Taba's model, process product model- Core curriculum: activity curriculum, inter disciplinary curriculum - Strategies for curriculum development- Competencies in curriculum development.

Unit IV: Curriculum Practices

Curriculum practice at Elementary, Secondary and Higher Secondary levels: methodology of Education and teaching of subjects, instructional aids and materials - Criteria for future curriculum - Developmental trends - Standard based curriculum development - Traditional Education System - Standard based Educational practice.

Unit V: Innovations in Curriculum Development

Educational goals and trends in curriculum reform - Improving curriculum development process - Curriculum as a way of attaining quality - Constructing the curriculum - Teacher's role in curriculum innovation - Innovation process.

Unit VI: Evaluation Process

Evaluation of the effectiveness of curriculum - Indicators of effective curriculum construction content: existing pedagogies and instructional approaches, teacher training, text books and instructional materials - Agencies of evaluation: NCTE, NCERT, SCERT, and MHRD.

Suggested references:

- ❖ Aggarwal, J.C., & Gupta, S. (2005). *Curriculum Development*. New Delhi: Shipra Publisher.
- ❖ Balrara,M. (1999). *Curriculum Planning for modern schools*. New York: Corwin press.
- ❖ Erickson, H.L. (2007). *Concept based curriculum and instruction for the thinking classroom*.
- ❖ Hassrin,M.(2004).*Curriculum planning for elementary education*. New Delhi: Anmol Publishers.
- ❖ Kumari. S., & Srivastava, D.S.(2005). *Curriculum and Instruction*. New Delhi: Shipra publishers.
- ❖ Panday, M. (2007). *Principles of Curriculum Development*. New Delhi: Rajat Publishers.

- ❖ Rajput, J.S. (2004). *Encyclopedia of Indian Education*. New Delhi: NCERT.
- ❖ Satyanarayanan, P.V. (2004). *Curriculum Development and management*. New Delhi: DPH.
- ❖ Sharma, Promila.(2009). *Curriculum Development*. New Delhi: A.P.H. Publishing corporation.
- ❖ Sharma, R. (2002). *Modern methods of curriculum organization*. Jaipur: Book Enclave.
- ❖ Srivaastava, H.S.(2006). *Curriculum and methods of teaching*. New Delhi: Shipra publishers.
- ❖ Yadav, Y.P.(2006). *Fundamentals of curriculum design*. New Delhi: ShriSai printographers.
- ❖ உமா மகேஷ்வரி, M. (2009). கலைத்திட்ட வளர்ச்சி, சென்னை : G.V. பப்ளிகேஷன்ஸ்.
- ❖ நாகராஜன், கி. (2012). கலைத்திட்ட வளர்ச்சி, சென்னை : இராம் பதிப்பகம்.
- ❖ செந்தில் குமார், சு. (2010), கலைத்திட்ட வளர்ச்சி. நாமக்கல் : சமயுக்தா பதிப்பகம்.
- ❖ தீனதயாள்,P.(2009), கலைத்திட்ட வளர்ச்சி, சென்னை : சாரதா பதிப்பகம்
- ❖ பாஸ்கரன், ஏ, (2008): கலைத்திட்ட வளர்ச்சி. சென்னை : சாரதா பதிப்பகம்

DISABILITY SPECIALIZATION (C)
SEMESTER - IV
C14 INTERVENTION AND TEACHING STRATEGIES

Credits: 4 Credits: 4

Internal: 40 marks

Hours/Week: Theory-4hrs Practical- 4hrs

External: 60 marks

Total: 100 marks

Introduction

This course builds on the pedagogy courses presented under A4 and A5 of the present B.Ed. curriculum. It prepares the student-teachers to transact lessons in various school-subjects for children with visual impairment. For this purpose, the required intervention and teaching techniques and skills are highlighted.

The student-teachers, it is hoped, will find the course highly stimulating, as it will enable them to help blind and low vision students to cope effectively with the challenges of curriculum transaction, at par with their sighted peers.

Objectives

After completing the course student-teachers will be able to

- Explain various theoretical perspectives related to intervention & teaching strategies.
- Demonstrate techniques of teaching Mathematics to visually impaired children.
- Acquire necessary competencies and skills for teaching science and assessment of the learners with special reference to children with visual impairment.
- Acquire and apply necessary skills for adapting TLM in social science and assessment of the learners with special reference to children with visual impairment.
- Describe the process of assessment visual efficiency and classroom management for children with low vision.

Unit 1: Theoretical Perspectives

Difference among Methods, Approaches and Strategies - Intervention – Concept, Scope and Importance - Intervention for lately blinded students – Role of Special teachers/educators -

Mediated teaching-learning – Concept, Need and Procedure - Enriched teaching for Concept development: Converting visual concepts into accessible experiences

Unit 2: Mathematics

Coping with Mathematics phobias - Conceptualization of Mathematical ideas – Processes and Challenges for Children with Visual Impairment - Preparation and Use of tactile materials - Mental arithmetic abilities – Concept, Importance and Application - Evaluation procedures with special reference to the Needs of Children with Visual Impairment

Unit 3: Science

Providing first-hand experience in the class and the school environment - Inclusive/collaborative learning for laboratory work - Science Teaching Learning Materials and Equipment: i) Preparation and use of TLM,ii) Locating and procuring Science equipment - Problem solving and Learning by doing approach for Visually Impaired students - Evaluation procedure with particular reference to Practicals and Adaptations in Examination questions

Unit 4: Social Science

Techniques of preparation and presentation of adapted Tactile maps, Diagrams, and Globe - Procuring, adapting and use of different types of models - Organizing field trips - Teaching Skills: Dramatization, Narration, Explanation, Story-telling, and Role play - Evaluation of concepts and skills in social science with particular reference to Geography

Unit 5: Teaching of Children with Low Vision

Visual Stimulation: Concept and Procedure - Selection of an appropriate medium of reading and writing - Techniques and procedures for developing reading and writing skills - Orientation and Mobility for low vision children- Classroom management – Seating arrangement, adjustable furniture, illumination, non-reflecting surfaces and colour contrast

Course Work / Practical / Field Engagement

- Prepare and use two teaching learning materials for teaching Maths/ Science/ Social Science.
- Prepare a short concept paper (about 500 words) on developing a science laboratory for the visually impaired students.
- Functionally assess the vision of a low vision child and plan a teaching programme.

Suggested readings

- ❖ Fernandez, G., Koening. C., Mani. M.N.G., & Tensi. S. (1999). See with the Blind. Books for Change, Bangalore.
- ❖ Jackson, J. (2007). Low Vision Manual. Edingurgh: Butterworth Heinemann/ Elsevier, Edingurgh.
- ❖ Jose, R. (1983). Understanding Low Vision. American Foundation For The Blind. New York.
- ❖ Lowenfeld, B. (1973). The Visually Handicapped Child in School. John Day Company, New York.
- ❖ Lydon, W. T., & McGraw, M. L. (1973). Concept Development for Visually Handicapped Children. AFB, New York.
- ❖ Mangal. S. K. (2007). Educating exceptional children-an introduction to special education. PHI learning Pvt. New Delhi.
- ❖ Mangal, S. K. (2011) Educating Exceptional Children: An Introduction to Special Education. PHI Learning Pvt. Ltd., New Delhi.
- ❖ Mani. M. N. G. (1997). Amazing Abacus. S.R.K. Vidyalaya Colony, Coimbatore.
- ❖ Mani, M. N. G. (1992). Techniques of Teaching Blind Children. Sterling Publishers Pvt. Ltd. New Delhi.
- ❖ Macnaughton, J. (2005). Low Vision Assessment. Butterworth Heinemann/ Elsevier, Edingurgh.
- ❖ Mason, H., & McCall, S. (2003). Visual Impairment – Access to Education for Children and Young people. London: David Fulton Publishers.
- ❖ Mukhopadhyay, S., Mani, M.N.G., Roy Choudary, M., & Jangira, N.K. (1988). Source Book for Training Teachers of Visually Impaired. New Delhi: NCERT.
- ❖ Macnaughton, J. (2005). Low Vision Assessment. Butterworth Heinemann /Elsevier, Edingurgh.

- ❖ Niemann, S., & Jacob, N. (2009). Helping Children who are Blind. The Hesperian Foundation, California.
- ❖ Punani, B., & Rawal, N.(2000). Handbook for Visually Impaired. Blind Peoples' Association, Ahmedabad.
- ❖ Scholl, G.T. (1986). Foundations of the education for blind and visually handicapped children and youth: Theory and Practice. AFB Press, New York.
- ❖ Vijayan, P., & Gnaumi, V. (2010). Education of children with low vision. Kanishka Publication, New Delhi.
- ❖ Agrawal, S. (2004). Teaching Mathematics to Blind Students through Programmed Learning Strategies. Abhijeet Publication, Delhi.
- ❖ Pandey, V. P. (2004). Teaching of mathematics. Sumit Publication, New Delhi.
- ❖ Status of Disability in India. (2012). Rehabilitation Council of India, New Delhi.

SEMESTER - IV**C15 TECHNOLOGY AND EDUCATION OF THE VISUALLY IMPAIRED****Credits: 4****Internal: 40 marks****Hours/Week: Theory-4hrs Practical- 4hrs****External: 60 marks****Total: 100 marks****Introduction**

Technology in the form of adaptive and assistive devices, plays a crucial role in the education of the visually impaired. This course brings into sharp focus the need and importance of such technologies both for the practicing teachers and the visually impaired learners. While highlighting the significance of addressing the users point of view/feedback and involving mainstream professionals in developing required technologies, the course also dwells upon on how best students with visual impairment get access to the printed text/material. The course also acquaints the student-teachers with various devices for making the teaching-learning process for important school subjects meaningful, exciting and rewarding for all concerned. The educational needs of children with low vision and related technological perspectives are addressed, too, along with critical contributions of computer-aided learning and interventions. In short, the course focuses on making transaction of curriculum for blind and low vision students, a really enjoyable and worthwhile experience. It needs to be studied in conjunction with course Code C14 of the curriculum.

Objectives

After completing the course student-teachers will be able to

- Relate the concept and nature of educational technology and ICT to the education of children with visual impairment.
- Acquire knowledge of the concept and nature of adaptive technology and explain underlying principles and techniques.
- Get familiar with technologies for print-access for children with visual impairment.
- Describe and use different technologies for teaching low vision children as also various school subjects.
- Demonstrate understanding of computer-based teaching-learning processes.

Unit 1: Introducing Educational and Information Communication Technology

Educational Technology-Concept, Importance, and Scope -Difference between Educational Technology and Technology in Education - Special Significance and Goals of Technology for the Education of children with Visual Impairment - Information and Communication Technology (ICT) - Concept and Special Significance for teaching-learning of the visually impaired - ICT and the UN Convention on the Rights of Persons with Disabilities.

Unit 2: Adaptive Technologies

Concept and Purposes - Basic Considerations--Access, Affordability, and Availability - Addressing User's Perspectives in Developing Adaptive Technologies - Roles of IIT's and the Scientific Community; - Universal/Inclusive Design - Concept, Advantages, and Limitations.

Unit 3: Access to Print for the Visually Impaired

Screen Readers with Special Reference to Indian Languages; Magnifying Software, and Open Source Software - Braille Notetakers and Stand-alone Reading Machines - Braille Translation Software with Particular reference to Indian Languages and Braille Embossers - On-Line Libraries and Bookshare - Daisy Books, Recordings, and Smart Phones.

Unit 4: Assistive Technologies for the Visually Impaired with Reference to School**Subjects and Low Vision**

Mathematics: Taylor Frame, Abacus, Geo Board, Algebra and Maths Types, Measuring Tapes, Scales, and Soft-wares for teaching Maths. - Science: Thermometers, Colour Probes, Scientific and Maths Talking Calculators, Light Probes, and Weighing scales and Soft-wares for teaching Science. - Social Science: Tactile/Embossed Maps, Charts, Diagrams, Models of Different Types, Auditory Maps, Talking compass, and GPS - Low vision devices: Optical, Non-Optical and Projective - Thermoform and Swell Paper technology and Softwares for developing tactilediagrams

Unit 5: Computer-Aided Learning

Social Media - Creation of Blogs - Tele-Conferencing - Distance Learning and ICT – e-Classroom: Concept and Adaptations for Children with Visual Impairment.

Course Work / Practical / Field Engagement**Any three of the following**

- Prepare a list of devices for Mathematics and Science available for the visually impaired in one special school and one inclusive school
- Write a short list of hints and suggestions you will offer to the scientific community for motivating them to develop adaptive technologies for the visually impaired
- Make a short report (in about 500 words) on the advantages and limitations as well as sources of availability in respect of any print-access technology indicated in Unit3
- Make a case study of a student with low vision at the secondary stage, indicating clearly his educational needs and how you can address them
- Prepare a report on the possibilities and prospects available for the visually impaired students through the use of computers
- Prepare a short note (in about 400 words) on various aspects of a classroom and how it could be made accessible to the visually impaired

Suggested Readings

- ❖ Biwas, P. C. (2004). Education of children with Visual Impairment: in inclusive education. Abhijeet Publication, New Delhi.
- ❖ Bourgeault, S. E. (1969). The Method of Teaching the Blind: The Language Arts. American Foundation for the Overseas Blind, Kuala Lumpur.
- ❖ Chaudhary, M. (2006). Low Vision Aids. Japee Brothers, New Delhi.
- ❖ Lowenfeld, B. (1973). The Visually Handicapped Child in School. John Day Company, New York.
- ❖ Mani. M.N.G. (1997). Amazing Abacus. S.R.K. Vidyalaya Colony, Coimbatore.
- ❖ Mukhopadhyay, S., Mani, M.N.G., Roy Choudary, M., & Jangira, N.K. (1988). Source Book for Training Teachers of Visually Impaired. NCERT, New Delhi.
- ❖ Proceedings: Asian Conference on Adaptive technologies for the Visually Impaired (2009).Asian Blind Union, New Delhi.
- ❖ Punani, B., & Rawal, N. (2000). Handbook for Visually Impaired. Blind Peoples' Association, Ahmedabad.
- ❖ Scheiman, M., Scheiman, M., & Whittaker, S. (2006). Low Vision Rehabilitation: a practical guide for occupational therapists. Therefore Slack Incorp, New Jersey.

- ❖ Scholl, G. T. (1986). Foundations of the education for blind and visually handicapped children and youth: Theory and Practice. AFB Press, New York.
- ❖ Singh, J. P. (2003). Technology for the Blind: Concept and Context. Kanishka Publication, New Delhi.
- ❖ Vijayan, P., & Gnaumi, V. (2010). Education of Children with low Vision. Kanishka Publication, New Delhi.
- ❖ Fatima, R. (2010). Teaching aids in mathematics; a handbook for elementary teachers. Kanishka Publication, New Delhi.
- ❖ Hersh, M.A., & Johnson, M. (2008). Assistive Technology for Visually Impaired and Blind People. Springer, London.
- ❖ Sadao, K. C., & Robinson, N. B. (2010). Assistive Technology for young children: creating inclusive learning environments. Paul H Brooks, Baltimore.

SEMESTER - IV
C16 PSYCHO SOCIAL AND FAMILY ISSUES

Credits: 2

Hours/Week: Theory-3hrs Practical- 2hrs

Internal: 20 marks

External: 30 marks

Total: 50 marks

Introduction

Children with Visual Impairment belong to families. It is important to explore family backgrounds and their influence on how visually impaired are perceived and how children perceive themselves, and how they behave in consequence. The learners need to develop an insight into the plethora of emotions the family goes through at the birth of a special child, the challenges they face throughout the life of the visually impaired, and the roles and responsibilities of the family and the community.

Objectives

After completing the course student-teachers will be able to

- Describe the effect of birth of a child with visual impairment on the family.
- Analyze the role of family and parental concerns related to their child with visual impairment from birth to adulthood.
- Explain the role of parent community partnership in the rehabilitation of a person with visual impairment.
- Develop different skills to empower families in meeting the challenges of having a child with visual impairment.

Unit 1: Family of a Child with Visual Impairment

Birth of a child with visual impairment and its effect on parents and family dynamics - Parenting styles: Overprotective, Authoritative, Authoritarian and Neglecting - Stereotypic attitudes related to visual impairment and attitude modification - Role of family in Early stimulation, Concept development and Early intervention - Role of siblings and extended family

Unit 2: Parental Issues and Concerns

Choosing an educational setting - Gender and disability - Transition to adulthood: sexuality, marriage, and employment - Parent support groups - Attitude of professionals in involving parents in IEP and IFSP

Unit 3: Rehabilitation of Children with Visual Impairment

Concept of habilitation and rehabilitation - Community Based Rehabilitation (CBR) and Community Participatory Rehabilitation (CPR) - Legal provisions, concessions and advocacy - Vocational rehabilitation: need and challenges - Issues and challenges in rural settings.

Unit 4: Meeting the Challenges of Children with Visual Impairment

Enhancing prosocial behaviour - Stress and coping strategies - Recreation and leisure time management - Challenges of adventitious visual impairment - Soft skills and social skills training .

Course Work/ Practical/ Field Engagement (Any Two)

- Interview family members of three children with visual impairment (congenital/adventitious and blind, low vision and VIMD) and analyze their reactions and attitudes towards the child.
- Prepare and present a list of activities how parents, siblings, and grandparents can be engaged with the child with visual impairment.
- Prepare charts/ conduct street plays/ make oral presentations to remove myths related to visual impairment.
- Visit schools for the visually impaired and make presentations before the parents on Government concessions and auxiliary services available.

Suggested Readings

- ❖ Bhandari, R., & Narayan, J. (2009). Creating learning opportunities: a step by step guide to teaching students with vision impairment and additional disabilities, including deafblindness. Voice and vision, India.
- ❖ Hansen, J. C., Rossberg, R.H., & Cramer, S.H. (1994). Counselling Theory and Process. Allyn and Bacon, Boston.
- ❖ Lowenfeld, B. (1973). Visually Handicapped Child in School. American Foundation for the Blind, New York.
- ❖ Lowenfeld, B. (1975). The Changing Status of the Blind from Separation to Integration. Charles C. Thomas, California.
- ❖ Mani, M. N. G. (1992). Techniques of Teaching Blind Children. Sterling publishers Pvt. Ltd., New Delhi.
- ❖ Narayan, J., & Riggio, M. (2005). Creating play environment for children. Hilton/Perkins. Watertown.
- ❖ Shah, A. (2008). Basics in guidance and Counselling. Global Vision Publishing House, New Delhi.
- ❖ Smith, D. D., & Luckasson, R. (1995). Introduction to Special Education – Teaching in an age of Challenge. (2Ed). Allyn & Bacon. USA.
- ❖ Bhan, S. (2014). Understanding learners-A handbook for teachers. Prasad Psycho Corporation, New Delhi.
- ❖ Early Support for children, young people and families. (2012). Information about Visual Impairment, Retrieved from <http://www.ncb.org.uk/media/875236/earlysupportvisimppart1final.pdf>
- ❖ Kundu, C. L. (2000). Status of Disability in India. RCI, New Delhi.

CURRICULUM AND PEDAGOGIC STUDIES (CPS)**SEMESTER - IV****CPS 2d - Part IV - PEDAGOGY OF TAMIL****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical - 3hrs****External: 30 marks****Total: 50 marks****தமிழ் கற்பிக்கும் முறைகள் - பகுதி 4****நோக்கங்கள்****இப்பாடப்பொருளைக் கற்றபின்பு மாணவ-ஆசிரியர்:**

- மொழி ஆசிரியருக்குரிய பண்பு நலன்களை வளர்த்தல்;
- கலைத் திட்டத்தின் நோக்கங்களையும், குறிக்கோள்களையும் கூறுதல்;
- மனித வாழ்க்கையில் தமிழ்மொழி வளர்ச்சியின் பங்கை அறிதல்;

அலகு 1: மொழியாசிரியர்

மொழியாசிரியரின் கல்வித்தகுதி - மொழியாசிரியரின் பண்பு நலன்கள் - மொழிப்பற்று - இலக்கண இலக்கியப் புலமை - எடுத்துக்கூறும் ஆற்றல் - குரலில் ஏற்றத்தாழ்வு அமைத்துப் பேசுந்திறன் - திறமையாக எழுதுந்திறன் - பிற ஆசிரியர்களுடன் கலந்துரையாடல் - கடமை உணர்வுடன் செயல்படல் - உளவியல் வல்லுநர் - கலையார்வம் மிக்கவர் - உடலோம்பலில் ஆர்வம் - தற்பெருமையும் சினமும் இல்லாதிருத்தல் - பெருந்தன்மை - சமூக உறவு கொள்ளல் - உலகப் பொதுஅறிவு பெறுதல்.

அலகு 2: கல்வி ஏற்பாட்டில் (கலைத்திட்டத்தில்) மொழியின் இடம்

பள்ளிக்கல்வி ஏற்பாடு: ஆரம்ப, இடை, உயர்நிலைகளில் - கலைத்திட்டத்தில் தாய் மொழி பெறும் இடம் - மொழிப்பாடத்தின் சிறப்புக் கூறுகள். பாடத்திட்டமும், பாடநூல்களும்: சிறந்த பாடநூலின் தன்மைகள் - தயாரிக்கும் முறைகள் - நிறை, குறைகள் - நடைமுறையில் இருக்கும் பாடநூல்களையும், பாடத்திட்டத்தினையும் பற்றிய ஆய்வு - கல்வியைப் பரவலாக்க அரசின் செயல்திட்டங்கள் (கல்வி உரிமைகள், பெண்கல்வி, சுற்றுச்சூழல், விழிப்புணர்வு கல்வி).

அலகு 3: தமிழ் மொழியும் சமூகச் சூழ்நிலையும்

சமூகவியல் பின்னணியில் மொழி மற்றும் பண்பாட்டைக் கற்பித்தல்: பெற்றோர் ஆசிரியர் கழகம் (PTA) - முன்னாள் மாணவர் கழகம் (OSA) - மொழி வளர்ச்சியில் சூழ்நிலையின் பங்கு - தமிழ் ஆட்சி மொழி - செம்மொழித் தமிழ் - தமிழ்மொழி நீதிமன்ற மொழியாக செயல்படுவதால் ஏற்படும் பயன்கள் மற்றும் செயல்முறைத் தடைகள், தடைகளை நீக்கும் வழிமுறைகள் - மொழிபெயர்ப்பின் வகைகள் - மொழிபெயர்ப்பில் எழும் சிக்கல்கள் மற்றும் தீர்வுகள்.

செயல்முறை ஒப்படைப்பு:

- தமிழ் நாளேடுகளில் காணப்படும் பிழைகளையும் பிறமொழிச் சொற்களின் கலப்பினையும் கண்டறிந்து அவற்றை நீக்கி செய்தி தொகுப்பு தயாரித்தல்.
- அடைவுத் தேர்வினை எழுதுதல் (முன்அறிவிப்பு தேர்வு மற்றும் முன்அறிவிப்பில்லாத தேர்வு)
- தொலைக்காட்சி நிகழ்ச்சிகளைக் கேட்டு திறனாய்வு எழுதுதல்
- வானொலி பேச்சைக் கேட்டு குறிப்பெடுத்தல்
- ஒப்படைப்பு எழுதுதல்.

பார்வை நூல்கள்

- ❖ வீரப்பன் பா. (2000). உயர்நிலைத் தமிழ் கற்பித்தல் ஆசிரியர் கையேடு, மைசூர்: (NCERT).
- ❖ இரத்தினசபாபதி .பி. (2007). செம்மொழிக் கல்வி, சென்னை: சாந்தா பதிப்பகம்.
- ❖ பரமசிவம் சொ. (2010). நற்றமிழ் இலக்கணம், சென்னை: பட்டு பதிப்பகம்.
- ❖ பிரபாகரன் உ. (2012). தமிழ் கற்பித்தல் முறைகள், கும்பகோணம்: அரவிந்த் பதிப்பகம்.
- ❖ பாக்கியமேரி. (2013). இலக்கண இலக்கிய வரலாறு மொழித்திறன், சென்னை: பாவேந்தன் பதிப்பகம்.
- ❖ இலக்கிய தேர்ச்சி அளவிடல். (2013). மைசூர்: இந்திய மொழிகளின் நடுவண் நிறுவன வெளியீடுகள்.
- ❖ கலைச்செல்வி வெ. (2013). தமிழ் பயிற்றல் நுட்பங்கள், நாமக்கமல்: சஞ்சீவி வெளியீடு.
- ❖ சுலோச்சனா ஆ. (2015). இலக்கிய வீச்சு, சென்னை: தமிழகக்கல்வி ஆராய்ச்சி வளர்ச்சி நிறுவனம்.

வலைதளப்பார்வை

- ❖ <http://mycbseguide.com/blog/continuous-and-comprehensive-evaluation-cce/>
- ❖ www.chennaiLibrary.com
- ❖ www.wikipedia.com

SEMESTER - IV**CPS 2d – Part IV - PEDAGOGY OF ENGLISH****credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical - 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- identify the skills needed to organize various co-curricular activities;
- implement the required traits for effective classroom management;
- state the norms of developing a good school plant and realize the need for maintaining various school records and registers.

Unit I: Teacher of English and Organization of Co-curricular Activities

Qualities of teachers of English-Role of teachers of English- Meaning of the term Co-curricular activities- Importance of Co-curricular activities-Guiding Principles for the organization of co-curricular activities-Variou co-curricular activities related to teaching of English: Essay, Elocution, Debate and Drama.

Unit II: Classroom Management

Defining Classroom Management- Teacher as an Effective classroom manager- Managing the learning environment- Managing Instruction- Inappropriate Behaviour and discipline: Responding to persistent misbehaviour, serious misbehaviour, bullies and bullying- Conflict Resolution- Legal dimensions of classroom management.

Unit III: The School Plant

Concept of School plant-The School plant Building-Principles of School Plant Building- Design of the school- Classrooms in School Plant-Special Rooms: Library and Reading Rooms, Assembly Hall, Science Laboratories, Science Rooms, Art Rooms, Workshops and Sheds, Medical Room, Office for the School Counsellor, Cafeteria, The Administrative Suite, The Office Room, Store Room and Storage and Supply Rooms- The Hostel- The Teachers' Quarters- The Museum- The School Play Grounds-Sanitation- Lighting-School Furniture-The Ideal Campus-Maintenance of the school plant- School Plant Utilization- Functions of the School Office: Records, Registers.

Suggested references:

- ❖ Bhatia, R.L., and Ahuja, B.N. (2009). *School Organisation and Management*. New Delhi: Surjeet Publications.
- ❖ Chaube, S.P., and Chaube, A. (2007). *School Organisation*. New Delhi: Vikas Publishing House Pvt. Ltd.
- ❖ Dash, B.N. (2008). *School Organisation Administration and Management*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Gill, S. (2014). *Educational Administration and Organisation Management*. New Delhi: Saurabh Publishing House.
- ❖ Kochhar, S.K. (2006). *Secondary School Administration*. New Delhi: Sterling Publishers Private Limited.
- ❖ Krishnamacharyulu, V. (2008). *Classroom Dynamics*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Mangal, S.K., and Mangal, Uma. (2011). *Essentials of Educational Technology*. New Delhi: PHI Learning private Limited.
- ❖ Mishra, R.C. (2012). *Classroom Administration*. New Delhi: APH Publishing Corporation.
- ❖ Mishra, R.C. (2012). *Classroom Management*. New Delhi: APH Publishing Corporation.
- ❖ Mohan, Aruna.G. (2010). *Understanding the learner and Classroom Management*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Mohanty, Jagannath. (2005). *Educational Management Supervision School Organisation*. Hyderabad: Neelkamal Publications Pvt. Ltd.
- ❖ Nayak, K.C. (2011). *School Organization and Administration*. New Delhi: Saurabh Publishing House.
- ❖ Savage, Tom V., and Savage, Marsha V. (2010). *Successful Classroom Management and Discipline- Teaching self-control and responsibility*. Washington DC: Sage Publications.
- ❖ Sharma, Madhulika. (2013). *Education Management, Curriculum Development and Teaching Techniques*. New Delhi: Kanishka Publishers.
- ❖ Sidhu, Kulbir Singh. (2005). *School Organisation and Administration*. New Delhi: Sterling Publishers Private Limited.
- ❖ Singh, Amarjit (Ed). (2012). *Classroom Management*. New Delhi: Kanishka Publishers.

SEMESTER - IV**CPS 2d – Part IV - PEDAGOGY OF MATHEMATICS****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical - 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- implement the knowledge of the learner controlled instruction, collaborative and co-operative learning effectively for better curriculum transaction;
- sensitize themselves with the School Curriculum;
- links the relationship of mathematics with other subjects.

Unit I: Teacher Controlled Instruction, Learner Controlled Instruction, Group Controlled Instruction

Teacher Controlled Instruction (TCI): Meaning and nature, various methods (lecture, team-teaching, demonstration, teacher based activities), strengths and weaknesses of each method, process / procedure for organizing effective lecture and demonstration, assessment of lecture and demonstration, role of teacher's in TCI. Learner Controlled Instruction (LCI): Meaning and nature, self-learning, methods of self-learning (self-instructional print material, Keller's Plan, Programmed Instruction and Computer Assisted Instruction), organization and assessment of LCI, teacher's role in LCI. Group Controlled Instruction (GCI): Meaning and nature, various methods (small group interaction, co-operative learning approach, role play, field trips, tutorial, project work), organization of GCI, problems in organizing GCI.

Unit II: School Mathematics Curriculum

Meaning of curriculum-Principles of curriculum construction in Mathematics-Development of a curriculum in Mathematics-Formulation of Objectives, Selection and Organization of Contents or Topics, Suggesting Appropriate Learning Experiences, Suggesting Suitable Methods and Techniques for Evaluation-Recommendations of Kothari Commission and National Curriculum Framework for bringing improvement in Mathematics.

Unit III: Linkage of mathematics with community life

Rethinking Mathematics-link with everyday life, nature, other subjects and its own branches; Mathematics and other subjects- Mathematics and Astronomy, Astrology- Mathematics and Art- Mathematics and Music, Vedic Mathematics- Basic Operations.

Suggested references:

- ❖ Aggarwal, J.C. (2008). *Teaching of Mathematics*. Uttar Pradesh: Vikas publishing House Pvt Ltd.
- ❖ Bagyanathan, D. (2007). *Teaching of Mathematics*. Chennai: Tamil Nadu Text Book Society.
- ❖ Bhatia, K.K. (2001). *Foundations of Teaching Learning Process*. Ludhiana: Tandon Publication.
- ❖ Bishop, G.D. (1965). *Teaching Mathematics in Secondary School*. London: Collins publication.
- ❖ Bolt, B. (2003). *Mathematical Pandora's box*. New Delhi: Cambridge University press.
- ❖ Boyer, Carl B. (1969). *A History of Mathematics*. New York: Wiley Publications.
- ❖ Butter, C.H. (1965). *The Teaching of Secondary Mathematics*. London: McGraw Hill book company.
- ❖ Driscoll, M. (1999). *Fostering Algebraic Thinking: A Guide for teachers, grades 5-10*. Portsmouth, NH: Heinemann Publications.
- ❖ Ediger, M., & Bhaskara Rao, D.B. (2004). *Teaching Mathematics Successfully*. New Delhi: Discovery Publishing House.
- ❖ Goel, Amit. (2006). *Learn and Teach Mathematics*. Delhi: Authors press.
- ❖ Grouws, D.A. (1992). *Handbook of Research on Mathematics Teaching and Learning*. New York: Macmillan Publishing.
- ❖ Gupta H.N., and Shankaran V. (1984). *Content cum Methodology of Teaching Mathematics*. New Delhi: NCERT.
- ❖ Hoglum, L. (1967). *Mathematics for the Million*. London: Pan Books Limited.
- ❖ Iyengar, K.N. (1964). *Teaching of Mathematics*. New Delhi: A Universal Publication.
- ❖ James, Anice. (2005). *Teaching of Mathematics*. New Delhi: Neelkamal Publication.
- ❖ Joyce, well. (2004). *Models of Teaching*. London: Prentice hall of India.
- ❖ Kapur S.K. (2005). *Learn and Teach Vedic Mathematics*. New Delhi: Lotus Publication.

- ❖ Kulshreshtha, *Teaching of Mathematics*. London: R. Lal and Sons.
- ❖ Kumar Sudhir, *Teaching of Mathematics*. New Delhi: Anmol Publications.
- ❖ Land, F.W. (1966). *New approaches to Mathematics Teaching*. New Delhi: MacMillan and St. Martin's press. .
- ❖ Mangal S.K. (2013). *Teaching of Mathematics*. Ludhiana: Tandon publications.
- ❖ Mangal, S.K., & Mangal, S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal book depot.
- ❖ Muijs, Daniel., & Reynolds, David. (2005). *Effective Teaching: Evidence and Practice*. London: Sage Publication.
- ❖ Nickson, Marilyn. (2000). *Teaching and Learning Mathematics: A Guide to Recent Research and Its Applications*. New York: Continuum Press.
- ❖ Nunes, T., & Bryant, P. ((1997). *Learning and Teaching Mathematics: An International Perspective*. London: Psychology Press.
- ❖ Parthasarathy, N. (1961). *Kanitham Karpithal*. Chennai: The South India Saiva Sidhantha works. .
- ❖ Pratap, N. (2008). *Teaching of Mathematics*. Meerut: R.Lall Books depot.
- ❖ Schwartz, James E. (1994). *Essentials of Classroom Teaching Elementary Mathematics*. London: Allyn and Bacon Publication.
- ❖ Sharan, R., & Sharma, M. (2006). *Teaching of Mathematics*, New Delhi: APH Publishing Corporation.
- ❖ Sharma, R.A. (2008). *Technological Foundations of Education*. Meerut: R.Lall Books Depot.
- ❖ Siddizui, M.H. (2005). *Teaching of Mathematics*. New Delhi: APH Publishing Corporation.
- ❖ Sidhu, K.S. (2006). *Teaching of Mathematics*. New Delhi: Sterling Publishers private limited.
- ❖ Singh, M. (2006). *Modern Teaching of Mathematics*. New Delhi: Anmol Publications Pvt. Ltd.
- ❖ வாசன் . (2002). கணக்கு கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்.
- ❖ நடராஜன், வி. (2013). கணிதம் கற்பிக்கும் முறைகள். 1 & 2. சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ நடராஜன், வி. (2006). கணிதப் பாடப்பொருள் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்

- ❖ தமயந்தி பாக்கியநாதன், என். (2009). கணிதம் கற்பித்தல். சென்னை: சாரதா பதிப்பகம்
- ❖ தமயந்தி பாக்கியநாதன், என். (1978). கணிதம் கற்பித்தல். தமிழ் நாடு அரசு வெளியீடு – பகத் பிரிண்டர்
- ❖ செந்தில் குமார், சு. (2010). கணிதம் கற்பிக்கும் முறைகள். தாள்-1. நாமக்கமல்: சம்யுக்தா பதிப்பகம்.
- ❖ பாலகிருஷ்ணன் R. & சரிதா M. (2010). கணிதம் கற்பிக்கும் முறைகள். தாள்-1. சென்னை: ஸ்ரீகோமதி பப்ளிஷர்ஸ்.
- ❖ நல்லாமூர் கோவி. பழனி. (2008): அறிவியல் கணித மேதைகள். சென்னை: வனிதா பதிப்பகம்
- ❖ நல்லாமூர் கோவி. பழனி. (2006): காகித மடிப்புகளில் கணிதம். சென்னை: வனிதா பதிப்பகம்.

SEMESTER - IV**CPS 2 d – Part IV - PEDAGOGY OF PHYSICAL SCIENCE****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical - 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course, the student teachers will be able to:**

- implement the knowledge of the Learner Controlled Instruction, Collaborative and Co-operative learning effectively for better curriculum transaction;
- recall the curricular development in Physical Science;
- execute the linkage of Physical Science with community life.

Unit I: Learner Controlled Instruction, Collaborative and Co-operative Learning

Learner Controlled Instruction: Introduction, need and origin, meaning, nature and definition, steps involved, advantages and limitations. Collaborative Learning: Introduction, meaning and definition, procedure involved, computer supported collaborative learning, team based learning, group problem solving, advantages and limitations. Co-operative Learning: Introduction, definition, basic assumptions and features, procedure involved, Academic benefits, Psychological benefits, Social benefits, obstacles involved in co-operative learning.

Unit II: Curricular Development in Physical Science

Curriculum: Meaning and Definition- Principles of curriculum construction- Criteria for selection of content- Curriculum improvement projects in India- Curriculum improvement projects abroad- CHEM Study, PSSC, CBA.

Unit III: Linkage of Physical Science with Community Life

Linkage of School with Community- Organization of Seminars, symposiums and workshops in Science utilizing the resources of the community (Human and Material)- Field trips to places of Science interest: Planetarium, Museum, Space Centers, Industries- Organization of Science Fairs- Improvised Apparatus.

Suggested references:

- ❖ Anderson, R.D et. al.(1992). *Issues of Curriculum Reform in Science, Mathematics and Higher Order Thinking- Across the Disciplines- The Curriculum Reform Project*. U.S.A.: University of Colorado.
- ❖ Carin., & Sund.R. (1989). *Teaching Modern Science*. U.S.A : Merill Publishing Co.
- ❖ Chauhan, S.S. (1985). *Innovation in Teaching and Learning Process*. New Delhi: Vikas Publishing House.
- ❖ Falvery, P., Holbrook, J.,& Conian, D. (1994). *Assessing Students*. Hongkong: Longman Publications.
- ❖ Gupta,S.K.(1985). *Training of Physical Science in Secondary Schools*. New Delhi: Sterling Publication (Pvt) Limited.
- ❖ Harms, N., & Yager, R. (1981). *What Research Says to the Science Teacher? Vol. 3*, U.S.A: National Science Teachers Association.
- ❖ Heiss, Oboum., & Hoffman.(1961).*Modern Science Teaching*. New York: Macmillan & Co, Limited.
- ❖ Husen, T., & Keeves, J.P., (Ed.). (1991). *Issues in Science Education*. London: Pergamon Press.
- ❖ Jenkins, E.W. (2000). *Innovations in Science and Technology Education. Vol. VII*, Paris: UNESCO.
- ❖ Joseph. (1966). *The Teaching of Science*. London: Harvard University Press.
- ❖ Khana, S.D., Sexena, V.R. Lamba, T.P., & Murthy, V. (1976). *Technology of Teaching*. Doaba Publishing House.
- ❖ Mangal S.K., & Uma Mangal. (1999). *Essentials of Educational Technology*. New Delhi: PHI Learning (P) Ltd.
- ❖ Natrajan,C. (Ed.). (1997). *Activity Based Foundation Course on Science Technology and Society*. Mumbai: Homi Bhaba Centre for Science Education.
- ❖ Nayak. (2003). *Teaching of Physics*. New Delhi: APH Publications.
- ❖ Owen, C.B. (1966). *Method of Science Mastery*. English Language Society and Macmillan Company Limited.
- ❖ Pandey. (2003). *Major Issues in Science Teaching*. New Delhi: Sumit Publications.
- ❖ Paneerselvam, A., & Rajendiran,K. (2005). *Teaching of Physical Science*. Chennai: Shantha Publication.
- ❖ PanneerSelvam, A. (1976). *Teaching of Physical Science (Tamil)*. Chennai: Government of Tamil Nadu.

- ❖ Popham, W.J. (2010). *Classroom Assessment: What teachers need to know (6th ed.)*. New York: Prentice Hall.
- ❖ Radha Mohan. (2007). *Innovative Science Teaching for Physical Science Teachers*. New Delhi: Prentice Hall of India Private Limited.
- ❖ Rao, C.S.(1968). *Science Teachers Handbook*. American Peace Crops.
- ❖ Sampath,K.(1981). *Introduction to Education Technology*. Sterling Publishers.
- ❖ Sharma, P.C. (2006). *Modern Science Teaching*. New Delhi: Dhanpat Rai Publications,
- ❖ Sharma, R.C. (2009). *Modern Science Teaching*. Meerut: Dhanpat Rai and Sons.
- ❖ Siddiqui & Siddiqui. (1985). *Teaching of Science Today and Tomorrow*. New Delhi: Doals House.
- ❖ Sonika Rajan. (2012). *Methodology of Teaching Science*. New Delhi: Dorling Kindersley (India) Pvt.Ltd.
- ❖ Thurber,W.A., & Collette,A.T.(1964). *Teaching Science in Today's Secondary School*. New Delhi: Prentice Hall of India Private Limited.
- ❖ Williams, B., (1999). *Internet for Teachers*. London: John Wiley & Sons.
- ❖ Yadav, M.S. (2003). *Teaching of Science*. New Delhi: Anmol Publications.
- ❖ பன்னீர் செல்வம், அ. (2009), இயற்பியல் வேதியியல் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிஷர்ஸ்
- ❖ உமா பாஸ்கரன், T. (2009). பொருளறிவியல் கற்பித்தல் முறைகள் -I. சென்னை : சாரதா பதிப்பகம்.
- ❖ ராதா மோகன். (2010 பொருளறிவியல் கற்பித்தல் முறைகள். புது டெல்லி: நீல்கமல்
- ❖ செந்தில் குமார், சு. (2010). பொருளறிவியல் தாள்-I: நாமக்கல் : சமயுக்தா பதிப்பகம்.

SEMESTER - IV**CPS 2d– Part IV - PEDAGOGY OF BIOLOGICAL SCIENCE****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical - 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- implement the knowledge of the learner controlled instruction, collaborative and co-operative learning effectively for better curriculum transaction;
- acquire knowledge about the curricular development in effective teaching of Biological Science;
- appreciate the linkage of Biological Science with community life.

Unit I: Learner Controlled Instruction, Collaborative Learning and Co-operative Learning

Introduction-LCI - Origin and need, Definition, Steps involved, Advantages and Limitations; collaborative learning: definition, need, procedure merits and limitations, team based learning, group problem solving, problem based solving co-operative learning: introduction, definition, steps in co-operative learning, obstacles in introducing cooperative learning, resistance from students, teachers, authoritarians' and parents.

Unit II: Curricular development in Biological Science

Introduction -Curriculum in Science in particular Biology-Principles of planning curriculum-process and construction of curriculum-Trends in curriculum. NCERT Curriculum-BSCS & Nuffield secondary Science projects.

Unit III: Linkage of Biological Science with Community Life

Introduction –Utilization of community resource-Importance of museum, ,Library, Reference books , magazines related to Science; Disease and medicines , Health and Hygiene, Real and Real Objects, Graphs and Charts, Radio and Audio tapes and Video tapes and News papers.

Suggested references:

- ❖ Aggarwal .D.D. (2008). *Modern Method of Teaching Biology*. New Delhi: Karanpaper backs.
- ❖ Arulselvi,E. (2007). *Teaching of Science*. Chennai: Saradha Publication.
- ❖ Bhandala, Chadha., & Khanna. (1985). *Teaching Of Science*. New Delhi: Prakash Brothers Educational Publishers.
- ❖ Bhatnagar,A.D. (2004). *Teaching of Science*. Meerut: Surya Publications.
- ❖ Buffaloe, Neal., & Throneberry, J. B. (1972). *Principles of Biology teaching*. New Delhi: Prentice – Hall of India Limited.
- ❖ Frost Jenny., & Turner Tony. (2005). *Learning to teach Science in Secondary school*. New York: Routledge Palmer Publication.
- ❖ Garrett. (1979). *Statistics in Psychology and Education*. Bombay: Vakils, Feffer and Simons Ltd.
- ❖ Green, T. L. (1965). *The teaching of biology in tropical secondary schools*. London: Oxford University Press.
- ❖ Harms, N., & Yager, R. (1981). *What research says to the science teacher* (Vol. 3). Washington: National Science Teachers Association.
- ❖ Heiss. E. D., Obown, S., & Hoftman, C. W. (1961). *Modern science teaching*. New Delhi: Macmillian Company Press.
- ❖ Khana, S.D,et al. (1976). *Technology of science teaching*. New Delhi: Doaba House.
- ❖ Natrajan, C. (1997). *Activity based foundation course on science technology and society*. Mumbai: Homi Bhaba Centre for Science Education.
- ❖ Korde., & Sawant.(1980). *Science and Scientific Method*. New Delhi: Himalaya Publishing House.
- ❖ Passi, B. K. (1976). *Becoming a Better Teacher: Micro teaching approach*. Ahemedabad: Sahitya Mudranalaya.
- ❖ Prasad Janardhan. (1999). *Practical aspects in Teaching of Science*. New Delhi: Kanishka Publication.
- ❖ Saunders, H. N. (1967). *The teaching of general science in tropical secondary school*. London: Oxford University Press.
- ❖ Sharma, Jagdish. (2006). *Models of Teaching Science*. Jaipur: Raj Publishing House.
- ❖ Veena Rani Pandey. (2004). *Major Issues in Science Teaching*. Summit Enterprises.

- ❖ வேணுகோபால்.கோ, நாகராஜன் கி. (2012). உழீளீயல் கற்றித்தல். சென்னை
- ❖ ரா உமா பாஸ்கரன். (2007). உளவியல் கற்பித்தல். சென்னை: சாரதா பதிப்பகம்.
- ❖ கே.ஆர்.திருவேங்கடசாமி. (2007). உயிர் வாழ்வதும் உளவி வேதியலும். சென்னை: கௌரா ஏஜென்ஸி.
- ❖ கே. ராஜம்மாள் .(2005). உளவியல் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பதிப்பகம்.
- ❖ மா. மலர்விழி, மா. ஊமாமகேஸ்வரி. (2008).உளவியல் கற்பித்தல். மதுரை: மாபிலா பப்ளிஸர்ஸ்.

SEMESTER – IV**CPS 2d – Part IV – PEDAGOGY OF ELEMENTS OF ECONOMICS****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical – 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- implement the knowledge of the learner controlled instruction, collaborative and co-operative learning effectively for better curriculum transaction;
- determine and appreciate curriculum development in economics;
- competently link economic concepts to community life.

Unit I: Learner Controlled Instruction LCI, Collaborative learning and co-operative learning: (LCI)

Need and Origin- meaning, nature and definition- Procedure or steps in LCI- advantages- Limitations. Collaborative learning economics - meaning – small group approach – buzz group technique- brain storming method- Reciprocal teaching. Co-operative learning definition –basic assumptions and features- obstacles in introducing co-operative learning: obstacle from teachers, students and parents view -merits and demerits.

Unit II: Curriculum development in Economics

Meaning- Principles in curriculum construction- methods of organizing content material – latest trends in curriculum construction in developed countries and developing countries. Curriculum concerned to Higher Secondary school syllabus. Evaluation of curriculum: formative and summative evaluation in curriculum.

Unit III: Linkage of Economics with community life

Meaning- Constructivism Principles- Resources beyond class room walls- Field trips –real youth entrepreneurship- Stock market game- Banks- types of lending- lifelong learning:

Meaning – definition- dimensions of lifelong learning- Participation in budgeting- Cost benefit analysis of any economic activity – Organizing economic importance day- Earth day- World tourism day-International volunteer day- Contribution of recent Nobel laureates in field of Economics.

Suggested references:

- ❖ Agarwal J. C. (2006). *Essential of Educational Technology: Teaching and learning*. New Delhi: Vikas Publishing House Pvt. Ltd.
- ❖ Alka Kalra. *Efficient School Management and Role of Principles*. New Delhi: A.P.H.Publishing Corporation.
- ❖ Anitha Yadav. (2003). *Teaching of Economics*. New Delhi: Anmol publication.
- ❖ Balaguruswamy, E., & Sharma, K.D. (1982). *Computer in Education and Training*. New Delhi: NIIT.
- ❖ Bloom, Benjamin. (1974) *Taxonomy of educational objectives, cognitive domain*. Longman Green.
- ❖ Chakraborty, A. K. (2004). *Principle & practice of education*. Meerut: R.Lall Books Depot. NIEPA.
- ❖ Chauhan, S.S. (2008). *Innovations in teaching learning process*. New Delhi: Vikas publishing House Pvt. Ltd.
- ❖ Dhand, H. (2009). *Techniques of Teaching*. New Delhi: APH Publishing Corporation.
- ❖ Edgar Dale. *Audio-Visual Methods in Teaching*. Newyork: Thy Dryden Press.
- ❖ Finch, R Curtes., & Crunkitton, R John.(1984). *Curriculum Development in Vocational and Technical, Education, Planning content, and Implementation*.
- ❖ Foshay, A.W. (1980). *Considered action for curriculum improvement: Association for Supervision and curriculum development yearbook*. Alexandria: ASCO.
- ❖ Garrett, H.E. (1979). *Statistics in Psychology and Education*. Bombay: Vakils Feffer and Simons Ltd.
- ❖ Karthick, G. S. (2004). *Teaching of Economics*. New Delhi: Discovery publication house.
- ❖ Krishnamachariyar. *School Management and System of Education*. New Delhi: Neelkamal Publishers.
- ❖ Kumar, J. J. (2001). *Encyclopedia of teaching of economics (Voll-3)*. New Delhi: Anmol Publishers.

- ❖ Mangal, S.K., & Mangal, S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal Book depot.
- ❖ Pathak, R.P. and Jagdeesh Chaudhary. (2012). *Educational Technology*, New Delhi: Anmol Publishers.
- ❖ Rudramamba, B. (2004). *Methods of teaching economics*. New Delhi: Discovery
- ❖ Sampath,K.(1981). *Introduction to Education Technology*. Sterling Publishers
- ❖ Sharma, R.A.(2008). *Technological Foundation of Education*. Meerut: R. Lall Book Depot.
- ❖ Singh, Y.K. (2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ செந்தில் குமார், சு. (2010). பொருளியல் கற்பித்தல். தாள்- I. நாமக்கல்.
- ❖ பொன் மருதவாணன். (2009). பொருளியல் கற்பிக்கும் முறைகள். சென்னை:சாரதா பதிப்பகம்.
- ❖ பொன் மருதவாணன். (2006). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாரதா பதிப்பகம்.
- ❖ ஸ்ரீபாலாஜி லோகநாதன். (2009). பொருளியல் கற்பிக்கும் முறைகள், தாள்-I. சென்னை: G.V. பப்ளிகேஷன்ஸ்.
- ❖ நடராஜன்,வி. (2006). பொருளியல் கற்பிக்கும் முறைகள். சென்னை: சாந்தா பப்ளிகேஷன்ஸ்.

SEMESTER - IV**CPS 2d – Part IV - PEDAGOGY OF COMPUTER SCIENCE****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical - 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- implement the knowledge of the learner controlled instruction, collaborative and co-operative learning effectively for better curriculum transaction;
- acquire knowledge on the curricular development in Computer Science;
- gain insight into systems approach.

Unit I: Learner Controlled Instruction LCI, Collaborative learning and co-operative learning: (LCI)

Need and Origin- meaning, nature and definition- Procedure or steps in LCI- advantages- Limitations. Collaborative learning in Computer Science : meaning – small group approach – buzz group technique- brain storming method- Reciprocal teaching. Co-operative learning definition –basic assumptions and features- obstacles in introducing co-operative learning: obstacle from teachers, students and parents view -merits and demerits.

Unit II: Curricular development in Computer Science

Meaning of the term curriculum – Distinguishing curriculum from syllabus – principles of curriculum in computer science – Development of Computer Science curriculum – principles or approaches to the organization of Computer Science curriculum: Correlated Approach, Integrated Approach, Topical Approach, Concentric or Spiral Approach, Chronological and Sequential Approach – Evaluation of the existing Computer Science curriculum at the secondary stage.

Unit III: Systems Approach

Systems: Types of systems- Systems Approach- Steps involved in Systems Approach- Systems Approach to Education- Instructional Systems- Systems Approach to Instructional System.

Suggested references:

- ❖ இரத்தின சபாபதி. பி இரெங் பத்மா மொகன். (2008). வினாக்களில் விரிகல்கள். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ இரத்தின சபாபதி. பி. (2008) கல்வியில் தொ்வஜ. டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ Agarwal J. C. (2006). *Essential of Educational Technology: Teaching and learning*. New Delhi: Vikas Publishing House Pvt. Ltd.
- ❖ Alexis, M. L. (2001). *Computer for every one*. New Delhi: Vikas Publishing house Ltd.
- ❖ Allison, L. J., and Chris, P. (2007). *Preparing for blended e-learning*. UK: Routledge.
- ❖ Bennett, S., Marsh, D., & Killen, C., (2008). *Handbook of online education continuum*. New York: International Publishing group.
- ❖ Chauhan, S. S. (1985). *Innovations in teaching learning process*. New Delhi: Vikas Publishing house Ltd.
- ❖ கணபதி வி. இரத்தின சபாபதி. பி (2008) நுண்நிலை கற்பித்தல். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ பா!கரன். ப. சூ. பத்மப்ரியா. (2007) கலைத்திட்ட வளர்ச்சி . டிசன்னை: சாரதா பதிப்பகம்
- ❖ Goel, H. K. (2005). *Teaching of Computer Science*. New Delhi: R.Lall Book Depot.
- ❖ Krishnamurthy, R. C. (2003). *Educational technology: Expanding our vision*. Delhi: Authors Press.
- ❖ Harley, H. (2007). *The internet: Complete reference*. New Delhi: Tata McGraw Hill Pub.co., Ltd.
- ❖ John, W. (2007). *Learning and teaching using ICT*. New Delhi: Learning Matters Ltd.
- ❖ Joyce, Well., (2004). *Models of teaching*. U.K: Prentice hall of India.
- ❖ Kochhar, S. K. (1992). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Pvt Ltd.
- ❖ Kumar, K. L. (1997). *Educational technology*. New Delhi: Angel International (P) Ltd.

- ❖ Mohanty, L. (2006). *ICT strategies for schools*. New Delhi: Sage Publication.
- ❖ Norton, P. (1998). *Introduction to computers*. New Delhi: Tata McGraw Hill Publishing Co Ltd.
- ❖ Oosterhof, A. C. (1990). *Classroom applications of educational measurement*. Ohio: Merrill Publishing.
- ❖ Sambath, K., Paneerselvam, A., & Santhanam, S. (2006). *Introduction of educational technology*. New Delhi: Sterling Publishers Private Limited.
- ❖ Sharma, R. A. (2008). *Technological foundation of education*. Meerut: R.Lall Books Depot
- ❖ Sharma, R. C. (1998). *Modern science teaching*. New Delhi: Dhanpat Raj and Sons.
- ❖ Sharma, R. N. (2008). *Principles and Techniques of Education*. Delhi: Surjeet Publications.
- ❖ Sidhu, K. S. (2006). *Teaching of Mathematics*. New Delhi: Sterling Publishers Private Ltd.
- ❖ Singh, Y. K. (2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ Srinivasan, T. M. (2002). *Use of computers and multimedia in education*. Jaipur: Aavisakar Publication.
- ❖ Stephen, M. A., & Stanely, R. (1985). *Computer based instruction: Methods and development*. New Jersey: Prentice Hall.
- ❖ Stone, E. (1996). *How to use Microsoft access*. California: Emergyville.
- ❖ விக்யலட்சுமி. வ (2007).: நுண்ணிலை கற்பித்தல்.: டிசன்னை: சாரதா பதிப்பகம்.
- ❖ விக்யலட்சுமி.: (2008).: கற்பித்தலில் சிக்கல்கள்-தீர்வுகள். டிசன்னை: சாந்தா பதிப்பகம்.
- ❖ Vanaja, M. (2006). *Educational technology*. Hyderabad: Neelkamal Publications Pvt. Ltd.

SEMESTER - IV**CPS 2 d – Part IV - PEDAGOGY OF HISTORY****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical - 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- implement the knowledge of the learner controlled instruction, collaborative and co-operative learning effectively for better curriculum transaction;
- sensitise themselves with the school curriculum;
- link the relationship of history with other curriculum.

Unit I: Learner Controlled Instruction LCI, Collaborative learning and co-operative learning: (LCI)

Need and Origin- meaning, nature and definition- Procedure or steps in LCI- advantages- Limitations. Collaborative learning economics - meaning – small group approach – buzz group technique- brain storming method- Reciprocal teaching. Co-operative learning definition –basic assumptions and features- obstacles in introducing co-operative learning: obstacle from teachers, students and parents view -merits and demerits.

Unit II: Curricular development in History

Curriculum- Meaning and definition – principles of curriculum construction – Criteria for selection of content, Curriculum improvement projects in India – curriculum improvement projects abroad – Education policies, SEC (Secondary Education Curriculum) Research Projects, Articles, abstracts, Latest issues – Contemporary perceptions of Education.

Unit III: Linkage of History with community life

Linkage of school with community – organization of seminars, symposiums and workshop in history. Utilizing the resources of the community, Field trips to historical places, Planetarium, museum, space centers, monuments, temples, Industries.

Suggested references:

- ❖ Aggarwal, J.C.(1996). *Teaching of history. A practical approach*. New Delhi: Vikas Publishing House Pvt Ltd.
- ❖ Aggarwal, J.C.(2008). *Principles, method and Techniques of teaching*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Baskaran., & V.Padmapriya.(2007). *Kalaithitta valarachi*. Chennai: Saratha Publishers.
- ❖ Bloom, Benjamin. (1974).*Taxonomy of educational objectives, cognitive domain*. Longman Green.
- ❖ Chauhan, S.S.(2008). *Innovations in teaching learning process*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Durplass, J.A.(2009). *Teaching elementary social studies*. New Delhi: Atlantic Publishers.
- ❖ Geoff, T.(2008). *Teaching and learning history*. New Delhi: SAGE Publications.
- ❖ Kanammall, Raa. (2007). *Varallatru Karpithal*. Chennai: Saradha Publishers.
- ❖ Kochhar, S.K. (2003). *Teaching of history*. New Delhi: Sterling Publishing pvt.Ltd.
- ❖ Mangal S.K., & Uma Mangal. (2011). *Teaching of social science*. New Delhi: PHI learning Private Limited.
- ❖ Mangal, S.K. & Mangal, S.(2005). *Essentials of Education Technology and Management*. Meerut: Loyal Book depot.
- ❖ Nagarajan.K. (2008). *Curriculum and development*. Ram Publishers.
- ❖ NCERT.(1970). *Teaching history in secondary school: A handbook for history teacher*. New Delhi: NCERT Publication.
- ❖ Rathina sabapathy, P. (2008). *Nunnailai Karppithal*. Chennai: Santha Pathipagam.
- ❖ Siddiqui,M.H.(2009). *Techniques of classroom teaching*. New Delhi: APH Publishing Corporation.
- ❖ Singh Y.K.(2009).*Teaching of History: Modern methods*. New Delhi: APH Publishing Corporation.
- ❖ Singh Y.K.(2009).*Teaching practice*. New Delhi: APH Publishing Corporation.
- ❖ Thirugnana sampantham.(2007). *Varallatru Karpithal muraika*. Chennai: Saradha pathipagam.

- ❖ டாக்டர் : ஸ்ரீபாலாஜி லோகநாதன் (2009) : வரலாறு கற்பிக்கும் முறைகள் : தாள் - ஐ. பு.ஏ. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ செந்தில் குமார், சு. (2010). வரலாறு கற்பிக்கும் முறைகள். தாள்- ஐஐஐ சேலம் ரோடு, நாமக்கல்.
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): வரலாறு கற்பிக்கும் முறைகள். தாள்- ஐஐஐ பு.ஏ. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ பேராசிரியர் என். செல்லம் (1992) : வரலாறு கற்பிக்கும் முறைகள். சாந்தா பப்ளிஷர்ஸ், சென்னை.
- ❖ கண்ணம்மாள் (2009), வரலாறு கற்பித்தல் : சாரதா பதிப்பகம், இராயப்பேட்டை, சென்னை
- ❖ திருஞானசம்பந்தம் (2005): வரலாறு கற்பித்தல் முறைகள், சாந்தா பப்ளிஷர்ஸ், சென்னை.
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): சமூக அறிவியல் கற்பிக்கும் முறைகள், தாள்-ஐஐஐ பு.ஏ. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ வசந்தி சு. (2007). கற்பித்தல் புதிய அணுகு முறை, வனிதா பதிப்பகம், சென்னை.

SEMESTER - IV**CPS 2 d – Part IV - PEDAGOGY OF GEOGRAPHY****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical - 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- implement the knowledge of the learner controlled instruction, collaborative and co-operative learning effectively for better curriculum transaction;
- sensitise themselves with the school curriculum;
- link the relationship of Geography with other curriculum.

Unit I: Learner Controlled Instruction LCI, Collaborative learning and co-operative learning: (LCI)

Need and Origin- meaning, nature and definition- Procedure or steps in LCI- advantages- Limitations. Collaborative learning economics - meaning – small group approach – buzz group technique- brain storming method- Reciprocal teaching. Co-operative learning definition –basic assumptions and features- obstacles in introducing co-operative learning: obstacle from teachers, students and parents view -merits and demerits.

Unit II: Curricular development in Geography

Curriculum- Meaning and definition – principles of curriculum construction – Criteria for selection of content, Curriculum improvement projects in India – curriculum improvement projects abroad – Education policies, SEC (Secondary Education Curriculum) Research Projects, Articles, abstracts, Latest issues – Contemporary perceptions of Education.

Unit III: Linkage of Geography with community life

Linkage of school with community – organization of seminars, symposiums and workshop in Geography. Utilizing the resources of the community, Field trips to historical places, Planetarium, museum, space centres, monuments, temples, Industries.

Suggested references:

- ❖ Aggarwal. (2008). *Principles, method and Techniques of teaching*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Aggarwal. (2008). *Teaching of social studies: A practical approach* (4th ed). Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Aurora, M.L.(1979). *Teaching of Geography*. Ludhiana: Prakash Brother.
- ❖ Chauhan, S.S.(2008). *Innovation in teaching learning process*. Uttar Pradesh: Vikas Publishing House Pvt Ltd.
- ❖ Chorley P.J.(ed).(1973). *Direction in Geography*. London: Mothuen & Co.
- ❖ Durplass, J.A. (2009). *Teaching elementary social studies*. New Delhi: Atlantic Publishers.
- ❖ Garnett Ohio. (1965). *Fundamental in school Geography*. London: Harrap and Co.
- ❖ Gill D.S. *Educational Administration and Organization Management*. New Delhi: Saurabh Publishing House.
- ❖ Gospil, G.H.(1965). *The Teaching of Geography*. London: Macmillan and Co.
- ❖ Graves, N.J.(1971). *Geography in secondary Education*. London: Geography Association.
- ❖ Haggett, P.(1972). *Geography: A Modern synthesis*. New York: Harper and Row.
- ❖ Hall, D. (1976). *Geography and the Geography Teachers*. London: George Allen & Unwin Ltd.
- ❖ Indian National Committee for Geography. (1968). *Indian Regional Studies*. Calcutta: IGU Publication.
- ❖ Kanammall, Raa.(2007). *Puviyiyal Karpithal*. Chennai: Saradha Publishers.
- ❖ Malid Husain. (2010). *Evolution of Geographical Thought*. Jaipur: Rawat Publication.
- ❖ Mangal S.K., & Uma Mangal. (2011). *Teaching of social studies*. New Delhi: PHI learning Private Limited.
- ❖ Rao M.S.(1999). *Teaching of Geography*. New Delhi: Anmol Publication Pvt. Ltd.
- ❖ Robinson, Aruthur H.(1960). *Elements of Cartography*. New York: John wiley and Sons, Inc.
- ❖ Selvam.N.(2004). *Puviyiyal Karpithal Muraigal*. Chennai: Santha Publication.
- ❖ Sharma, R.A.(2008). *Technological Foundation of Education*. Meerut: R. Lall Books Depot.

- ❖ Siddiqui, M.H.(2009). *Teaching of Geography*. New Delhi: APH Publishing Corporation.
- ❖ Siddiqui, M.H.(2009). *Techniques of Classroom Teaching*. New Delhi: APH Publishing Corporation.
- ❖ Singh, Y.K.(2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.
- ❖ வாசன் (1992) – புவியியல் கற்பிக்கும் முறைகள் : சாந்தா பப்ளிஷர்ஸ், சென்னை
- ❖ சீனிவாசன். த. (2010): வரலாறு கற்பித்தல் தாள்- I, சமயுக்தா பதிப்பகம், சேலம் ரோடு, நாமக்கல்.
- ❖ கண்ணம்மாள் (2009), புவியியல் கற்பித்தல்: சாரதா பதிப்பகம், இராயப்பேட்டை, சென்னை
- ❖ ஸ்ரீபாலாஜி லோகநாதன் (2009): சமூக அறிவியல் கற்பிக்கும் முறைகள், தாள்-I, G.V. பப்ளிகேஷன்ஸ், சென்னை.
- ❖ வசந்தி சு. (2007). கற்பித்தல் புதிய அணுகு முறை, வனிதா பதிப்பகம், சென்னை.

**SEMESTER - IV CPS 2 d – Part IV - PEDAGOGY OF COMMERCE AND
ACCOUNTANCY**

Credits: 2

Internal: 20 marks

Hours/Week: Theory-2hrs Practical - 3hrs

External: 30 marks

Total: 50 marks

Objectives

At the end of the course the student teachers will be able to:

- implement the knowledge of the Learner Controlled Instruction (LCI) and co-operative learning effectively for better curriculum transaction;
- familiarize with the principles of developing commerce and accountancy curriculum;
- familiarize with the different types of community resources and its utilization of community resources.

Unit I: Learner Controlled Instruction (LCI) and Co-operative learning

Need and Origin- meaning, nature and definition- Procedure or steps in LCI- advantages- Limitations - Co-operative learning definition –basic assumptions and features- obstacles in introducing co-operative learning: obstacle from teachers, students and parents view -merits and demerits.

UNIT II: Curriculum development in Commerce and Accountancy

Introduction – Meaning & Definition of Curriculum - The concept of Commerce & Accountancy Curriculum – Curriculum and Syllabus – Curriculum and Education – Principles of curriculum development – Criteria of selection of content and principles of organizing the selected content : Psychological Vs. Logical – Topical Vs. Spiral - Functions served by a Curriculum – Foundations of Curriculum Development – Types of Curriculum – Principles of Developing Curriculum – Different approaches of Curriculum Construction.

Unit III: Linkage of Commerce with community life

Introduction – Types of Community Resources: Places of Civic Interest, Cultural Interest, Commercial and Economic Interest, Geographical Interest, Historical Interest, Scientific Interest, Government Buildings and Forms of social control – Methods of utilizing Community Resources: (A) Taking the school to the community (B) Bringing the community to the school – Establishing link between school and community – Field Trips, Education at Tours, Market Studies and Surveys.

Suggested references:

- ❖ Aggarwal, J.C. (2006). *Essentials of Educational Technology Teaching and Learning*. New Delhi: Vikas Publishing House.
- ❖ Allen, O.C., & Francis P.H. (1988). *Curriculum: Foundations, principles and issues*. New Jersey: Prentice Hall.
- ❖ Bining A.C., & Bining D.A. (1962). *Teaching of Social Studies in Secondary Schools*. New York: Mc Graw Hill.
- ❖ Boynton, L.O. (1995). *Methods of Teaching Book-Keeping*. Cincinnati: South Western Publication Company.
- ❖ Chauhan, S.S. (2008). *Innovations in Teaching Learning Process*. Uttar Pradesh: Vikas Publishing House Pvt. Ltd.
- ❖ Douglas, Palnford., & Anderson. (2000). *Teaching Business Subjects*. New York: Prentice Hall.
- ❖ Edward, F.O., Raymond, W.K., & Ronald J.M. (1971). *Programmed Instruction Techniques and Trends*. New York: Century Cropts.
- ❖ Head, G.W. (1988). *Commerce*. London: Heinemann Professional Publishing.
- ❖ Joyce, Well. (2004). *Models of Teaching*. U.K.: Prentice Hall of India.
- ❖ Khan, M.S. (1982). *Commerce Education*. New Delhi: Sterling Publishers Private Limited.
- ❖ Kochhar, S.K. (1992). *Methods and techniques of teaching*. New Delhi: Sterling Publishers Private Limited.
- ❖ Kumar, K.L. (1996). *Educational Technology*. New Delhi: New Age International Publishers.
- ❖ Mangal, S.K., & Mangal, S. (2005). *Essentials of Educational Technology and Management*. Meerut: Loyal Book Depot.

- ❖ Nagarajan, K.L. (1997). *Principles of Commerce and General Commerce Knowledge*. New Delhi: S.Chand & Company Ltd.
- ❖ Pattanshetti, M.M. (1992). *Designing and organizing tutorials in colleges and universities*. Davangere: You Need Publication.
- ❖ Saylor, J.G. William, M.A., & Hollis. (1956). *Curriculum Planning*. New York: Rinehart and Company Inc.
- ❖ Sharma, R.A. (2008). *Technological Foundation of education*. Meerut: R.Lall Books Depot.
- ❖ Sharma, R.N. (2008). *Principles and Techniques of Education*. New Delhi: Surjeet Publications.
- ❖ Singh, Y.K. (2009). *Teaching of Commerce*. New Delhi: APH Publishing Corporation.

SEMESTER - IV**CPS 2 d – Part IV - PEDAGOGY OF HOME SCIENCE****Credits: 2****Internal: 20 marks****Hours/Week: Theory-2hrs Practical - 3hrs****External: 30 marks****Total: 50 marks****Objectives****At the end of the course the student teachers will be able to:**

- recognise the need for the assessment of teacher behaviour;
- acquire knowledge about the curricular development in effective teaching of home science;
- appreciate the linkage of home science with community life.

Unit I: Teaching behaviour of Home Science teachers

Dimension of teaching behaviour- importance of each dimension- qualitative and quantitative assessment of home science teachers teaching behaviour- student, peer, and supervisor – interpretation of observation. Ways of modifying teachers teaching behaviour- Tools for assessment.

Unit II: Curricular development in Home Science

Introduction -Curriculum in science in particular home-Principles of planning curriculum- process and construction of curriculum-Trends in curriculum. NCERT Curriculum.

Unit III: Linkage of Home Science with Community Life

Introduction –Utilization of community resource-Importance of museum, ,Library, Reference books , magazines related to science; Disease and medicines , Health and Hygiene, Real and Real objects, Graphs and Charts, Radio and audio tapes and video tapes and Newspapers.

Suggested references:

- ❖ Bhatia, K.K. (1990). *Measurement and Evaluation in Education*. Ludhiana: Prakash Brothers.
- ❖ Jha, J.K. (2001). *Encyclopaedia of Teaching of Home Science. (Vol. I & II)*, New Delhi: Anmol Publications Private Limited.
- ❖ Kalra, R. M. (2009). *Teaching of Science*. New Delhi: Rakhi Prakashan Publishers.
- ❖ Lakshmi, K. (2006). *Technology of Teaching of Home Science*. New Delhi: Sonali Publishers.
- ❖ Nibedita, D. (2004). *Teaching of Home Science*. New Delhi: Dominant Publishers and Distributers, New Delhi
- ❖ Seshaih, P.R. (2004). *Methods of Teaching Home Science*. Chennai: Manohar Publishers & Distributors.
- ❖ Shah, A. Et al. (1990). *Fundamentals of Teaching Home Science*. New Delhi: Sterling Publishers Private Limited.
- ❖ Shalool, S. (2002). *Modern Methods of Teaching of Home Science*. New Delhi: Sarup & Sons.
- ❖ Sharma, S. (2009). *Modern Methods of Teaching Home Science*. New Delhi: Rakhi Prakashan Publishers & Distributors.
- ❖ Yadav, S. (1997). *Text book of Nutrition and Health*. New Delhi: Anmol Publishers.
- ❖ Yadav, S. (1997). *Teaching of Home Science*. New Delhi: Anmol Publishers.
- ❖ Yadav, V.K. (2009). *Biochemistry & Biotechnology: A Laboratory Manual*. New Delhi: Pointer Publishers.

CROSS DISABILITY AND INCLUSION (B)
SEMESTER – IV
B2 - INCLUSIVE EDUCATION AND ORIENTATION & MOBILITY

Credits: 2

Internal: 20 marks

Hours/Week: Theory-2hrs Practical- 3hrs

External: 30 marks

Total:50marks

Introduction

The course is designed to develop an understanding about inclusive education, addressing diversity in the mainstream classroom. It is also formulated in a way that the learners will know the pedagogical practices and recognizes ways in which different stakeholders can collaborate for the success of inclusive education. Movement with independence in the environment has been stated to be one of the major challenges of vision loss. In order to facilitate their meaningful empowerment, therefore, it is necessary to provide students with visual impairment skills and techniques which enable them to cope with these challenges. It would also enable them to get insights into basic skills and components essential for meaningful orientation and easy and graceful movement for the visually impaired.

Objectives

After completing the course the student-teachers will be able to

- Explain the construct of inclusive education & the progression from segregation towards valuing & appreciating diversity in inclusive education.
- Explicate the national & key international policies & frameworks facilitating inclusive education.
- Enumerate the skills in adapting instructional strategies for teaching in mainstream Classrooms and strategies for collaborative working and stakeholders support in implementing inclusive education.
- Describe the nature and scope of O&M as also the O&M related responsibilities of the special teacher and acquire basic knowledge of human guide techniques.
- Describe pre-cane and cane travel skills and devices and skills of training in independent living for the visually impaired.

Unit 1: Introduction to Inclusive Education

Marginalisation vs. Inclusion: Meaning & Definitions - Changing Practices in Education of Children with Disabilities: Segregation, Integration & Inclusion - Diversity in Classrooms: Learning Styles, Linguistic & Socio-Cultural Multiplicity - Principles of Inclusive Education: Access, Equity, Relevance, Participation & Empowerment - Barriers to Inclusive Education: Attitudinal, Physical & Instructional.

Unit 2: Policies & Frameworks Facilitating Inclusive Education

International Declarations: Universal Declaration of Human Rights (1948), World Declaration for Education for All (1990)- International Conventions: Convention against Discrimination (1960), Convention on Rights of a Child (1989), United Nations Convention of Rights of Persons with Disabilities (UNCRPD) (2006)- International Frameworks: Salamanca Framework (1994), Biwako Millennium Framework of Action (2002)- National Commissions & Policies: Kothari Commission (1964), National Education Policy (1968), National Policy on Education (1986), Revised National Policy of Education (1992), National Curricular Framework (2005), National Policy For Persons With Disabilities (2006) - National Acts & Programs: IEDC (1974), RCI Act (1992), PWD Act (1995), National Trust Act (1999), SSA (2000), RTE (2006), RMSA (2009), IEDSS (2013).

Unit 3: Inclusive Academic Instructions Supports and Collaborations for Inclusive Education

Universal Design for Learning: Multiple Means of Access, Expression, Engagement & Assessment - Co-Teaching Methods: One Teach One Assist, Station-Teaching, Parallel Teaching, Alternate Teaching & Team Teaching - Peer Mediated Instructions: Class Wide Peer Tutoring, Peer Assisted Learning Strategies - ICT for Instructions - Stakeholders of Inclusive Education & Their Responsibilities - Advocacy & Leadership for Inclusion in Education - Family Support & Involvement for Inclusion - Community Involvement for Inclusion - Resource Mobilisation for Inclusive Education.

Unit 3: Introduction to Orientation and Mobility

Orientation and Mobility -- Definition, Importance and Scope - Basic Terminologies Associated with O&M: Trailing, Landmarks, Clues, Cues, Shoreline, Squaring Off, Clockwise Direction, Sound Masking, Sound Shadow - Roles of Other Senses in O&M

Training -Special Responsibilities of Special Teacher/Educator with reference to O&M
 Training - Blindfold -- Rationale and Uses for the Teacher.

Unit 5: Human/ Sighted Guide Technique, Pre-Cane Skills, Cane Travel Techniques & Devices and Training In Independent Living Skills

Grip – Stance - Hand Position - Speed Control - Negotiating: Narrow Spaces, Seating Arrangements, Staircases, Muddy paths - Upper and Lower Body protection - Room Familiarization - Using Oral Description for Orientation - Search Patterns - Building Map Reading Skills. Canes - Types, Parts, Six Considerations and importance - Cane Travel Techniques: Touch Technique, Touch and Drag Technique, Diagonal Cane Technique - Use of Public Transport - Electronic Devices, Tactile and Auditory Maps - Description and Uses - Self Care, Gait and Posture -Personal Grooming - Eating Skills and Etiquette - Identification of Coins and Currency Notes - Basics of Signature Writing

Course Work/Practical/ Field Engagement

Undertake any two of the following

- I. Prepare a Checklist for Accessibility in Mainstream Schools for Children with Disabilities
- II. Prepare a Lesson Plan on any one School subject of your choice using any one Inclusive Academic Instructional Strategy
- III. Prepare a list of canes and other devices available with various sources along with prices & Make a short PowerPoint/ oral presentation for about 5 minutes on the importance of O&M for the visually impaired.
- IV. Draw up a list of important clues/cues/landmarks which the visually impaired student can use in the school & Undergo an experience of moving under a blindfold for a few minutes and describe it (about 200 words).

Suggested Readings

- ❖ Dodds, A. (1986). *Mobility Training for Visually Handicapped People*. Croom Helm, London.
- ❖ Hill, E., & Ponder, P. (1976). *Orientation and Mobility Techniques*. AFB Press, New York.
- ❖ Jacobson, W.H. (1993). *The Art and Science of Teaching Orientation and Mobility to Persons with Visual Impairments*. AFB Press, New York.
- ❖ Singh, J.P. (2003). *Technology for the Blind*. Kanishka Publication. New Delhi.

ENHANCING PROFESSIONAL CAPACITIES (EPC)**SEMESTER – IV****EPC 5 DRAMA AND ART IN EDUCATION****Credits: 2****Internal: 50 marks****Hours/Week: 5 hrs****Objectives:****At the end of this course, the student teacher will be able to:**

- Integrate Art with Education and become better communicator;
- Develop creative thinking through different Art forms;
- Realize that liberal arts help in making better professionals;
- Understand Art as a medium of education;
- Understand the role of Art medium of education;
- Deepen student's ability for perception and reflection;
- Use Art as an alternative language to experience and communicate concepts in teaching-learning.

ACTIVITIES

- Visit to any center of art (museums, art gallery or institutes of performing art like NCPA) and observe pieces of art/play, Group Discussion can be conducted on the observation highlight up the aesthetics in art.
- Write an appreciation essay on the historical movements (sculpture, and agricultures) or any piece of art (music, dance, drama, painting)
- Perform a drama or dance or music of local culture.
- Prepare a project work on any contemporary thinkers like Rabinranath Tagore, Herbert Read, etc and their contribution to art field.
- Prepare a file on different forms of bhāratha natyam mudras, bavas, rasas.
- Do a different variety of craft work on "origami".

Suggested references:

- ❖ John, B., and Chawla, R. (2007). *Playing for real: Using drama in the classroom*. Macmillan Publishers.
- ❖ Jefferson B. (1960). *Teaching Art to children- Continent View Point*. Boston: Allyn Bacon.
- ❖ Rabindranath Tagore *Lectures and Address*, New Delhi: Macmillan Publishers.
- ❖ Coomara Swamy, A.K. (1974). *Christian and Oriental Philosophy of Art*. New Delhi: Munshiram Manoharlal.
- ❖ John Dewey. *Art as Experience*. New York: Macmillan Publishers.
- ❖ Herbert Reed. *Education through Art*. New York: Faber and Faber.
- ❖ Esner Elliot, W. *Educating Artistic Vision*. New York: Macmillan Publishers.
