

Programme Learning Outcomes (BEd)

The programme will enable the student teachers to:

1. Getanin-depth understanding of different perspectives of education, learning and teaching in the context of school and society..
2. Developanunderstandingoftheneedandimportanceofunderstandingthepsycho- social and cultural setting of the learners who bring diversities to the classroom.
3. Understand the intricacies involved in the teaching, learning, assessment and other curricular concerns in school education.
4. Developpedagogicalcompetenciesforeffectiveteachingofschoolsubjectsandadopt ICT and Art mediated instructional approaches and strategies.
5. Getfirsthandwholeschoolexperiencethroughschoolattachmentprogrammesand internship in teaching.
6. Get exposed to the importance of value & peace education, guidance & counseling and action research.



Principal
क्षेत्रीय शिक्षा संस्थान / Regional Institute of Education
(एन सी ई आर टी) / (NCERT)
चेन्नई - 400006 / Mysuru - 570006

Course Learning Outcomes for Information and Communications Technology and Educational Technology
B.Ed – II Semester: Pedagogy of English
B.Ed: CPS#ENG-2: Pedagogy of English

Course Learning Outcomes:

Unit I: Language Processes and the Classroom Context

On completion of the Course, Prospective teachers will be able to:

1. Differentiate the terms – Academic Language and Social Language, Oral Language and Written Language, Formal Language and Informal Language and apply them in their day-to-day life.
2. Actively Participate in Classroom activities
3. Use language confidently and with ease within the classroom context and conversation
4. **Easifies the risk within the process of learning and using LSRW Skills**
5. Promote the aesthetic and emotive aspects of Reading
6. Promote the Composition of Writing with all its elements
7. Teach Prose following appropriate approach, method, technique and strategies
8. Selects appropriate material and strategies and teaches Prose effectively
9. Develops and applies Literary knowledge, Cultural Literacy, Creative and Critical thinking skills in their academic and practical life through teaching and learning of Prose.
10. Differentiates the links between reading and writing of Prose and applies in practical life accordingly.

Unit II: Examining the Language Curriculum

On completion of the Course, Prospective teachers will be able to:

1. Review the syllabus of different languages, different textbooks and Critically analyze them.
2. Differentiate Childrens' literature for different age groups and will teach accordingly.
3. Selects/ appropriate approach, method, techniques, material and teaches poetry effectively.
4. Develops and applies Literary knowledge, Cultural Literacy, Creative and Critical thinking skills in their academic and practical life through teaching and learning of Prose.
5. Differentiates the links between reading and writing of Prose and applies in practical life accordingly.
6. Prepares lesson plans in English based on NCERT textbooks from Class VI to IX and transacts them in simulated conditions in integrating different skills and various approaches.
7. Prepares Observation Schedules for Peer-assessment and Self- assessment.
8. Observes and assess their peer performance during their classroom teaching.

प्राचार्य / Principal
क्षेत्रीय शिक्षा संस्थान / Regional Institute of Education
(एन सी ई आर टी) / (NCERT)
दिसरु - ५७०००६ / Mysuru - 570006

Unit III: Planning for teaching and assessing English Language

On completion of the Course, Prospective teachers will be able to:


1. Teaches a complete lesson using constructivist principles and skills
2. Assess different language skills continuously throughout their process of teaching English
3. Applies different language skills based on their variety of functions
4. Constructs different types of test items for different language skills and components
5. Assess different skills and components of language
6. Reflects on One's own performance in teaching English and Writes a Reflective diary

Unit IV: Challenges in Language Learning

On completion of the Course, Prospective teachers will be able to:

1. Understands different difficulties in language learning and resolves the issues of non-comprehension, independence in language use
2. Resolves the issues that arise due to language 'disability'
3. Promotes the mother tongue and English as medium of instruction as per the recommendations of NCF 2005 and NEP 2020
4. Teach Drama following appropriate approach, method, technique and strategies
5. Develops and applies Literary knowledge, Cultural Literacy, Creative and Critical thinking skills in their academic and practical life through teaching and learning of Drama.
5. Comprehends the nuanced subtleties of a political and social vision of language teaching.

-
1. Comprehend and employ suitable strategies and techniques in Teaching of English
 2. Understand and promote the presence of multilingualism and multicultural voices in teaching and learning of English
 3. Understand and appreciate literature of different types
 4. Actively participate in academic Discussions and Debates with regard to Content and Context
 5. Reflect on One's own performance in teaching English

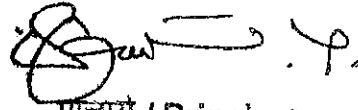

Principal
क्षेत्रीय शिक्षा संस्थान / Regional Institute of Education
(एन सी ई आर टी) / (NCERT)
मैसूरु - ५७०००६ / Mysuru - 570006

CPS#PS-2: PEDAGOGY OF PHYSICAL SCIENCE

Course learning outcomes (CLOs)

On completion of course, the student teacher's will be able to

1. Write the lessons plans and unit plans as per NCF 2005, apply different methods of teaching based on constructive approach.
2. Integrate ICT effectively in teaching physical science.
3. Adopt various assessment strategies for evaluating learning in physical science.
4. Acquire the necessary skills of teaching process.
5. Utilize various types of learning resources in teaching physical science.
6. Understand the professional competencies of physical science teacher



प्राचार्य / Principal

क्षेत्रीय शिक्षा संस्थान / Regional Institute of Education

(एन सी ई आर टी) / (NCERT)

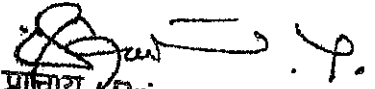
मैसूर - ५७०००६ / Mysuru - 570006

B.Ed.

PC-4: GENDER, SCHOOL AND SOCIETY

On completion of this course the prospective teachers will be able to:

1. Understand the concept of gender and the related terms
2. Analyze the status of women in India from historical time to the present time
3. Appreciate the importance and need for women empowerment
4. Analyze the gender issues and concerns in the education system
5. Analyze the causes of gender inequality
6. Appreciate the governmental measures and initiatives in promoting girl education
7. Understand the constitutional provisions of human rights and women rights
8. Understand the laws with respect to safeguarding the rights of women and girl child
9. Analyze the text books and other instructional materials with respect to gender bias and other related issues of gender.
10. Critically appraise women development programs


प्रधान / Principal
क्षेत्रीय शिक्षा संस्थान / Regional Institute of Education
(एन सी ई आर टी) / (NCERT)
मैसूरु - ५७०००६ / Mysuru - 570006

B.Ed

B.Ed - PC-5: CREATING AN INCLUSIVE SCHOOL

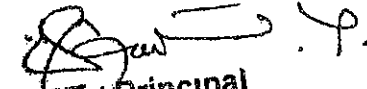
BA.B.Ed - BAE VII. 4: Creating an Inclusive School

BSc.B.Ed- BSE VII.4 :CREATING AN INCLUSIVE SCHOOL

M.Sc.Ed:CREATING AN INCLUSIVE SCHOOL

On completion of the course, prospective teachers will be able to :

1. Analyse the meaning and concept of Special Education, Integration and Inclusion.
2. Appreciate the special needs of Individuals with diverse needs.
3. Realize the importance of inclusive education and inclusive education programmes
4. Examine the role of various agencies towards inclusion.
5. Appreciate the concept of exceptional children.
6. Identify the exceptional learners in a classroom.
7. Explore the nature and needs of different categories of children with special needs.
8. Implement the different considerations and provisions for facilitating inclusion.
9. Exercise various educational intervention programmes for meeting the needs of exceptional learners.
10. Employ the skills of adapting curriculum to meet the need of the students with diverse needs.

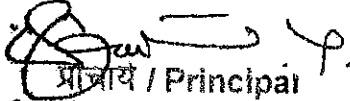

प्रधान / Principal
क्षेत्रीय शिक्षा संस्थान / Regional Institute of Educator
(एन सी ई आर टी) / (NCERT)
मैसूरु - ५७०००६ / Mysuru - 570006

Yoga Education, Self-Understanding and Development

Course Learning Outcome.

On the Completions of the Course, prospective teachers will be able to demonstrate

1. Some Important Asanas and Pranayamas
2. He/She will have a clear Idea about the Concepts like Self-esteem & Self-Concept & its importance.
3. Ability to State the Different types of yoga (Astana Yoga, Hatha Yoga etc.,)
4. The Process of Meditation and Stress management
5. The Process of Personality Development through Yogic Practice.



प्रिन्सिपल / Principal

क्षेत्रीय शिक्षा संस्थान / Regional Institute of Education

(एन सी ई आर टी) / (NCERT)

मैसूर - ५७०००६ / Mysuru - 570006

UNIVERSITY  **OF MYSORE**

**Two-Year (4-Semester)
Bachelor of Education – B.Ed.**

RIE Scheme (CBCS)

Regulations, Syllabi and Scheme of Examination

2017-2018



REGIONAL INSTITUTE OF EDUCATION
(National Council of Educational Research & Training)
Mysore 570 006



REGIONAL INSTITUTE OF EDUCATION
[National Council of Educational Research and Training, New Delhi]

Regulations governing the Programme

1.0 Programme and Duration:

Programme of Teacher Education titled '**Bachelor of Education**' (B.Ed.) degree programme. The programme will be of two year duration organized in the semester pattern with 2 semesters in a year. Each semester will consist of a minimum of 16 weeks of instruction excluding examination.

1.1 Equivalence:

The B.Ed. programme of RIE is in accordance with the norms and regulations of the two-year B.Ed Programme prescribed by the NCTE (2014). On successful completion of the programme, students are eligible for admission to Master Degree Programmes in Education in the University of Mysore and other Indian/Foreign Universities.

2.0 Eligibility for admission to B.Ed.

Candidates seeking admission to the programme should have passed with at least 50% marks in Bachelor's Degree and /or in the Master's Degree in Science/ Bachelor's in Engineering or Technology with specialization in Science or Mathematics or in Bachelor's Degree and /or in the Master's Degree in Social Science/Humanities of universities of Karnataka, Kerala, Andhra Pradesh, Tamil Nadu, Telangana or the UT of Lakshadweep / Pudhucherry are eligible for admission to the programme (relaxation of 5% marks for SC/ ST/ PH candidates).

- i) Candidates opting for the Science/Mathematics stream should have studied two related subjects, i.e., Physics, Mathematics, Statistics, Chemistry, and Botany, Zoology and Micro Biology and Bio technology at the degree level.
- ii) Candidates opting for English and Humanities should have studied English and any one of the following subjects: History, Geography, Economics, Sociology, Political science at the degree level.
- iii) All candidates should have studied English as a subject under language group at the degree level.

2.1 Admission shall be made by selection on the basis of marks in the qualifying examination and performance in a specially designed national level test (Common Entrance Examination)

conducted by the NCERT. It shall be governed by the admission policies of NCERT and the guidelines of the University of Mysore.

Admission will be in accordance with administrative policies related to proportionate representation (based on the latest available census report) to different States in the region. It will also be governed by the reservation policies of Govt. of India as prevalent at the time of admission.

3.0 Scheme of Instruction :

In accordance with the NCTE regulations – 2014, the programme includes 21 courses of 95 credits which are positioned throughout the 4 semesters. This also includes the pedagogy courses in different school subjects which will be selected by the student teachers according to their area of specialization in their degree/post graduate levels. Two optional courses are also included in the 3rd semester. The requirements of the 20 weeks of Engagement with the field proposed by the NCTE, are met through three rigorous phases of School Attachment Programmes. The first two Phases are of 2 week duration each which will be organized in the Demonstration School and other selected schools in Mysore. The longer duration, 15 weeks will be organized in the third phase of School Attachment Programme, is primarily an internship in teaching Programme which will be organized in selected schools of southern region. One week of community living camp will be organized in Mysore or around Mysore during which the student teachers will be participating in the community related activities.

Courses of Study are organized under the following titles:

- | | | |
|----|-----------------------------------------|----------|
| a) | Perspective courses | (PC) |
| b) | Curriculum and Pedagogy Studies | (CPS) |
| c) | Enhancing Professional Capacity Courses | (EPC) |
| d) | Engagement with field /SAP | (EF/SAP) |
| e) | Internship in school subject | (ISS) |
| f) | Community Living camp | (CLC) |
| g) | Electives | (EL) |

Each component of the curriculum will have sub component with course titles of study with specific credits and scheme of examination.

3.1. Details of the courses

- i) **The Perspective courses** include 6 papers which are mandatory and offered from 1st semester to 4th semester. These are the core papers that provide necessary theoretical inputs and perspectives in understanding Education, learner, learning, teaching and the curriculum in the context of school and society.
- ii) **The curriculum and pedagogy studies** include 2 papers in the respective pedagogy of the school subject which are offered in semester 1 and 2. Each student teacher will select 2 pedagogy papers of school subjects in semester 1 and continue with the same subjects in

semester 2 as well as for teaching at secondary level. Besides this, there are other 2 papers which are mandatory under CPS are offered in semester II. The pedagogy subjects that will be offered based on the graduate/ post graduate subjects of the students are as follows.

TABLE.1. CURRICULUM PEDAGOGY COURSES

S.No	Discipline	Pedagogy of school subject
1	Language	Pedagogy of English -1
2	Humanities	Pedagogy of Social Science-2
3	Science (for students with the background of CBZ/Botany/ Zoology/Bio technology/Micro Biology)	Pedagogy of Physical science -1 Pedagogy of Biological Science -2
4	Science (for students with the background of PCM/Physics/Chemistry/ Maths/Statistics	Pedagogy of Physical science -1 Pedagogy of Mathematics -2

iii). Enhancing Professional Capacities (EPC): This includes 4 courses where in the student teacher is equipped with certain competencies that are essential to enhance the professional capacities of student teachers.

iv). Engagement with Field (EF) : This includes school attachment programme which will be carried out in 1st and 2nd semesters, where in the student teacher will be exposed to the school environment and its various functions and roles. The two curricular areas of ‘Perspectives in Education’ and ‘Curriculum and pedagogic studies’ shall offer field engagement through different tasks and projects with the school, and child in school and out of school. The student teachers will have the experience of know-how of the theoretical frameworks studied in a teacher education classroom with field based experiences. In the 3rd semester, after the Internship, the community living camp will be organized for one week around Mysore to engage the student teachers in various community related activities.

v). Internship in school subject (ISS) : This course intends to provide school experience in totality to the student teachers where they will give the required number of lessons and perform various tasks in the respective 2 pedagogical subjects in the 3rd semester.

vi). Electives (EL) : This includes 3 Electives among which any one can be chosen by the student teacher. The Electives are provided in order to empower the student teachers with the additional competencies in any one of the chosen subject area related to secondary level.

4.0 Attendance

Each student has to attend a minimum of 75% of the classes conducted in each course. Failure to

meet the minimum requirement renders disqualification from terminal examination and makes him/her ineligible for NCERT scholarship/ free ship. Such a student is deemed to have dropped the course and is not allowed to write the semester end examination of that course. The student has to re-register for the course/s as and when they are offered by the institute.

5.0 Medium of Instruction:

The medium of instruction and examination is English.

6.0 Course Structure

Table No. 2 - B.Ed Course - Semester wise Papers

S. No	Code. No's	Subjects	Credits
SEMESTER 1			
1	PC-1	Understanding the Learner	4
2	PC-2	Contemporary India and Education	4
3	CPS-PS1 CPS-M1 CPS-BS I CPS-ENG1 CPS-SS I	Pedagogy of Physical Science-I Pedagogy of Mathematics -1 Pedagogy of Biological sciences-I Pedagogy of English-I Pedagogy of Social sciences-1	4 4
4	EPC-1	Critical understanding of ICT	4
5	EPC-2	Reading and Reflecting in text	2
6	SAP-1	Engagement with field/SAP I	2
			Total:24 Credits
SEMESTER II			
1	PC-3	Learning and teaching	4
2	CPS-LAC III	Language Across curriculum	4
3	CPS-PS II CPS-M II CPS-BS II CPS-ENGI CPS-SS II	Pedagogy of Physical Science-II Pedagogy of Mathematics -II Pedagogy of Biological sciences-II Pedagogy of English-II Pedagogy of Social sciences -1	4 4
4	CPS-IV	Assessment and Evaluation	4
5	SAP-II	Engagement with field/SAP II	2
			Total:22 Credits
SEMESTER III			
			Credits
1	ISS-1	Internship in school subject I	15
2	ISS-II	Internship in school subject II	15
3	CLC	Community Living Camp	1
			Total:31 Credits
SEMESTER IV			
1	PC-4	Gender , School and Society	2
2	PC-5	Creating an inclusive school	4
3	PC-6	Knowledge and Curriculum	4
4	VPE-EL GC-EL	Optional : (a) Value and Peace Education (b) Guidance and Counseling (c) Action Research	4
5	EPC-3	Drama and art education	2

6	EPC-4	Health and physical education	2
			Total :18 Credits
			Overall Credits: 95

Table.3: The credits according to the grouping of the courses are given below.

Sl.No	Course category	Code	Credits
1	Perspective courses	PC	22
2	Curriculum and Pedagogy Studies	CPS	24
3	Enhancing Professional Capacity Courses	EPC	10
4	Engagement with field(SAP, Internship, community living camp)	SAP/ISS/CLC	35
6	Electives	EL	4
			Total 95

7.0. Table No. 4 - PANORAMA OF COURSES IN THE FOUR-SEMESTERS

Sl.No.	COURSE	CREDITS (L+T+P)				Credits	Credits In Programme	Total Contact Hours per week (x 16)	Periodical assessment (C1+C2)	Terminal Assessment	Total marks
		Semester I	Semester II	Semester III	Semester IV						
1.	Understanding the Learner	3+1+0				3+1+0	4	5	C1+C2=30 30%	C3=70 70%	100
2.	Contemporary India and Education	3+1+0				3+1+0	4	5	30%	70%	100
3.1	PEDAGOGY-I (any two subjects)										100
	a) Pedagogy of English Language	2+2+0				2+2+0	4	6	30%	70%	
	b) Pedagogy of Social Science.	2+2+0				2+2+0	4	6	30%	70%	100
3.2	a) Pedagogy of Physical Science.	2+2+0				2+2+0	4	6	30%	70%	100
	b) Pedagogy of Mathematics	2+2+0				2+2+0	4	6	30%	70%	100
3.3	a) Pedagogy of Physical Science.	2+2+0				2+2+0	4	6	30%	70%	100
	b) Pedagogy of Biological Science.	2+2+0				2+2+0	4	6	30%	70%	100
4	Critical Understanding of ICT	3+0+1				3+0+1	4	5	30%	70%	100

5	Reading & reflection on text	1+1+0				1+1+0	2	3	30%	70%	100
6*	School Attachment Programme 1	0+0+2				0+0+2	2	2 weeks	C1+C2=30%	C3=70%	100
Credits: 24										Marks	700
7	Learning & Teaching		3+1+0			3+1+0	4	5	30%	70%	100
8	Language Across Curriculum		3+1+0			3+1+0	4	5	30%	70%	100
9.1	PEDAGOGY-II a) Pedagogy of English Language b) Pedagogy of Social Science.		2+2+0			2+2+0	4	6	30%	70%	100
			2+2+0			2+2+0	4	6	30%	70%	100
9.2	a) Pedagogy of Physical Science.		2+2+0			2+2+0	4	6	30%	70%	100
	b) Pedagogy of Mathematics		2+2+0			2+2+0	4	6	30%	70%	100
9.3	a) Pedagogy of Physical Science		2+2+0			2+2+0	4	6	30%	70%	100
	b) Pedagogy of Biological Science.		2+2+0			2+2+0	4	6	30%	70%	100
10	Assessment and Evaluation		3+1+0			3+1+0	4	5	30%	70%	100
11*	School Attachment Programme 2		0+0+2			0+0+2	2	2 weeks	C1+C2=30%	C3=70%	100
Credits : 22										Marks	600
12*	Internship in School Subject 1			0+0+15		0+0+15	15	1+14 = 15 weeks	C1+C2=30%	C3=70%	100
13*	Internship in School Subject 2			0+0+15		0+0+15	15	1+14 = 15 weeks	C1+C2=30%	C3=70%	100
14*	*Community living Camp			0+0+1		0+0+1	1	1 week	C1+C2=25%	C3=25%	50
Credits : 30										Marks	250
15	Gender School & Society				1+1+0	1+1+0	2	3	30%	70%	100
16	Creating an inclusive school				2+2+0	2+2+0	4	6	30%	70%	100
17	Knowledge & Curriculum				2+2+0	2+2+0	4	6	30%	70%	100
18	Electives(any one) a) Guidance & Counselling				2+2+0	2+2+0	4	6	30%	70%	100
18.1											
18.2						2+2+0	2+2+0	4	6	30%	70%

18.3	b) Value & Peace Education				2+2+0	2+2+0	4	6	30%	70%	100
	c) Action Research				2+2+0	2+2+0	4	6	30%	70%	100
19	Drama & Art Education				1+0+1	1+0+1	2	3	50%	50%	100
20	Health and Physical Education				1+0+1	1+0+1	2	3	50%	50%	100
Credits: 19									Marks :		600
Total Credits: 95									Total Marks		2150

***= Courses which do not have C3 Theory examination**

L : Lectures: 1 credit = 1hr/week x 16 weeks

T : Tutorial: 1 credit = 2 hr/week x 16 weeks

P : Practicum/practical = 2 hr/week x 16 weeks

V: Credit value of a course is L+T+P

8.0 Scheme of Examination

8.1 There shall be a terminal (C3) Examination conducted by the University of Mysore at the end of each semester in Theory and/or Practical as the case may be.

8.2 Detailed Scheme of Examination along with breakup of C1, C2 and C3 marks is given below.

❖ All the courses will be evaluated for a total of 100 marks in the C1, C2 and C3 pattern.

❖ C1= 15; C2 = 15 and C3 = 70 will be followed uniformly for all the courses, except in case of community living camp where C1=25, C2=25, and C3=50 marks will be provided.

8.3 Duration of semester end examination (C3) for all theory courses will be for 3 hours, except for the courses EPC-3, and EPC-4 which would be of 2 hours duration and 50 marks each

Each theory paper comprises of 5 questions of 14 marks each with internal choice covering the entire syllabus. The Question 9 will have two questions drawn from each unit in serial order with internal Choice

In case of courses on EPC-3 and EPC-4, the theory paper will comprise of 5 questions of 10 marks each with a break up, following internal choice covering the entire syllabus.

9.0 Question paper setting, valuation, declaration of results, challenge valuation and all other examination related issues will be as per the rules and procedures followed by the University of Mysore.

9.1 Question paper setting for C₃.

(i) There shall be a separate Board of Examiners for each subject approved by the University, for preparing, scrutinizing and approving the question papers and scheme of valuation for use in the examination/s.

9.2 Coding of Answer Scripts:

Before valuation, the answer scripts shall be coded using false numbers. For each paper code, separate false number shall be given.

9.3 Valuation and Classification of Successful Candidates

- A semester is divided into three discrete components namely C_1 , C_2 and C_3 .
- The evaluation of the first component C_1 will be done during the first half of the semester after completing the I and II units of the syllabus with a weightage of 15%. This will be consolidated during the 8th week of the semester.
- The evaluation of the second component C_2 will be done during the second half of the semester when units III and IV of the syllabus are completed which will have a weightage of 15%. This will be consolidated during the 16th week of the semester.
- In general C_1 and C_2 are evaluated through Test/ Seminar/ Dissertation/ Presentation/ Assignment between the 8th and 14th week of the semester, the semester end examination will be conducted by the University and this forms the third component of evaluation, C_3 with weightage of 70%.
- *If a candidate has not scored at-least 30% in C_1 and C_2 put together, he/she is **not allowed** to appear for C_3 .
- It should be noted that evaluated papers/assignments of C_1 and C_2 assessment are immediately returned to the candidates after obtaining acknowledgement in the register maintained by the concerned teacher for this purpose.
- The C_3 valuation will be done by the board of external examiners approved by the University of Mysore.

The final marks of a course, **M of C_3** , will be computed as per the following table:

Table No. 5

S. No	Credit Distribution patterns	Formula for calculating M
1.	L : T : P	$M = ((L+T)*X + (P*Y)) / (L+T+P)$
2.	L : T : P = 0	X
3.	L : T = 0 : P	$(L*X + P*Y) / (L+P)$
4.	L = 0 : T : P	Y
5.	L : T = 0 : P = 0	X
6.	L = 0 : T = 0 : P	Y
7.	L = 0 : T : P = 0	Z

Where,

X is the marks scored out of 70 in C_3 in Theory

Y is the marks scored out of 70 in C_3 in Practical

Z is the marks scored out of 70 in C_3 in Tutorial

The total marks in a course is $P = C_1 + C_2 + M$ (after rounding to nearest integer). The grade (G) and grade point (GP) will be calculated as follows where V is the credit value of the course.

P	G	GP = V × G
90 – 100	10	V × 10
80 – 89	9	V × 9
70 – 79	8	V × 8
60 – 69	7	V × 7
50 – 59	6	V × 6
40 – 49	5	V × 5
30 – 39	4	V × 4
0 -29	0	V × 0

If a candidate's score is $C_1 + C_2 \geq 30\%$, $M \geq 30\%$ and $G \geq 5$ in a course, then he is considered to be successful in that course.

After successful completion of the required number of credits, then the overall cumulative grade point average (CGPA) of a candidate is calculated using the formula $CGPA = \Sigma GP / \text{Total number of credits}$ and the class is declared as follows :

Table No. 6

CGPA	FGP	
	Numerical Index	Qualitative Index
$4 \leq CGPA < 5$	5	Second Class
$5 \leq CGPA < 6$	6	
$6 \leq CGPA < 7$	7	First Class
$7 \leq CGPA < 8$	8	
$8 \leq CGPA < 9$	9	Distinction
$9 \leq CGPA \leq 10$	10	

Overall percentage = $10 * CGPA$ or is said to be 50% in case $CGPA < 5$.

However, if $C_1 + C_2 \geq 30\%$, $M \geq 30\%$ and with grade $G = 4$, then a candidate has three options namely conditional success or make up of a course or dropping a course.

9.4 Conditional Success: A candidate is said to be successful conditionally in a course if his score in $C_1 + C_2 \geq 30\%$, $M \geq 30\%$ and grade $G = 4$. But this benefit will be available up to a maximum 32 credits for the entire programme of B.Ed. of 2 years. The candidate has to exercise this option within 10 days from the date of notification of results.

9.5 Make Up of a Course: Under the following circumstances, a candidate can have option to choose MAKE-UP OPTION for C_3 :

1. scores $\geq 30\%$ in $C_1 + C_2$ and $M < 30\%$
2. scores $\geq 30\%$ in $C_1 + C_2$; $M \geq 30\%$ but with grade $G = 4$

The candidate has to exercise this option within 10 days from the date of notification of results. Once he has chosen the option he has to write the examination which will be conducted within 25 days from the date of notification of results or as directed by the University. There can be two or more examinations on the same day and they may be held on Saturdays and Sundays also.

If the candidate is unsuccessful in make up, also then he/she is deemed to have withdrawn/ dropped the course.

9.6 Dropping a Course

Under the following circumstances a candidate is said to have DROPPED a course,

If the candidate:

1. fails to put in 75% attendance in a course,
2. decides to discontinue/ withdraw from the course,
3. scores less than 30% in $C_1 + C_2$ together,
4. scores in

i) $C_1 + C_2$ is $\geq 30\%$ and $M < 30\%$ or

ii) $C_1 + C_2$ is $\geq 30\%$, $M \geq 30\%$ and Grade $G = 4$ and exercises option to drop the course within 10 days from the date of notification of final results is unsuccessful in the MAKE-UP examination.

A candidate who has dropped a course has to **re-register** for the course when the course is offered again by the Institute.

9.7. Each student can go with a normal pace of 24 credits per semester. However, he/she has provision to go with a slow pace of 20 credits per semester and an accelerated pace of 28 credits per semester. In any case it should not exceed 28 credits including re-registered courses(except for the credits of Internship).

9.8. The tuition fee and the examination fee of a semester will be in accordance with the number of credits registered by each student in that semester.

9.9 The student may avail a maximum of two blank semesters in one stretch. However, he has to pay a nominal fee for maintaining a semester blank to the institution.

10.0 Provision for Appeal

A candidate, if dissatisfied with the grades that he/she has got with a feeling that he/she is unnecessarily penalized can approach the grievance cell with the written submission together with all facts and all the assignments, test papers etc. which were evaluated. He / She can do so before the semester-end examination (based on 2 continuous assessment components already completed) or after the semester-end examination. The grievance cell is empowered to review the grades if the case is genuine and is also empowered to penalize the candidate if his/her submission is found to be baseless and unduly motivated. This Cell may recommend to take disciplinary/corrective action on an evaluator if he/she is found guilty. The decision taken by the Grievance Cell is final.

The Registrar (Evaluation) will be the Chairman of the Grievance Cell. The composition of the Grievance Cell is as follows:

1. The Registrar (Evaluation) *ex-officio* Chairman/ Convener.
2. The Principal
3. Dean of instructions
4. Head, Department of Education
5. An external expert from the University of Mysore in the concerned subject.
6. Additional lady faculty member (in case not covered by 1, 2,3,4,5 and 7).
7. Additional faculty member from a minority community (in case not covered by 1,2,3,4,5 and 6)

The appropriate fee as fixed by the University shall be collected from the candidate who goes for an appeal to the Grievance Cell.

11.0 Marks Cards:

11.1 The marks card shall be laminated after affixing the hologram only when a candidate passes all the courses/papers of a particular semester.

12.0 Barring of Simultaneous Study

12.1 No student admitted to a degree course in a college under the jurisdiction of this university, shall be permitted to study simultaneously in any other course leading to a degree (regular/evening/morning) offered by this/any other university.

12.2 If a candidate gets admitted to more than one course, the university shall without giving prior notice cancel his/her admission to all the courses to which he/she has joined.

13.0 Miscellaneous:

13.1 These regulations will apply to the candidates admitted for the academic year 2017-18 and onwards for the courses mentioned in Regulation No.1.0 above.

13.2 Other regulations not specifically mentioned above are as per the Regulations of the University as applicable from time to time.

13.3 Any other issue not envisaged above, shall be resolved by the Vice-Chancellor in consultation with the appropriate Bodies of the University, which shall be final and binding.

SEMESTER -I

PC-1: UNDERSTANDING THE LEARNER

Credits: 4 (3L+ 1T +0P)

Contact hrs per week: 5

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The student teacher will be able to:

- Understand the salient features and problems of growth and development during childhood to adolescence.
- Understand the dynamics of personality development in order to facilitate student trainees' and their students' personal growth.
- Develop the ability to apply the knowledge provided by Educational Psychology to classroom problems of various kinds.
- Understand the intra and inter individual differences in the learners and their Implications for organizing educational programmes.
- Acquire the skills of understanding the needs of all the learners in the classroom and meeting their needs.
- Appreciate the contribution of psychology in realizing the objectives of education.

COURSE CONTENT

Unit I: Nature of Human Development and Educational Implications

Concept and Branches of Psychology; Importance of Study of Psychology by Classroom Teachers, Meaning of Growth and Development. Differences between growth and development, importance of growth and development for the teachers. Principles of Development, Factors Influencing Growth and Development; Role of Heredity and Environment in determining individual Differences in Development. Developmental Stages and Tasks, Development during Early Childhood, Late Childhood and Adolescence-Characteristics, Factors Influencing and Educational Implications:(a) Physical (b) Psychomotor (c) Intellectual (d) Language (e) Emotional (f) Social and (g) Moral and Value Development

Unit II: Management of Issues and Concerns of Adolescent Students Factors Affecting Adolescent development; Issues and Concerns during Adolescence - Physical and Health concerns, Emotional Issues, Social Issues, Socio-cultural diversity, Adverse Life experiences, Identity Vs Role Confusion; Adolescent Cognition and its effect on Adjustment, Need and Importance of Adolescence Education, Significance of Life Skill Education for Adolescence, Role of Schools for the Balanced Personality

Unit III: Individual Differences in Learners Individual Differences in - Psycho-Motor skills, Intelligence, Aptitude, Personality, Learning styles and Cognitive Preferences, Self concept and Self-

esteem, Social-Emotional Development, Aptitude, Interest, Attitude and Values and Study Habits.

Unit IV: Assessment of Individual and Intra Individual Differences in Learners

Tools and Techniques: Psychological Tests, Observation Schedules, Inventories, Checklists, Anecdotal Records, Cumulative Records, Sociometry, Interview Techniques, Achievement and Diagnostic Tests. Meeting the Individual Differences in the Classroom- General Approaches; Remedial Instruction, Guidance and Counseling, Whole School Approach.

Sessional activities

Administering Group Tests
Conducting Case Studies
Diagnosing the deviations
Studying School Record and preparing Reports.
Getting Familiarized with Individual Psychological Tests.

References:

- Bigge, M.L. (1982). *Learning Theories for Teachers*, (4th edition). New York, Harper and Row Publishers, pp. 89-90.
- Bolles, R.C. (1975). *Learning Theory*. New York, Holt, Rinehart and Winston, pp. 18-19.
- Chauhan, S.S. (1978). *Advanced Educational Psychology*, Vikas Publishing House Pvt. Ltd., New Delhi.
- Dandapani, S. (2001). *A textbook of Advanced Educational Psychology*. New Delhi: Anmol Publications.
- Dunn, R. (1983). *Can students identify their own Learning Styles?* Educational Leadership, 40, pp. 60-62.
- Dash, M. (1988). *Educational Psychology*. Delhi: Deep and Deep Publication.
- Duric, L. (1975). *Performance of Pupils in the Process of Instruction*. Bratislava, SPN, pp. 54-90.
- Duric, L. (1990). *Educational Sciences: Essentials of Educational Psychology*. International Bureau of Education, UNESCO, New Delhi, Sterling Publishers, p. 81.
- Fontana, D. (1995). *Psychology for Teachers* (3rd edition). The British Psychological Society, London: McMillan in association with BPS Books.
- Kumar, S. (2014). *Child Development and Pedagogy*, Pearson.
- Kundu C.L. and Tutoo, D.N. (1993). *Educational Psychology*, Sterling Publishers Pvt. Ltd.
- Lindgren, H.C. (1967). *Educational Psychology in Classroom* (3rd edition). New York: John Wiley and sons.
- Mohan J. and Vasudeva P.N. (1993). *Learning Theories and Teaching*, In Mohan Jitendra (ed.) *Educational Psychology*, New Delhi, Wiley Eastern Limited, P. 146.
- Murthy, CGV and Rao, AVG. (2005). *Life skills Education: Training Package*, Mysore: Regional Institute of Education.
- NCERT (2013) *Training and Resource materials in Adolescence Education*, New Delhi

- Oza, D.J. and Ronak, R.P. (2011). *Management of behavioral problems of children with mental retardation*. Germany: VDM publication.
- Papalia D.E., and Sally, W.O. (1978). *Human Development*. McGraw Hill Publishing Company.
- Phens, J.M., and Evans, E.D. (1973). *Development and Classroom Learning: An Introduction to Educational Psychology*. New York: Holt Rinehart and Winston Inc.
- Tessmer, M., and Jonassen, D. (1988). *Learning Strategies: A New Instructional Technology*. In Harris Duncun (1988) *Education for the New Technologies*, World Year Book of Education. London: Kogan page Inc.
- Skinner, E.C. (1984). *Educational Psychology*-4th Edition. New Delhi: Prentice Hall of India Pvt. Ltd.
- Spinthall, N., and Spinthall, R.C. (1990). *Educational Psychology* 5th Edition. McGraw Hill Publishing Company.

Web Resources

Animated Videos from Study.com, <http://study.com/academy/course/educational-psychology-course.html>

- Seifert, K. and Sutton, R. 2011). *Educational Psychology Third Edition*
<http://www.oercommons.org/courses/educational-psychology/view>
- Introduction to Psychology, Open Textbook, <http://open.lib.umn.edu/intropsyc/>
- Generic Issues, NCERT,
http://www.ncert.nic.in/departments/nie/dse/activities/advisory_board/PDF/generic.pdf
- www.aeparc.org

PC-2: CONTEMPORARY INDIA AND EDUCATION

Credits: 4 (3L+ 1T +0P)

Contact hrs per week: 5

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives

The student teacher will be able to:

- Appreciate the unity and strengths of Indian diversities based on region, religion, gender, languages, socio-economic factors like caste, means of livelihood etc.
- Acquire knowledge about the salient features of Indian Constitution and constitutional measures to protect diversities
- Develop understanding of the issues in contemporary India like industrialization, urbanization, globalization, modernization, economic liberalization and digitalization etc.
- Appraise about the policy initiatives taken in education reform during pre- and post independent India.
- Develop understanding of the working and recommendations of various Commissions and Committees constituted for improving education in the country.
- Appreciate Innovations and new measures towards universalization of education economically, socially and educationally backward communities
- Develop understanding of the issues, and challenges faced by Indian contemporary Society

UNIT- 1 : Social Realities of Indian Society and Education

Meaning , Nature and scope of Education ; Education in the context of Indian society

Rich Cultural Heritage - Diversity in Indian Society; Diversity in terms of educational opportunities- Caste, Religion, Language, Region and their demands on Education

- Forms and Bases of Social Stratification -Impact of Social Stratification on Education and Vice versa
- Culture and Education - Meaning and definitions of culture
- Characteristics of culture Dimensions of culture, cultural lag, cultural pluralism
- Role of Education in preservation, transmission and promotion of culture.
- Role of Education in creating positive attitude towards diversity.
- Globalization, modernization, economic liberalization and digitalization etc and their impact on Education system

UNIT 2 - Constitutional Provisions and Education

Constitutional provisions on education that reflect National ideals:

- Democracy and the values of equality, justice, freedom, concern for others' wellbeing, secularism, respect for human dignity and rights.
- India as an evolving Nation: Vision, Nature and Salient Features – Democratic and Secular polity,

Federal structure: Implications for educational system;

- Aims and purposes of education drawn from constitutional provision;
- Fundamental Rights & Duties of Citizens Constitutional interventions for universalization of education and RTE Act 2009
- Decentralization of Education and Panchayati Raj (specifically through 73rd and 74th amendment)
- Role of Central and State governments in the development of education

UNIT 3 - Policy Framework for Development of Education in India

a. Overview of educational reform in the Pre-independence period:

- Macaulay's minutes,
- Wood & Despatch,
- Hunter Commissions;
- Sargent Report,
- Basic education;

b. Education in Post Independence Period:

- Mudaliar Commission(1952)
- Education Commission (1964-66);
- NPE 1968; NPE 1986 and its modified version 1992;
- Knowledge Commission; Language Policy
- Learning without Burden-1993,
- Justice Verma Commission-2012

UNIT 4 - Initiatives of the Government of India

- Sarva Shiksha Abhiyan (SSA)
- Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
- Mid-day Meal
- Schemes for girls, SC, ST and Marginalised Group
- ICT in School Education
- National Repository of Open Educational Resources (NROER)
- Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMNMTT)

Concerns and Issues in Indian Education - Right to Education and Universal Access: Issues of a) Universal enrolment b) Universal retention c) Universal success

Issues of quality and equity - Equality of Educational Opportunity: Meaning of equality and constitutional provisions, Prevailing nature and forms of inequality, including dominant and minor groups and related issues

Inequality in schooling- Public-private schools, rural-urban Schools, single teachers' schools and many other forms of inequalities in school systems and the processes leading to disparities

Sessional activities

- Case study of different kind of schools
- Study the impact of Right to Education Act on schools
- Conduct of survey of government and private schools to identify various forms of inequality
- Critical Analysis of Different Committees and Commissions on Education
- Presentation on the reports and policies on SSA/USE

Mode of transaction:

Lectures, discussions, assignments.

References:

- Dhankar. N. (2010). Education In Emerging Indian Society. New Delhi: APH Publishing Corporation.
- National Policy on Education, Min. of HRD, New Delhi.
- Govt. of India (1992). Programme of Action (NPE). Min of HRD
- Govinda, R. (2011). Who goes to school: Exploring exclusion in Indian education. Oxford University Press.
- Kakkat, S. B. (1995). Changing Perspectives in Education. New Delhi: Vikas, Publishing House Pvt. Ltd.
- Kumar, K. (2013). Politics of education in colonial India. India: Routledge.
- Mani, R.S. (1964). Educational Ideas and Ideals of Gandhi and Tagore, New Book Society, New Delhi.
- Mehta, D. D. (2009). Education in Emerging Indian Education, Indian Education. Ludhiana:Tondan Publications, Books Market.
- Mukherji, S.M., (1966). History of Education in India, Acharya Book Depot, Baroda.
- GOI(1964-1966):‘Education and National Development’.
- Ministry of Education, Government of India 1966. GOI(2004):
- Learning without Burden, Report of the National Advisory Committee.
- Naik, J.P. (1982). The education commission and after. APH Publishing.
- Naik, J.P. & Syed, N., (1974). A Student’s History of Education in India, MacMillan, New Delhi.
- NCERT (1986). School Education in India – Present Status and Future Needs, New Delhi. NCERT. (2005). National curriculum framework. (NCF 2005). New Delhi: NCERT.
- NCERT. (2006a). Position paper-National focus group on education with special needs NCERT. (2006b). Position paper-National focus group on gender issues in the curriculum (NCF 2005).
- Varghese, N.V. (1995). School Effects on Achievement: A Study of Government and Private Aided Schools in Kerala. In Kuldip Kumar (Ed.) School effectiveness and learning achievement at primary stage: International perspectives. NCERT. New Delhi.
- World Bank, (2004). Reaching the Child: An Integrated Approach to Child Development. Oxford University Press, Delhi.

CPS#ENG-1: PEDAGOGY OF ENGLISH

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The Student teacher will be able to

- Understand the status and functions of English in India.
- Understand the principles underlying the learning of English language.
- develop an insight into the language learners and the learning process
- Critically evaluate the new school English curriculum.
- Understand the importance of various instructional aids.
- Analyze and fourfold language skills and their interrelationship.
- Become familiar with the different types of vocabulary and structural items.

COURSE CONTENT:

Unit I: General Introduction on Language

- Understanding and defining Language; various components of language; Functions of language; Signature characteristics of Languages; Understanding the following concepts Dialect, Standard and Non-standard language, classical ;Characterizing mother tongue, first language, and second language, bilingual and multilingual.
- Minority languages and Heritage languages, Code mixing and code switching- their application in classroom. Introducing the four major skills and sub skills- Teaching oral communication- listening and speaking skills in the classroom-collaborative learning activities and demonstrations of approaches to teaching oral communication- developing, evaluating and adapting tasks and resources.

Unit II: Language Acquisition

- Language learning in early childhood; Language and Cognition: Piaget, Vygotsky and Chomsky on language acquisition and relevance of their views for the language teacher; Second language acquisition
- Theories of Noam Chomsky and Ken Goodman.
- A general understanding of the traditional approaches including grammar-translation method, audio-lingual method, bilingual method and communicative approach
- Teaching and assessing reading skills in the classroom – investigate varied teaching strategies for meeting learner's diverse abilities and needs-guidance for developing, evaluating and adapting reading tasks and resources.

Unit III: Language and Literacy in the Context of School

- Language environment of school and the varied nature of Indian classrooms; Language

- Learner's profile: language environment at home; Characterizing bilingualism and
- Multilingualism; Home language, notions of dialects and colloquialism, literary inventions and idioms.
- Understanding notions concerning "right" and "Wrong" use of language; acknowledging the worth of "errors" in language learning.
- Student teachers will develop an understanding of the role of grammar in syllabus text types and current textbooks- practice designing appropriate grammar teaching and assessment strategies within other context of teaching other language skills- presentations and demonstration of approaches to grammar teaching- guidance for developing evaluating and adapting grammar teaching tasks and resources.

Unit IV: Multimedia and Communications Technology

- CALL- Computer Assisted Language Learning
- Audio visual aids –importance and their limitations
- Pictures, Audio CDs, realia, flashcards, flip charts, language lab, models, video clipping, films, documentaries, cartoons, advertisements, newspaper cutting , various IT resources, etc.
- Develop an understanding of theoretical approaches to teaching and assessing writing, and explore different strategies for integrating classroom writing with other language skills and subjects-collaborative and reflective activities that provide guidance in developing and adapting textual and media resources for writing syllabus.

Sessional Work:

- * Students undertake a study of the linguistic cultures prevailing in the society
- * Make a case study of use of home language and second language
- * Assess the influence of IT resources on language learning and teaching.

References:

National Curriculum Framework, 2005, NCERT

Position Paper on English, NCERT

- Agnihotri, R. K. and Khanna, A. L. (1994). / Second language acquisition: Sociocultural and linguistic aspects of English in India. / New Delhi: Sage Publications.
- Allen and Campbell (Ed.). (1969). / Teaching English as a second language. / New Delhi: Tata McGraw Hill. Book Co.
- Allen, H. B.(1965)./ Teaching English as a second language : Book of readings / Bombay: McGraw Hill.
- Broughton, Geoffery et al. (1978)./ Teaching English as a second language./ London :
- Routledge and Kegan Paul.
- Carrel, P. L., Devine, J. & Eskey, D. E. (1988). / Interactive approaches to second language reading. / Cambridge: Cambridge University Press.
- Chaturvedi, M. G. & Mohale, B. V. (1976). / Positions of language in School Curriculum in India. / New Delhi: NCERT.
- Chaudron, Craig, (1988). / Second language classrooms. / Cambridge: Cambridge University Press.
- Cook, Vivian. (1991)./ Second language learning and language teaching./ New York:

- Chapman and Hall Inc.
- Crystal, David. (Ed.). (1997). / Cambridge encyclopedia of second language education. / United Kingdom: Cambridge University Press.
- Cummins, J. (1984)./ Bilingualism and special education : Issues in assessment and Pedagogy. / Claredon. UK: Multilingual matters.
- Di Pierto, R.J. (1987). / Strategic interaction: Learning language through scenarios. / Cambridge: Cambridge University Press. Vv
- Dubin, F. and Olshtain, E. (1986). / Course design- developing programs and materials for language learning. /Cambridge, Cambridge University Press.
- Ebel, R. L. and Frisbie. D. A. (1991). / Essentials of educational measurement. / New Delhi: Prentice Hall of India Pvt. Ltd.
- Eggen, P. D. and Kauchak, D. P. (1990). Strategies for teachers: Teaching content and Thinking skills. / New Jersey: Prentice Hall.
- Ellis, Rod. (1987). / Understanding second language acquisition. / Oxford: Oxford University Press.
- Underhill, Nic. (1987). / Testing spoken language. A handbook of oral testing techniques. Cambridge : Cambridge University Press

CPS#SS-1: PEDAGOGY OF SOCIAL SCIENCES

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The student teacher will be able to

- Develop an insight into the emergence of social sciences as a discipline, nature of knowledge and process of inquiry in social sciences.
- Comprehend the place of social sciences in school curriculum as well as the conceptual and pedagogical shift occurred in the field.
- Analyze the policy documents on education and bring out perspectives on aims and objectives of social science curriculum in India.
- Critically appraise the existing social science curriculum at the national and state level in the light of the approaches and principle of curriculum design and organization.
- Evaluate the social science textbooks based on laid down criteria.
- Prepare effective plans for teaching social sciences at secondary level including Unit and Lesson Plans.

COURSE CONTENTS:

Unit I: Nature, and Place of Social Sciences in School Curriculum

- Historical overview of emergence of social sciences; Nature of knowledge and process of inquiry in social sciences; Critical analysis of socio-political realities; Contributions of Indian social scientists.
- Concept of social science and social studies; Evolution of social science curriculum as reflected in national curriculum frameworks.
- Scope of social science as a core subject in school curriculum; Paradigm shift in school social sciences: conceptual and pedagogical.
- Aims and objectives of learning social sciences; Emphasis in teaching social sciences: integrated versus disciplinary.

Unit II: Social Science Curriculum and School Textbooks

- Approaches and challenges in designing social science curriculum: child centered, society centered, subject centered, integrated, constructivist.
- Selection of content from different social science disciplines and their weightages and interrelationship; Content load, scientific rigour, and normative concerns.
- Organization of content: Thematic, Spiral, Interdisciplinary; Horizontal and Vertical linkage;

Linkage between upper primary and secondary curriculum.

- Textbook content and classroom discourse; Scope for multiple reading and meaning; Political and ideological underpinning; Representation of dominant views; Gender issues and concerns.
- Critical review of social science textbooks from curricular and pedagogical perspectives.

Unit III: Pedagogical Practices in Social Sciences

- Principles of effective pedagogy in social sciences; Facilitating learning in social science: Creating multiple, meaningful and participatory learning contexts; Providing opportunities for collaborative learning;
- Effective scaffolding of student s learning; Promoting questioning abilities. Developing critical perspectives-historical, environmental, economic and constitutional.
- Pedagogical analysis in social sciences: Analysis of textbook content; Identification of themes, key concepts and issues; Formulating learning objectives; Designing pedagogical process; Selecting appropriate evaluation strategies, and devices.
- Development of Unit Plan: Thematic mapping of the content of a unit; Writing learning outcomes; Preparation of Unit plan.

Unit IV: Planning for Teaching Social Sciences

- Importance of lesson planning: Analyzing relevant materials including videos on instructional planning; Critical review of videos on classroom teaching in social sciences; Observation of a social science class, interact with the teacher and reflect upon planning of lesson and classroom process.
- Approaches to lesson planning in social sciences: Herbartian approach, Bloom s evaluation approach, Constructivist approach; 5Es lesson plan model in social sciences.
- Using taxonomy of instructional objectives for lesson planning; Writing learning objectives based on selected chapters from social science textbooks.
- Designing and sequencing of learning activities; Preparation of lesson plans in social sciences.

Sessional activities:

- Critical analysis of educational policies, curriculum frameworks and other relevant documents to bring out the evolution of social science curriculum in India.
- Review of National Policies on Education and Curriculum Frameworks to bring out the perspectives on aims and objectives of social science curriculum in India.
- Critical appraisal of existing social science curriculum and textbooks at school level.
- Develop four unit plans, one each in History, Political science, Geography and Economics.
- Prepare lesson plans, one each in history, geography, economics and political science based on selected topics from textbooks of classes VI to X, and present and discuss in groups under the mentorship of faculty members.
- Critical analysis of existing social science textbooks of classes VI to X from curricular, pedagogical and or gender perspectives.

References:

- Allen, J and Landaker, C. (2004). Reading history: Strategies to improve comprehensions and connections in social studies classes. New York: Oxford University Press.
- Arora, P. (2014). Exploring the Science of Society. Journal of Indian Education, NCERT.
- Batra, P. (2010). Social science learning in schools: Perspectives and challenges. New Delhi: Sage publications India.
- Binning, A. A. and Binning, D. H. (1952). Teaching of social studies in secondary schools. Bombay: Tata McGraw Hill.
- Burz, H. L. and Marshall, K. (1998). Performance based curriculum for social studies: From knowing to showing. Thousand Oaks: Corwin Press, INC.
- Crotty, M. (1998). The foundation of social research: Meaning and perspectives in the research process. London: Sage Publications.
- Dhamija, N. (1993). Multimedia approaches in teaching social studies. New Delhi: Harman Publishing House.
- Farris, P. J. (2001). Elementary and middle education social studies: An interdisciplinary instructional approach. New York: McGraw Hill.
- George, A. M and Madan, A. (2009). Teaching social science in schools. New Delhi: Sage Publications India.
- National Curriculum Frameworks 1975, 1988, 2000 and 2005.
- Root, M. (1993). Philosophy of Social Sciences. Oxford: Blackwell.
- Sartori, G. (Ed.) (1984). Social concepts: A systematic analysis. New Delhi: Sage Publications.
- Siddiqui M. H. Teaching of economics. APH Publications Corporation.
- Sanford, M. (1986). The nature of historical knowledge. Oxford. Blackwell.
- Teachers Curriculum Institute. (2010). Bring Learning Alive: Methods to Transform Middle and High School Social Studies Instruction. [www.teachtci.com]
- Trigg, R. (1985). Understanding social science: A philosophical introduction to social sciences. Oxford: Blackwell.
- Wilkins, E. J. (1979). Elements of social sciences. London: McDonald and Evans.

CPS#PS 1: PEDAGOGY OF PHYSICAL SCIENCE

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The Student teacher will be able to

- Explain the nature of science.
- Specify the goals and objectives of science teaching.
- Review the contributions of major scientists.
- Explore several methods of teaching science.
- Apply various theories science learning and analyze the implications for teaching science.
- Review the science curriculum, syllabus, and text books.
- Explore constructivist practices in teaching of science.
- Create unit plans, lesson plans in an artistic and scientific way.
- Explore the inter-relation between science and other subjects.

COURSE CONTENT:

Unit I: Nature of Science

Nature of science -Scientific method, how science works, science as a process and product. Science as a way of thinking: inquiry, observation, problem-solving, rational thinking, reasoning, science as an empirical body of knowledge. Structure of knowledge: facts, concepts, principles, generalizations, theories. Historical development of physical science with illustrations from topics such as structure of atoms, laws of chemical combinations, stoichiometry, equivalent mass, models of the universe, nature of light, electricity and magnetism etc. Contributions of Indian and international figures in science to the knowledge domain of physical science. Basic branches of physical science and applications of physical science to human life. Evolution of Physical Science as a knowledge field; science and technology; science and society; inter-relation between science and other subjects, role of science teacher.

Unit II:

a. Aims and learning objectives of Physical Science

- Aims of teaching physical science in the school curriculum.
- Development of process skills of science, scientific attitude and temper by learning Physics and Chemistry as experimental sciences.
- Nurturing curiosity, creativity and aesthetic sense.

- Science and society– relating physical science with the natural and social environment and technology, relating science to daily life, social interaction and science.
- Values through science teaching-open mindness, objectivity, truthfulness, critical thinking, logical thinking, development of problem solving skill, social learning.
- Ethics of using the knowledge of science and technology.

b. Physical Science Curriculum

- Recommendations of major commissions in India and policies on science teaching.
- The school science curriculum with regard to NCF 2005: major themes in secondary school science.
- Brief study of famous curricular reform projects such as Nuffield, STEM, PSSC, Chemical Bond Approach, CHEMSTUDY etc.
- Comparison of international secondary schools science syllabus- Singapore, Oxford, CIE (Cambridge).

Unit III: Pedagogical shift, Approaches and Strategies of learning Physical Science

- Role of prior knowledge in constructing new knowledge (Ausubel), Piaget’s theories of learning (schema- disequilibrium).
- Development of concepts in Science- real-life as the basis of conceptions; personal vs. verified knowledge of science. Conceptions, alternate concepts, and misconceptions in science.
- Teaching concepts and generalizations, inductive approaches, using advance organizers, problem solving approach, investigatory approach, project method, cooperative learning method.
- Vygotsky’s theories of role of language and context in learning, Van Glasersfeld’s theory. Development of constructivist practices in science teaching, 5E learning model, 7E model, conceptual change model of teaching, challenges in using constructivism in the classroom.
- Collaborative learning approach, problem solving approach, concept mapping, experiential learning, cognitive conflict, inquiry approach, analogy strategy.
- Facilitating learning: teacher’s role as a facilitator, grouping students, multiple learning experiences, discussing ideas, scaffolding, consolidating students’ ideas, questioning-techniques and strategies, higher order and metacognitive questioning.
- Maintaining positive learning environment. Catering to children with varied needs and abilities, context in learning, gender and science.
- Scope and importance inclusiveness in science class room.
- Role of learner: each learner as unique individual, involving learner in learning process, role of learner in negotiating and mediating learning, encouraging learner to raise and ask questions.

Unit IV: Planning for Physical science Teaching-learning

1.

- Importance of planning, unit plan and lesson plan.
- Anderson and Krathwohl’s revised Bloom’s taxonomy: knowledge domains and cognitive processes, action words. types of knowledge- factual, conceptual, procedural and metacognitive knowledge.
- Identification and organization of concepts.
- Elements of physical science lesson plan: learning Objectives, introduction, development, assessment, extended learning, assignment.

- Designing learning experiences, pre-existing knowledge, selecting approach/strategy, arrangement of teaching learning materials, group learning, formation of groups, organizing activities.
- Planning the lesson by using ICT applications and laboratory materials.
- Reflective planning; unit plan; developing lesson plans on different topics and through various approaches taking examples from upper primary, secondary and higher secondary stage (physical and chemical changes, redox reaction, light, magnetic effect of electric current, etc.).

Sessional Activities:

- Presentation on historical development of science concepts with a view to understand the nature of science.
- Pedagogical analysis (units for pedagogic analysis: any unit from VIII, IX or X physical science textbook).
- Drawing concept-maps for secondary level concepts.
- Presentation on the contributions of Physicists and Chemists to physical science.
- Readings on curriculum initiatives in secondary science with a special reference to NCF 2005.
- Comparison of different science curricula.
- Lab demonstration/exploration of science experiments.
- Exploring common mis-concepts in Physical Science by observing science classes or interviewing science teachers or using VIII and IX textbooks.
- Stating learning objectives for teaching a topic in science.
- Demonstration of different methods of teaching of Physical Science.
- Experimentation of different methods of teaching of Physical Science.

References:

- Pedagogy of Physical Science, Text book for Bed, Part I, NCERT
- Pedagogy of Physical Science, Text book for Bed, Part II, NCERT
- National Curriculum Framework 2005, NCERT, New Delhi.
- Steve Alsop, Keith Hicks (2007). Teaching Science: A Handbook for Primary and Secondary School Teachers, Kogan Page, New Delhi.
- Judith Bennett (2003) Teaching and Learning Science: A guide to recent research and its applications, Continuum, London.
- Robin Millar (1984) Doing Science : Images of Science in Science Education, The Falmer Press, London.
- State Textbook in Physics and Chemistry for classes VIII, IX and X.
- Nathan S Washton (1967). Teaching Science Creatively, Saunders Company, London.
- History of Physics in the 20th Century, Internet Browsing.
- Novak D J and D Bob Gowin (1984) Learning how to learn, Press Syndicate of the University of Cambridge, Ohio.111
- Carin A and B R Sund (1964), Teaching Science through Discovery, Charles E. Merrill Books Inc.,
- Columbus Ohio. 11. Ralph Martin, Colleen Sexton, Kay Wagner, Jack Gerlovich (2000) Science for All Children: Methods for Constructing Understanding, Allyn and Bacon, London.

- School Science Review, The Association for School Education, College Lane, Hatfield, Hertfordshire, AL 109 AA, UK.
- Physics Education, Institute of Physics Publishing, Dirac House, Temple Block, Bristol BS1 6BE, UK.
- Physics Teacher, American Association of Physics Teachers, Department of Physics and Astronomy, University of Maryland, College Park, MO 20742.
- Kamala Mukunda, 2009. What did you ask at school today? A Handbook on Child Learning.
- Donald Schon,(1983) The reflective practitioner, How professionals think in Action Basic Books, ISBN 0465068782
- Donald A. Schon, (1987) Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions. San Francisco, Jossey-Bass, 1987 ISBN: 978-15-5542-220-2

CPS#M 1: PEDAGOGY OF MATHEMATICS

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The Student teacher will be able to

- understanding of nature of mathematics and its branches
- ability to analyze the relationship of mathematics within itself and with other subjects
- ability to categorize mathematical knowledge into factual, conceptual, procedural and meta cognitive knowledge
- Appreciates the contributions made by Indian and other country mathematicians contribution
- realizes the importance of aims and objectives of teaching mathematics
- Develops the skill for planning for a unit and a lesson.
- Appreciates the various move in, teaching concepts and generalizations in mathematics

Unit-1: Knowledge about Mathematics

Nature of mathematics- abstractness, preciseness, brevity, language and symbolism; Nature of mathematical propositions- compound propositions, truth values, truth tables, open sentences, logically valid conclusions; Quantifiers- necessary and sufficient conditions(one and two way); structure of mathematics- undefined terms, defined terms, definitions, axioms, postulates and theorem; mathematical theorem and its variants- converse, inverse and contra positive.

Pure and Applied mathematics; branches of mathematics- Arithmetic, algebra, geometry and their diversities; Knowledge of mathematics- Number system, algebraic equations, geometrical pattern, geometrical construction, data handling and mathematization through- observation, conjecturing, hypothesizing, testing and verifying; creation of conceptual knowledge and its importance; creation of procedural knowledge- derivation of laws/ theorems/ generalizations in mathematics

Evolution of mathematics as a discipline; relationship of mathematics among different branches of science; relationship within and among branches of mathematics; Contribution of Indian and other Mathematician- Aryabhata, Bhaskara, Ramanujam, Guass, Euclid, Descarte, Cantor, pythagarous; Organization of Mathematical content- horizontal and vertical linkage (within and between classes IX and X); linkage between upper primary, secondary and senior secondary mathematics.

Unit-2 Aims and Objectives of teaching Mathematics

Aims of mathematics- Cultural, disciplinary, moral, social and utilitarian aims; General objectives of teaching mathematics Vis-a-Vis the objectives of secondary education; Major shifts in classroom teaching (societal and technological influence); characteristics of a good instructional objectives; Writing specific objectives of different content categories in mathematics.

Unit-3 Planning for instruction

Selection of content, content analysis, Writing a unit plan , Preparation of writing lesson plan-writing of specific instructional objectives, identifying learning resources, designing learning experiences, selection of suitable approaches and strategies of teaching as well as assessment techniques; Writing of mathematics unit plan and lesson plan in specific content areas.

Unit-4 Strategies for learning mathematical concepts and Teaching of Generalization

Nature of concepts, types of concept, process of concept formation; Moves in teaching concepts-

a) Exemplar moves- giving examples and non-examples (with or without reasoning); comparing and contrasting; giving counter example

b) Characterization move- defining, stating necessary and/or sufficient condition; concept Attainment Model (Bruner); Advance Organizer Model (Ausubel); Planning and implementation of strategies for teaching various mathematical concepts (secondary level maths)

Teaching by exposition- Moves in teaching generalization:- Introductory move, focus move, objective move, motivation move, assertion move, application move, interpretation move, justification move; Planning for expository strategies of teaching generalization.

Teaching by guided discovery- nature and purpose of learning by- discovery, inductive, deductive, guided discovery strategies, maxims for planning and conducting discovery strategies; planning strategies involving either induction or deduction or both.

Sessional activities:

- Analysis of secondary level mathematics text books to identify various categories of mathematical knowledge presented and its horizontal and vertical linkage among 8, 9 and 10 standard text books.
- Analyzing the structure of mathematics present in selected chapter/unit.
- Writing a unit plan for selected unit
- Writing of specific instructional objectives for selected unit
- writing a lesson plan on selected content area
- Writing a plan for teaching a concept / a generalization using the appropriate moves.

References:

- Butler and Wren (1965), The Teaching of Secondary Mathematics- Fourth Edition, London, McGraw Hill Book company
- Cooney T J and others (1975), Dynamics of Teaching Secondary School Mathematics, Boston: Houghton Mifflin
- Focus Group Report (2005), Teaching of Mathematics, New Delhi, NCERT
- Iglewicz, Boris and Stoyle, Judith (1973), An Introduction to Mathematical Reasoning, New York, the McMillan company
- John Stillwell(1989), Mathematics and its History- undergraduate Texts in Mathematics, Newyork, Springer-Verlag New york Inc
- NCERT, A textbook of Content-Cum-Methodology of Teaching Mathematics, New Delhi, NCERT
- NCERT(2012), Pedagogy of Mathematics- textbook for Two year B.Ed course, New Delhi
- Polya george (1957), How to solve it, Garden city, New york, Doubleday
- Robert B Davis (1984), Learning Mathematics-The cognitive approach to Mathematics Education, Syndey, Croom Helm Australia Pty Ltd
- Servas W and T varga, Teaching school Mathematics- UNESCO source book
- T V Somashekar, G Viswanathappa and Anice James (2014), Methods of Teaching Mathematics,

CPS#BS-1: PEDAGOGY OF BIOLOGICAL SCIENCE

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The Student teacher will be able to

- explain the nature of science
- specify the goals and objectives of science teaching
- demarcate science from other pursuits of knowledge
- get a glimpse of the major turning points in the history of biology
- review the contributions of major biologist
- apply the learning theories in teaching of biological science
- review the science curriculum, syllabus, and text books
- perform content analysis of secondary school biological units
- write instructional objectives using revised taxonomy
- plan and develop unit and lesson plans

COURSE CONTENT:

Unit I: Nature of Science

- Science as a way of thinking: Inquiry, observation, problem-solving, rational thinking, reasoning and scientific attitude; Science as a way of investigation: scientific method, science process skills; Science as an empirical body of knowledge: Structure of Knowledge, Facts, Concepts, principles, Generalisations, theories; Process and Product of Science
- Historical development of biological Science with special reference to those included in the school curriculum; evolution of biological science as a knowledge field; theories contributing to modern biology (cell theory, theory of evolution by natural selection, gene theory, and homeostasis),
- Contributions of Indian and International biologist to the knowledge domain of biological science, basic branches of biological science and applications of biology to human life.
- Science and technology ; Science and society ; inter-relation between Science and other subjects

Unit II: Theoretical basis of science teaching

- Applying Learning theories in teaching of biological science: process of concept formation; Development of conceptions in Science, Conceptions, alternate conceptions and misconceptions in science.
- Role of prior knowledge in constructing new knowledge (Ausubel), Piaget's theories of learning (schema- disequilibrium), Vygotsky's theories-role of language, ZPD and scaffolding in learning, Van Glasersfeld's theory; Spiral curriculum and discovery learning (Bruner),
- Metacognition, development of constructivist practices in science teaching, conceptual change model of teaching.

Unit III: Biological Science Curriculum

- Aims of teaching biological science in secondary schools
- Recommendations of major commissions and policies on science teaching
- The school science curriculum with regard to NCF: major themes in secondary school science
- Brief study of famous curricular reform projects such as Nuffield, BSCS, and Project 2061
- Biological science syllabus of secondary schools
- Analysis of science text books

Unit IV: Planning for Biology Teaching

- Content Analysis; An analysis of the major themes of secondary school science (facts, concepts, laws, theories); Concept mapping: role and procedure, studying linkages between concepts within the same subject and across subjects
- Objectives of teaching science using revised Bloom's taxonomy: Knowledge domains and cognitive processes, Types of knowledge- factual, conceptual, procedural and metacognitive knowledge, and action words.
- Principles of teaching biological science: Science as inquiry, development of process skills of Science, scientific attitude and critical thinking, relating Science to daily life, Science and society.
- Unit plan and Lesson plan: stating objectives, selecting the content, designing learning experiences, selecting approach/strategy, questioning, assessment and evaluation.

Sessional Activities

- Developing timelines of development of biological knowledge/contributions of biologist
- Historical development of Science concepts- Poster presentation/concept maps
- Analysis and presentation of biological theories and models
- Timelines of current trends and future predictions of biological science
- Background readings on history of science, philosophy of science
- Observation of a biology classroom
- Exploring common misconceptions in Physical Science by observing Science classes or interviewing Science teachers/ from VIII and IX textbook
- Viewing and discussion on documentary on various biologist
- Performing textbook analysis using specified criteria
- Analysis of secondary school science textbook
- Content analysis of selected secondary school biology unit
- Concept analysis and mapping of the selected unit in biology
- Critical review of a few curricular reforms
- Developing a unit plan for a selected biology unit
- Lesson planning using various approaches including BSCS 5E model

References

- Amanda Berry, et.al. (2015). Re-examining Pedagogical Content Knowledge in Science Education (Teaching and Learning in Science Series). Routledge: New York
- Carin A and B R Sund (1964), Teaching Science through Discovery, Charles E. Merrill Books Inc.,
- David Sang & Robert Frost (2005). Teaching Secondary Science Using ICT
- DK Publishing (2013). Timelines of Science
- Don P. Kauchak, & Paul D. Eggen (2013). Introduction to Teaching: Becoming a Professional (5th Edition)

- Ernst Mayr (1985).The Growth of Biological Thought: Diversity, Evolution, and Inheritance
- J. A. Cover, Martin Curd, & Christopher Pincock (2012).Philosophy of Science: The Central Issues (Second Edition)
- Jeffrey Bennett (2014). On Teaching Science: Principles and Strategies That Every Educator Should Know. Big Kid Science: Boulder,CO
- John Gribbin. (2004).The Scientists: A History of Science Told through the Lives of Its Greatest Inventors. Random House: New York
- Judith Bennett (2003) Teaching and Learning Science: A guide to recent research and its applications, Continuum, London.
- Lois N. Magnier (2002).A History of the Life Sciences, Revised and Expanded
- Michael F. Fleming (2002).Biology Teacher's Survival Guide: Tips, Techniques & Materials for Success in the Classroom
- Michael Reiss (2012). Teaching Secondary Biology (As Science Practice). Hodder Education: London
- Nathan S Washton (1967). Teaching Science Creatively, Saunders Company, London.
- National Curriculum Framework 2005, NCERT, New Delhi.
- Novak D J and D Bob Gowin (1984) Learning how to learn, Press Syndicate of the University of Cambridge, Ohio.111
- BSCS (2009)The Biology Teacher's Handbook, 4th Edition
- Ralph Martin, Colleen Sexton, Kay Wagner, Jack Gerlovich (2000) Science for All Children: Methods for Constructing Understanding, Allyn and Bacon, London.
- Robert J. Marzano.(2007). The Art and Science of Teaching: A Comprehensive Framework for Effective Instruction (Professional Development). ASCD:Alexandria, VA
- Rodger W. Bybee, et.al. (2007). Teaching Secondary School Science: Strategies for Developing Scientific Literacy (9th Edition)
- Sally McKeown (2012). Brilliant Ideas for Using ICT in the Inclusive Classroom. Routledge:New York
- Samir Okasha (2002).Philosophy of Science: A Very Short Introduction. Oxford University Press:Oxford
- Sandra K Abell& Mark J Volkmann. (2006). Seamless Assessment in Science: A Guide for Elementary and Middle School Teachers
- Stephen P. Gordon. (2003). Professional Development for School Improvement: Empowering Learning Communities
- Steve Alsop, Keith Hicks (2007). Teaching Science: A Handbook for Primary and Secondary School Teachers, Kogan Page, New Delhi.
- Susan Loucks Horsley et.al. (2009). Designing Professional Development for Teachers of Science and Mathematics. Sage:New Delhi
- Thomas S. Kuhn (2012). The Structure of Scientific Revolutions: 50th Anniversary Edition. University of Chicago Press:Chicago
- WestEd, & WGBH Boston (2003).Teachers as Learners: A Multimedia Kit for Professional Development in Science and Mathematics

EPC-1: CRITICAL UNDERSTANDING OF ICT

Credits: 4 (3L+ 0T +1P)

Contact hrs per week: 5

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives

The student teacher will be able to:

- Appreciate the historical, current and future trends in ICT and its implications to education
- Explain the meaning of ICT and its application in Education
- Demonstrate an understanding of the computer hardware and software fundamentals
- Use various digital hardware and software for creating resources and providing learning experiences
- Use a word processor, spread sheet, drawing and presentation software skillfully and intelligently to produce various teaching learning resources for educational use
- Use internet technologies efficiently to access remote information, communicate and collaborate with others
- Model collaborative knowledge construction using various web 2.0 tools and technologies
- Design and develop technology integrated learning experiences using ICT tools
- Develop skills in using various e-learning and e-content tools and technologies
- Plan, develop, and use multimedia based learning content using open source authoring software
- Use ICT for designing learning experiences using innovative pedagogical approaches
- Explain the role of ICT in authentic and alternative assessment
- Understand the social, economic, security and ethical issues associated with the use of ICT
- Appreciate the scope of ICT for improving the personal productivity and professional competencies
- Appreciate the use ICT in improving educational administration
- Explain the emerging trends in information and communication technology

COURSE CONTENT:

Unit I: ICT and Education

- Information and Communication Technology: meaning and nature. Learning theories and its implications for ICT integration in education. National ICT policy, curriculum and schemes
- Historical account of the development of various educational media (audio, print, video, storage, display, projection)
- Role of technology in emerging pedagogical practices. Visual literacy, media literacy, and new media literacy
- Computer hardware fundamentals, computer network-LAN, WAN and Internet. Software –

meaning and types: proprietary software and open source software, System software and application software

- Emerging Trends in ICT and its educational applications: Augmented reality, e-books and rhizomatic learning, learning analytics, ubiquitous computing and mobile learning, Game based learning, cloud computing and software as service, 3D printing, and marker space

Unit II: E-content and e-resources

- Educational applications of word processing, spreadsheet, presentation, and drawing tools – diagrams, concept maps, timelines, flow charts.
- Reusable Learning Objects (RLO), e-content standards, authoring tools- open source and proprietary alternatives
- Multimedia: meaning and types, multimedia tools-audio editing, video editing, screen casting, graphic editing, basics of animation, and creating interactive media. Evaluation of multimedia resources.
- Open Educational Resources – Meaning and importance, various OER initiatives, creative common licensing
- Locating internet resources – browsing, navigating, searching, selecting, evaluating, saving and bookmarking
- Use of digital still and video camera, digital sound recorder, scanner, printer, interactive white board, visualizer, and multimedia projector for creating and using multimedia resources

Unit III: ICT and Pedagogy

- Techno pedagogical content knowledge (TPCK). Approaches to integrating ICT in teaching and learning
- Web 2.0 tools for creating, sharing, collaborating, and networking: Social networking, social book marking, blog, wiki, instant messaging, online forums/discussion groups and chats, and media streaming.
- E-learning: concept, types, characteristics, e-learning tools and technologies, Learning Management Systems (LMS)
- Subject specific ICT tools for creating and facilitating learning. Designing technology integrated authentic learning designs and experiences
- ICI integrated Unit plan – Web 2.0 for creating constructivist learning environment
- Technology for pedagogical innovations: web quest, PBL, virtual tours, MOOC, flipped classroom
- Assistive technology for special needs and inclusion: tools and processes, ICT and Universal design for Learning (UDL)

Unit IV: ICT for Assessment, Management, and professional development

- ICT and Assessment: e-portfolio, electronic rubrics, online and offline assessment tools – rubrics, survey tools, puzzle makers, test generators, reflective journal, and question bank. Use of web 2.0 tools for assessment,
- ICT for professional development - tools and opportunities: electronic teaching portfolio, web 2.0 technologies, technology and design based research, ICT for self-directed professional development, web conferencing, role of OER and MOOCs
- ICT for personal management: email, task, events, diary, networking. ICT for educational administration: scheduling, record keeping, student information, electronic grade book, connecting with parents and community, school management systems.

- Managing the ICT infrastructure: software installation, troubleshooting of hardware, seeking and providing help, storage and backup, updating and upgrading software
- Computer security: privacy, hacking, virus, spy ware, misuse, abuse, antivirus, firewall, and safe practices, fare use and piracy

Sessional activities

- Hands on experience in setting up a desktop PC and working with various input devices, output devices, storage devices, and display devices
- Using word processor, spread sheet, drawing and presentation software to produce various teaching learning resources and sharing it online
- Locating internet resources – navigating, searching, selecting, saving, evaluating(use standard internet evaluation criteria), and bookmarking using social bookmarking
- Creating digital concept maps, flow charts, timelines, and other graphics for a particular content
- Creating screen cast video and podcast of a lesson
- Shooting, editing, and sharing of videos segment on any educational topic
- Creating account in YouTube/slide share and sharing the video/presentation. View and comment on others contributions
- Creating account in wikispace/wikipedia/mediawiki and adding/editing content
- Developing an educational blog in www.blogger.com, www.wordpress.com, or www.edublog.com
- LMS experience- hands on various features of LMS – the ICT course may be provided through LMS
- Enrolling and completing some MOOC courses of interest
- Creating resources for flipped classroom and Practicing flipped learning in school during internship
- Evaluating OER resources. Creating and sharing OER materials- may be in NROER
- Developing technology integrated unit/lesson plan and trying out this in the school during internship
- Hands on experience on subject specific software tools like Geogebra, PhET
- Developing a multimedia e-content for a topic using eXe Learning
- Field visit to the Edusat center and take part in teleconferencing
- Planning and creating digital rubrics for any topic and create an e-portfolio
- Organize web conferencing using Skype or any other tools
- Review of ICT labs (plans and equipments/resources) in school from internet
- Interview of computer hardware engineer/ICT specialist regarding Hardware planning, evaluation, maintenance and up gradation
- Readings on emerging ICT trends in education
- Review of national ICT policy and curriculum
- Using FOSS tools for timetabling, grade sheet

References:

- Andrew A Kling(2010).Web 2.0 (Technology 360). Lucent Books : New Delhi.
- Andrew M. St. Laurent. (2004). Understanding Open Source and Free Software Licensing. Oreilly:Cambridge
- Athanassios Jimoyiannis (Editor) (2011). Research on e-Learning and ICT in Education. Springer: USA

- Barbara B. Levin, Lynne Schrum.(2012). Leading Technology-Rich Schools (Technology & Education, Connections (Tec). Teachers College Press: New York
- Bharihok Deepak. (2000). Fundamentals of Information Technology. Pentagon Press: New Delhi
- Bruce M. Whitehead, Devon Jensen, Floyd A. Boschee.(2013). Planning for Technology: A Guide for School Administrators, Technology Coordinators, and Curriculum Leaders. Corwin: New Delhi
- Cambridge, D.(2010). E-Portfolios for Lifelong Learning and Assessment. John Wiley and Sons
- Christopher Moersch(2009). Beyond Hardware-Using Existing Technology to promote Higher-Level thinking. Viva Books: New Delhi.
- Conrad, Keri (2001). Instructional Design for Web based Training. HRD Press
- Costantino, P.M., DeLorenzo, M.N., Kobrinski, E.J. (2006). Developing a professional teaching portfolio: a guide for success. Pearson
- Crumlish Christian (1999). The Internet No Experience Required. BPB Publications: New Delhi
- Curtis J. Bonk (2011). The World Is Open: How Web Technology Is Revolutionizing Education. Jossey- Bass: San Francisco
- Imison, T., Taylor, P.H. (2001). Managing ICT in the Secondary Schools. Heinemann: Oxford
- James, K.L. (2003). The Internet: A User's Guide. Prentice Hall of India Pvt.Ltd: New Delhi
- Jane Hunter (2015). Technology Integration and High Possibility Classrooms: Building from TPACK
- Jean-Eric Pelet (2014). E-Learning 2.0 Technologies and Web Applications in Higher Education (Advances in Higher Education and Professional Development (Ahepd)). Idea Group: U.S.
- Liz Arney (2015.) Go Blended!: A Handbook for Blending Technology in Schools
- Loveless Avril(2001). ICT-pedagogy and the curriculum-Subject to change. Routledge Falmer: London.
- Lynne Schrum, Barbara B. Levin. (2010). Leading 21st-Century Schools: Harnessing Technology for Engagement and Achievement. Corwin: New Delhi
- Manojkumar Dash(2010). ICT in teacher development. Neelkamal Publications: New Delhi.
- Mary Webb and Margaret Cox (2014). Information and Communication Technology- Assessment for Learning in the ICT Classroom (Inside the Black Box). Learning Sciences :US.
- M. D. Roblyer, Aaron H. Doering (2012). Integrating Educational Technology into Teaching (6th Edition)
- Michael Thomas (2009). Handbook of Research on Web 2.0 and Second Language Learning. Information Science Reference: US.
- Rena M. Palloff, Keith Pratt (2011). The Excellent Online Instructor: Strategies for Professional Development. Wiley: San Francisco
- Ronghuai Huang and Kinshuk(2014). ICT in Education in Global Context: Emerging Trends Report 2013-2014 (Lecture Notes in Educational Technology). Springer: New York.

- Rosemary Papa.(2010).Technology Leadership for School Improvement. Sage: New Delhi.
- Sarkar, S.K. & Gupta, A.K. (1998). Elements of Computer Science. S.Chand& Company: New Delhi
- Semenov, Alexy (2005). Information and Communication Technologies in Schools. A handbook for Teachers. UNESCO
- ShalinHai-Jew. (2012). Open-Source Technologies for Maximizing the Creation, Deployment, and Use of Digital Resources and Information. Information Science Reference:USA
- Theodore Lee (2008). Professional Development of ICT Integration for Teachers.VDM Verlag : Germany.
- W.J. Pelgrum and N.Law(2003). ICT in Education around the world-Trends, Problems and Prospects. UNESCO: Paris.
- Viva Lachs (2000). Making Multimedia in the Classroom-A Teacher's Guide. Routledge Farmer :London.

EPC-2: READING AND REFLECTING ON TEXT

Credits: 2 (1L+ 1T +0P)

Contact hrs per week: 3

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives

The student teacher will be able to:

- Understand the meaning, process, importance and characteristics of reading.
- Understand and apply different levels, types, techniques and methods of reading.
- Acquaint with the skills of reading different types of texts.
- Develop different types of reading skills through various activities and met cognition
- Learn the skills of reading comprehension and to enhance vocabulary.
- Acquaint with the problems of reading across curriculum.

COURSE CONTENT

Unit I: Introduction to Reading

Reading – Meaning and Process, Importance of Reading across Curriculum, Characteristics of Reading, Developing reading skills. Role of libraries in promoting reading habits

Unit II: Techniques and Methodology of Reading

Levels of reading – literal, interpretative, critical and creative, Types of reading – intensive and extensive reading, oral & silent reading, Reading techniques – skimming and scanning. Methodology of reading

Unit III: Reading the Text

Types of Texts – Narrative, expository, descriptive, suggestive, empirical, conceptual, ethnography, policy documents, field notes; Importance of Different Texts in Curriculum

Unit IV: Developing Reading Skills and Reading Comprehension

Developing Critical Reading Skills, Developing Reflective Skills, Activities for Developing Reading Skills, Developing Met cognition for Reading, Developing Reading Comprehension
Developing Vocabulary for Reading, Problems of Reading

Sessional activities:

- Divide the class in small group and provide different kinds of texts and instruct them to read and reflect according to the nature of text.
- Divide the group and provide one text and suggest students to make different interpretations.
- Design vocabulary games to enhance vocabulary.
- Read the text and provide a five words summary to each paragraph.
- Reading and comprehension exercises.
- Skim through the text and give suitable title to the text.
- Complete given text in stipulated time and summarize it in 6/7 lines with a suitable title.
- Making an oral presentation

- Organizing a debate, discussion based on their reading
- Preparation of a poster
- Making a collage
- Displaying appropriate texts/graphic on bulletin board
- Addressing morning assembly during their internship in schools
- Making a power point presentation on selected topic
- Submission of written articles/assignments
- Writing maintaining reflective journals

*** In addition, school and community based activities may be organized with provisions for visits to innovative centres of pedagogy and learning, innovative schools, educational resource centres, etc. Action research based on teaching learning and school and community could be conducted.**

References:

- Bright, J.A., and McGregor, G.P. (1970). *Teaching English as a Second Language*. ELBS: Longman.
- Doff, A. (1988). *Teach English: Training Course for Teachers*. Cambridge: Cambridge University Press.
- Hill, L.A., and Dobbyn, M.A. (1979). *Training Course, Trainer's Book*. London: Cassell.
- Hubbard, P., and Hywel, J. et al (1983). *A Training Course for TEFL*. Oxford University Press.
- Joseph, K.S. (2004). *Self Instruction in English Grammar and Figures of Speech*. Vadodara: Gold Rock Publications.
- Mukalel, J.C. (1998). *Approaches to English Language Teaching*. New Delhi: Discovery publishing house.
- Mukalel, J.C. (1998). *Creative Approaches to Classroom Teaching*. New Delhi: Discovery publishing house.
- Mukalel, J.C. (1998). *Psychology of Language Teaching*. New Delhi: Discovery Publishing House.
- Mukalel, J.C., and Ahmed, S. B. (1984). *Teaching English in India*. New Delhi: Arya Book Depot.
- Nagaraj, G. (1996). *English Language Teaching Approaches, Methods and Techniques*. Calcutta: Orient Longman.
- Richard, J.; Theodore, S. and Rodgers, T.S. (1968). *Approaches and Methods in Language*. Cambridge University Press.
- Venkateswaran, S. (1995). *Principles of Teaching English*. New Delhi: Vikas Publishing House.
- Wilkins, D.A. (1982). *Linguistics in Language Teaching*. London: Edward Arnold.
- Willis, J. (1981). *Teaching English through English ELBS*. England: Longman Ltd.
- Yule, G. (1985). *The Study of Language*. Cambridge: Cambridge University Press.
- My experiments with the truth – *Autobiography of Mahatma Gandhi*
- The Little Prince – *Antain de Saint* – Exupery
- Cultural Heritage – Dr. S. Radhakrishnan
- Periodicals Like – Outlook, India Today, Economic and Political Weekly, Business Today, Journals of Education, Organizer – weekly
- Recognizing Different Types of Text

Web Resources

- <http://www.bbc.co.uk/skillswise/factsheet/en03text-11-f-different-types-of-text>
- Models of Reading Process
- <http://people.ucalgary.ca/~mpeglar/models.html>
- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3001687/>
- <http://www.tarleton.edu/Faculty/gentry/reading%20models.html>
- Reflective Skills
- <http://www.skillsyouneed.com/ips/reflecting.html>
- <http://www.skillsyouneed.com/ps/reflective-practice.html>

ENGAGEMENT WITH FIELD School attachment programme -1 (SAP-1)

Credits: 2 (0L+ 0T+ 2P)

Contact hrs per week: 2 weeks

Marks: 100

C1 + C2: 30

C3: 70

DEVELOPMENT OF STUDENT TEACHERS CONTEXTUAL KNOWLEDGE

School attachment programme-1 intends to develop awareness about the functioning of school and experience in totality. It also intends to connect the theoretical understandings and substantiating perspectives studied in the teacher education courses through real class room situations. This will be carried out in **upper primary** as well as in **secondary schools**.

Objectives

The Student teacher will be able to

- Develop an awareness about the functions of school and its role in the development of learners
- Develop an insight into the multiple roles of a teacher
- Develop an awareness of inclusiveness in the school settings
- Understand learners coming from diverse backgrounds
- Analyze the availability of physical and learning facilities which function as the curriculum resources at secondary level.

The student teachers will be briefed about the purpose of visiting schools and their role and the tasks to be performed during two weeks of their attachment to the schools identified in the neighbourhood. The student teachers will be attached to the upper primary schools for first one week and to the secondary schools in the second week.

The student teachers will perform the activities listed below and prepare reflective diary and the reports on the tasks performed separately level wise. They will present their reports in the seminar organized after the completion of school attachment programme. During the school attachment programme, the student teachers will hold discussion meetings at the end of each day with their peer groups and share their observations and experiences. Some regular teachers may be identified as mentors to whom 4 to 5 student teachers are attached. Under the guidance of the mentors, the student teachers will observe the school activities and learn all aspects of school functioning, rules and regulations, conduct of meetings with staff and parents etc.

During this phase student teachers are expected to begin developing their own understanding about school environment, facilities available in school, learners and their learning context, teachers' roles & responsibilities in the school contexts. Student teachers gain understanding being into actual school environment by observation, gathering information and interaction with students, teachers and school Head.

The following tasks centered on school, learner contexts and teacher context are suggested to be carried out by student teachers in this phase.

Suggested Tasks: (Upper primary + secondary)

- Study of the school profile: (Board-CBSE, State, Government aided: Single or Co- education); collect information on history and background of the school
- Study of the infra structure of the school and the available facilities (Building, play ground, , number of class rooms, toilets, rest rooms etc.) and teacher- pupil ratio
- Study of the availability of facilities and resources catering to curriculum transaction at upper primary and secondary levels - labs, library, activity rooms, learning resources, art and craft resources and resources for physical education and yoga
- Study of the School environment – Physical safety and appeal; environment friendly; cleanliness; overall appearance catering to value development
- Study of the facilities and scope for inclusiveness in school environment
- Study of the school as an organization: Observe the school activities and its functioning from morning assembly till the end of school hours.
- Study of the school calendar, time table, school magazine etc.
- Study of the Guidance and Counseling programmes in school
- Study of the various clubs in school and their functions; NCC; Guides/Scouts etc.
- Analysis of the health programmes implemented in school.
- Study of the practices of mid -day meal programme.
- Shadowing a teacher trying to understand the day routine of a teacher.
- Interaction with teachers as well as observe them to learn about their multiple roles in school functions and programmes.
- Study of the functional relationship between head of the institution and teachers; teachers and

administrative staff; and among teachers itself

- Observation of classes to understand the learning processes ; Study the learners coming from diverse back grounds and their interaction in class rooms - social context of learners; Individual differences; learning facilities for Inclusive children
- Observation of learners in various contexts (participation in school activities, play ground, lunch time, participatory role in school functioning, maintenance of class room and school surroundings, responsibilities taken in various club activities etc.)
- 17. Study of the role of community participation in school development and also the role of teachers in community development (role of SDMC in school improvement; ; meeting held with SDMC members; PTA meetings; role of health centres)

Records to be submitted for assessment

- **School Profile** (activities – 1 to 5)
- **Functions and activities of school** (activities- 6 to 11)
- **Role and responsibilities of teachers** (activities - 12 to 14)
- **Learners' diversity** (activities -15 to 16)
- **Role of community participation in school functioning** (activity 17)

* The activities will be assessed for C1 and C2

* Viva-voce on the selected activities (For C3)

SEMESTER II

PC-3: LEARNING AND TEACHING

Credits: 4 (3L+ 1T +0P)

Contact hrs per week: 5

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The student teacher will be able to:

- Gain the knowledge about the scientific knowledge about the process of learning.
- Understands the Conditions Essential for Facilitating Learning and Retention.
- Apply the Principles and Strategies of Major Approaches to Learning in Classroom Environment.
- Understands the Process of Effective Teaching and Qualities of Effective Teachers.
- Understands various Approaches to Teaching and will be able to apply them in the relevant situations.
- Understands the Principles and Strategies for Creating Conducive Classroom Environment.
- Appreciates the role of a teacher as leader, organizer, a facilitator & a humane reflective practitioner.
- Realize the difficulties in learning and teaching.

COURSE CONTENT

Unit I: Concept and Nature of Learning

- Concept and Nature of Learning
- Factors Associated with Learning
- Maxims of Learning and their Educational Implications
- Approaches to Learning(Concept, Associated Concepts Basic Principles and Educational Implications)-Habitual Learning, Associative Learning (Classical and Instrumental Conditioning), Spatial Learning/Cognitive Maps, observational Learning, Learning by Insight, Information Processing Approach, Humanistic Approach, Constructivist Learning Approach
- Types of Learning-Concept Learning, Skill Learning, Verbal Learning, Learning of Principles and Problem Solving(Meaning, Nature, Stages, Principles and Approaches/Strategies)

Unit II

- Attention-Meaning, Factors Influencing Attention, Strategies for Enhancing Attention;
- Perception-Meaning, Laws of Perceptual Organization (Gestalt Psychologists' View) and Educational Implications.
- Process of Memory- Sensory Registration, Retention(Storing), Recognition, Recall;

- Factors Influencing Retention; Strategies for Enhancing Memory.
- Transfer of Learning- Concept, Types, Theories; Strategies for Enhancing Positive Transfer of Learning
- Achievement Motivation- Concept, Intrinsic and Extrinsic Motivation; Strategies for enhancing Achievement Motivation in Students.

Unit III: Understanding the process of Teaching-Learning

- Various Approaches to Teaching: Behaviourist, Cognitivist, Constructivist, Connectionist, Participatory, Cooperative, Collaborative, Personalized, and Holistic
- Teacher as a Facilitator and Guide/Philosopher/Friend
- Teachers commitment towards fulfilling Felt Need of Learners
- Professional Characteristics of Teacher in Classroom Management.
- Skills & Competencies of a Teacher Communication: Meaning, mode::input/process/output
- Basic Model of Communication: Sender, Message, Medium, Receiver & Reach;Factors facilitating communication
- Effective Classroom Management-Principles and Strategies
- Leadership Qualities in Teachers

Unit IV: Teacher and Teaching as a profession

- Teaching as a Profession
- Teaching as an Art and Science.
- Understanding the Process of Teaching as a Profession
- Identifying the need and importance of classroom teaching-learning
- Reflective teaching
- skillful teaching
- Applying the knowledge of Maxims of Teaching
- Role of teacher in identifying classroom related problems

Sessional activities

- Conducts Projects on –
- Identifying the Learning Difficulties of Students in Different School Subjects and the Possible Reason for them;
- Providing Remedial Instruction to the Students with Learning Difficulties;
- Study the Qualities of Effective Teachers through observation, interview, case study etc.,
- Visiting Model Schools and Prepare Reports

References:

- Benjamin S., Bloom et al. (1964). *Taxonomy of educational objectives*. Longman Group.
- Bruce Joyce (1985) *Models of teaching* (2nded.) Prentice Hall.
- Encyclopaedia of Modern Methods of Teaching and Learning (Vol. 1-5).
- Gage N.L. *Scientific Basis of art of Teaching*
- Gavriel Salomon (1981) *Communication and education* Sage.
- Lieberman, M. (1956) *Education as a profession*. Prentice Hall, Inc.
- Karthikeyan, C. (2004). *A Text book on instructional technology*, RBSA.
- Kumar, S. (2014). *Child Development and Pedagogy*, Pearson.
- Ohles, J.F. (1970). *Introduction to Teaching*. New York: Random House, INC.
- Siddiqui, Mujibul Hasan (2005). *Techniques of classroom teaching* A.P.H
- Skinner, E.C.(1984). *Educational Psychology*. 4th Edition. New Delhi: Prentice Hall of India Pvt. Ltd.
- Snowman & Baihler (2006). *Psychology Applied to teaching*. Boston: Houghton Mifflin Company.
- Stephens, L.M. & Evans, E.D. (1973). *Development and Classroom Learning: An Introduction to Educational psychology*. New York: Holt, Rinehart and Winston, Inc.
- Tanner, L.N. & Lindgren, H.C. (1971). *Classroom Teaching and Learning*. New York: Holt, Rinehart and Winston, Inc.

Web Resources

- Courses on Communication Skills, <http://nptel.ac.in/courses/109104030/>
- Jane Ciumwari Gatumu, Reflective Teaching, <http://oer.avu.org/bitstream/handle/123456789/155/REFLECTIVE-TEACHING.pdf?sequence=1>
- School leadership (2011), <http://azimpremjifoundation.org/pdf/learning-curve-16.pdf>

CPS-1: LANGUAGE ACROSS CURRICULUM

Credits: 4 (3L+ 1T +0P)

Contact hrs per week: 5

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The student teacher will be able to:

- Understand nature, function and role of different kinds of languages in curriculum transaction
- Acquaint with obstacles in language usage while using the language and ways to overcome them.
- Understand importance and use of first and second language, multilingualism and impact of culture.
- Acquire knowledge about the communication process and verbal and nonverbal communication skills.
- Familiarize the students with of barriers to (Listening, Speaking, Reading, Writing) LSRW skills and activities for developing these skills.

- **COURSE CONTENT :**

Unit I: Nature and Functions of Language

Language – Meaning and Concept, Functions of Language, Role of Language in Curriculum Transaction, Theories of Language Learning, Barriers in Using a Language & Strategies to Overcome them, Verbal and Non-verbal communication

Unit II: Language across Curriculum in the Indian Context

Language as a determinant of Access, Language proficiency and students' attitude towards Learning and Schooling/ dropouts, Language/oral proficiency and critical thinking

Unit III: Strategies for Multilingual Classrooms

Role Plays and Discussions as tools for learning, 'Questioning' to stimulate thought and to encourage and motivate to respond, Preparing Subject/content based exercises in reading, comprehension and usage, Sensitizing, Reflecting and Facilitating, Understanding the learner and his/her language background, Creating sensitivity to the language diversity, Using oral & written language in the classroom for optimal learning

Unit IV: Developing Receptive Skills and Productive Skills

Barriers to Listening Skills, Activities for Developing Listening Skills, Barriers to Reading Skills, Activities for Developing Reading Skills, Barriers to Writing Skills, Activities for Developing Writing Skills, Need and Importance of Classroom Discourse. Barriers to Speaking Skills, Activities for Developing Speaking Skills

Sessional activities

- School Visit to Find out Communication Problem/Apprehension in Students
- Designing Games and Exercises for Developing Listening, Speaking, Reading and Writing Skills

- Assignments on Developing Writing Skills- Summary, Letter, Paragraph, Essays, Speech
- Assignments on Developing Speaking Skills – Oral Presentations, Debate, Elocution, Discussion, Brain-storming
- Assignments on Developing Listening Skills – Listening to speech, directions

* In addition, school and community based activities may be organized with provisions for visits to innovative centres of pedagogy and learning, innovative schools, educational resource centres, etc. Action research based on teaching learning and school and community could be conducted.

References:

- Akmajian, A. et al. (2010). *Linguistics: Introduction to Language and Communication*. (6thed.). Cambridge: MIT Press.
- Fasold, R. & Connor-Linton, J. (2013). *An Introduction to Language and Linguistics*. (6thed.). Cambridge: Cambridge University Press.
- Floyd, K. (2009). *Interpersonal Communication*. New York: McGraw Hill Companies Inc.
- Fromkin, V., Rodman, R. & Hymes, N. (2011). *Introduction to Language*. (9thed.). Canada: Cengage Learning.
- Pearson, J.C. et al (2011). *Human Communication*. (4th ed.). New York: McGraw Hill Companies Inc.

Web Resources

- First and Second Language Acquisition – A Brief Comparison.
- Retrieved from https://www.uni-due.de/ELE/FLA_SLA_brief_comparison.pdf
- Similarities and Differences between First and Second Language Acquisition
- Retrieved from <http://multilingualism.pbworks.com/w/page/21913433/Similarities%20and%20Differences%20between%20First%20and%20Second%20Language%20Acquisition>
- Activities for Developing Speaking Skill
- Retrieved from <http://faculty.weber.edu/ppitts/ed4320/Handouts/speakingskills.htm>
- <http://www.educ.ualberta.ca/staff/olenka.Bilash/best%20of%20bilash/speaking.html>
- Activities for Developing Listening Skill Retrieved from
- <http://www.educ.ualberta.ca/staff/olenka.bilash/best%20of%20bilash/listening.html>
- <https://blog.udemy.com/listening-skills-exercises/>
- Learning curves: Language Education (2009), by Azim Premji Foundation <http://azimpremjifoundation.org/pdf/LCIssue13.pdf>
- Courses on Communication Skills, <http://nptel.ac.in/courses/109104030/>

CPS#ENG-2 : PEDAGOGY OF ENGLISH

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The Student teacher will be able to

- understand classroom strategies and techniques to be employed in teaching English Language
- comprehend the nuanced subtleties of a political and social vision of language teaching
- develop the ethic of radical individualism, an ethic that positions the classroom as a privatized space and teachers as autonomous, self-developing individuals
- develop a meaningful framework within which individual exercises or readings could be placed
- understand and promote the presence of multicultural voices in the teaching of language
- promote pedagogical inquiry requiring an ongoing process of discovering-and responding to-revisionary possibilities

COURSE CONTENT:

Unit I: Language Processes and the Classroom Context

Academic language and oral language in classrooms; Participation in the classroom; Facilitating language interaction and independence. Promoting classroom environment of confidence for language use;

Space for “risk taking”; Reading:

Introducing and engaging with books of different types; Comprehension of stories and non-fiction (content area texts); Understanding and appreciating literature:

Reading- its aesthetic and emotive aspect; Writing as a composing process: Problem solving, developing a sense of audience, purpose, and understanding the process of writing.

Teaching prose- overview of the principles, aims and objectives and methodology of teaching literature as a subject- text selection, canon-formation and problems of representation- approaches and techniques for teaching prose fiction like short story and novel- selection of appropriate material and teaching strategies for different elements-- selection of appropriate materials and teaching strategies for different elements of narrative and style—focus on links between reading and writing – teaching prose for literary development, cultural literacy and creative and critical thinking.

Unit II: Examining the language curriculum

- Role and significance of Curriculum and syllabus.
- Syllabus of different languages; Review of textbooks, use of literature in language
- textbooks, critical analysis of exercises and; Moving beyond the textbook: Children’s
- literature for different age groups; Classroom practices in India
- Introduction of approaches and techniques for teaching poetry-- material and teaching areas for different elements of poetry-- links between reading and writing about poetry-- teaching of poetry for literary development, cultural literacy and creative and critical thinking.
- **Preparing lesson plans based on NCERT textbooks from Class VI to IX and transacting them in the classroom. This would be followed by peer assessment**

Unit III. Planning for teaching and assessing English language

- *Skills of teaching language* (Introduction; reading and writing skills; questioning-techniques of questioning; using visual and audio devices; stimulus variation, scaffolding; handling of pupils responses; skills used for developing language skills in learners; expression skills etc)
- Teaching of a complete lesson using constructivist principles and skills
- Continuous assessment in Language learning
- Assessment of all the linguistic skills, categories and classifications of assessment process, maneuvers of languages- negotiations, making requests, skills of persuasion, arguments, debates and deliberations, developing suitable scoring mechanisms
- Various ways of assessing literature—assessing essay and extended essay writing, project work and portfolio assessment; construction of different types of test items in Language learning; criteria for assessing different types of test items in Language learning, analysis of question papers in Language at secondary level.
- Need for reflection on one’s own teachign and writing a reflective diary

Unit IV: Challenges in Language Learning

- Issues of non-comprehension; lack of independence in language use; Examining the role of school context in creating difficulties for language learners; Understanding language
- “disability” and the language teacher’s role in dealing with it.
- Language Policies and Politics
- Power, identity, and politics of language; Language as a medium of instruction and debates about English as a medium of instruction; The recommendations of NCF-2005 on language education
- Teaching of Drama: Approaches and techniques—materials and strategies for teaching different elements of drama—links between reading, performance and writing—teaching of drama for literary development, cultural literacy and creative and critical thinking.

Sessional Work:

- Teaching of English lessons by student teachers in simulated conditions integrating skills and various approaches
- Construction of a unit test. Assess the four linguistic skills- effective communication skills in negotiations, making requests, offering suggestions, creative writing etc- development of suitable scoring mechanism.
- Plan for formative assessment using various techniques for a unit
- Writing observation and reflective journals.
- Conducting discussions and debates with peers about the performance.

References:

- National Curriculum Framework, 2005, NCERT
- Position Paper on English, NCERT
- Anderson, Ann and Lynch Tony: Listening, Oxford University Press, 1988
- Baruah T.C : The English teachers Handbook, Sterling publishers Pvt.Ltd. 1984

- Billows F.L: The Techniques of English Language Teaching, Longman Group Ltd., London 1961
- Bright, J.A., and McGregor G.P: Teaching English as a Second Language, ELBS London, 1972.
- Gordon B.S: The Teaching of English in free India, Christian Literature society, Madras, 1960.
- Harris: Testing English, Tata McGraw Hill, Bombay, 1974
- Hornby: Stage 1,2,3 & 4 Teaching of Structural words, Sentence patterns ELBS & OUP, London 1959.
- Hubbard, P., Jones H: Thornton B and Wheeler, R. Training Course for TEFL, Oxford University press

CPS#SS-2 : PEDAGOGY OF SOCIAL SCIENCE

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives

The student teacher will be able to

- To develop comprehensive understanding of different approaches, methods and strategies of teaching social sciences and make use of them in their practice teaching in simulated situation as well as real classroom setting in the schools.
- To develop competencies in teaching social sciences by planning and implementing appropriate lessons in simulated and real classroom situation.
- To design and develop appropriate learning resources including E-content for teaching social sciences.
- To familiarize with different evaluation approaches and devices for assessing students learning in social sciences.
- To be competent in constructing achievement tests in social science, analyze test scores and report the results using appropriate formats.
- To critically analyze the curricular reforms in social sciences at the state and central level.
- To assess and evaluate the teaching and learning processes and their implications in the professional development of social science teachers.

COURSE CONTENT:

Unit I: Approaches to Teaching Social Sciences

- Rationale and evolution of teaching and learning social sciences; Issues and key questions central to teaching social sciences in schools.
- Pedagogical approaches, methods and strategies: Lecture-cum-discussion; Storytelling; Cooperative learning strategies;
- Interactive pedagogies; Constructivist approaches; Project based learning; Social inquiry; Critical pedagogy; Group discussion; Role play; Activity method.

- Skills of teaching: skills involved in ways of introducing a lesson, questioning, types of questions, handling of pupils response, explanation, illustration; skills involved in handling maps, globes, atlas, and other resource materials, scaffolding techniques, and closing the lesson
- Interdisciplinary instruction; Concept mapping; Map based leaning; Field Study; Source method; Biographical method.
- Multiple intelligences teaching strategies; Visual discovery, Social science skill builder, experiential exercises, Problem solving group work.

Unit II: Preparation and Use of Learning Resources in Social Sciences

- Technology as a learning site in social sciences; Preparing and using audio-visual resources for effective teaching: Charts, Models, Maps, Atlas, Graphs, Audio programs, Print media; Worksheets, Self-learning materials;
- Integration of ICT in teaching social sciences: Offline and online digital resources; Using multimedia for teaching social sciences; Websites and virtual tours; Critical analysis of instructional Video or Television program; Development and utilization of E-content, Open Educational Resources, and MOOCs.
- Setting up and using social science room in schools; Effective use of library resources in learning social sciences; Utilization of community resources for teaching social sciences.

Unit III: Assessment of Learning in Social Sciences

- Assessment and evaluation of learning in social sciences – application of different tools and techniques in assessing learning of social science.
- Continuous assessment in social science-methods and tools to be used.
- Construction of achievement test in social sciences; preparation of table of specification/blue print, weightages, scoring key, construction of various types of items
- Analysis of achievement test scores; reporting results of assessment and evaluation; providing feedback to the learners.
- Alternative assessment in social sciences classroom: Rubrics, Portfolio, Projects, Self assessment, Peer assessment, Use of ICT in assessment.

Unit IV: Curriculum Reforms and Professional Development of Teachers

- Curriculum reforms in social sciences: Recent initiatives for reforming school curriculum at the States and the Center and their implications for pedagogical practices; Critical analysis of the reforms in social science curriculum envisaged by NCF 2005.
- Social science teacher as a reflective practitioner; Need for professional development of social science teachers; Avenues for professional development; In-service teacher development programs: face-to-face, distance and online programs; Networking with teachers; Teachers organization; Writing reflective journals.
- Teaching as inquiry: Read and use research and outcome linked evidence; Identify and use best pedagogic practices to achieve prioritized outcomes; Action research in social sciences.

Sessional Activities

- Practice teaching in simulated situation: Plan and execute four lessons, one each in four social science subjects, under the supervision of a mentor, using appropriate teaching approaches and strategies, followed by feedback, and reflection by the student teachers.

- Planning and implementation of a lesson to teach any social science topic to the peer group based on any one of the cooperative teaching or multiple intelligence teaching strategies.
- Preparation of charts, models, worksheets, self-learning materials for teaching the social science lessons planned by the student teachers.
- Development of e-content (Audio or Video program) using the resources in CAL / ET Cell Studio of the Institute.
- Construction of an achievement test in social sciences based on the textbooks of classes VI to X.
- Critical analysis of the reforms in social science curriculum envisaged in the policy documents such as NPE, NCF, and Reports of Commission/Committees on education.
- Visit a school and interview social science teachers and report about their professional development activities.

References:

- Allen, J and Landaker, C. (2004). Reading history: Strategies to improve comprehensions and connections in social studies classes. New York: Oxford University Press.
- Arora, P. (2014). Exploring the Science of Society. Journal of Indian Education, NCERT.
- Batra, P. (2010). Social science learning in schools: Perspectives and challenges. New Delhi: Sage publications India.
- Binning, A. A. and Binning, D. H. (1952). Teaching of social studies in secondary schools. Bombay: Tata McGraw Hill.
- Burz, H. L. and Marshall, K. (1998). Performance based curriculum for social studies: From knowing to showing. Thousand Oaks: Corwin Press, INC.
- Dhamija, N. (1993). Multimedia approaches in teaching social studies. New Delhi: Harman Publishing House.
- Farris, P. J. (2001). Elementary and middle education social studies: An interdisciplinary instructional approach. New York: McGraw Hill.
- George, A. M and Madan, A. (2009). Teaching social science in schools. New Delhi: Sage Publications India.
- Graeme Aitken and Claire Sinnema (2008). Effective pedagogy in social sciences: Best evidence iteration. Wellington: Ministry of Education, Newsland. [Available on www.ibe.unesco.org].
- Jack Zevin (2000). Social studies for twenty-first century: Methods and material for teaching in middle and secondary schools. Mahwah, NJ: Lawrence Erlbaum Associates.
- Mehlinger, H. D. (Ed.) (1981). UNESCO Handbook for Teaching Social Studies. Paris: UNESCO.
- National Policy on Education 1968 and 1986
- National Policy on Education 1986-Programme of Action 1992.
- National Curriculum Frameworks 1975, 1988, 2000 and 2005
- NCERT (2005). Position paper: National Focus Group on Teaching of Social Sciences.
- Root, M. (1993). Philosophy of Social Sciences. Oxford: Blackwell.
- Sartori, G. (Ed.) (1984). Social concepts: A systematic analysis. New Delhi: Sage Publications.

CPS#PS-2: PEDAGOGY OF PHYSICAL SCIENCE

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives

The student teacher will be able to:

- Enable the students to write the unit plans and lesson plan as per the norms of NCF 2005.
- Applying the different teaching methods based on a constructivist point of view.
- Enable the students to observe the lesson systematically.
- Selecting the learning resource and effective use of the same.
- Using of ICT in physical science teaching and learning.
- Explore various assessment strategies for evaluating learning in Physical science.
- Explore various professional development opportunities.
- Plan and conduct action research in secondary schools.
- Identify various teaching- learning resources.
- Develop skills of facilitation as they teach in simulated situations.
- Reflecting the methods in the class.

Unit 1: Planning for teaching Physical science

- Skills of teaching : ways of introducing a lesson; questioning and types of questions; skills involved in explaining; different types of explanations; skills of illustrating and giving analogy; scaffolding; modeling (difficult experiments, handling equipments etc)developing skills of inquiry and higher order thinking abilities, closing the lesson); skills of integrating ICT skills, demonstrating skills etc.)
- Unit and lesson plan writing using different approaches. followed by teaching.
- Need for reflection in teaching and writing reflective diary/journal

Unit II: Learning Resources in Physical Science

- Print resources: science Textbook as a learning resource, Evaluation of NCERT/State science text books using relevant criteria, characteristics of teachers handbooks, resource books, laboratory manuals, science journals and magazines, encyclopedia.
- Developing and using resources such as charts, models, science kits, posters, science parks.
- Science laboratories: designing, management, and safe practices.
- Making low-cost equipment from locally available resources, using the immediate environment

and the community resources for teaching of physical science.

ICT integration in physical science teaching: websites, videos, games, simulations, mobile apps, presentations, OER, interactive multimedia resources, e-books, podcasts, digital concept maps, and digital graphics; different forms of ICT and its application in science education

Unit III: Assessment of learning in Physical science

- Analysis of Learning standards in science – comparison of Indian (Learning outcomes) and International learning standards in science.
- Process and product assessment in Physical Sciences
- Performance Assessment criteria in assessing projects, experiments, group work and individual activities in physical science.
- Continuous assessment in physical science and the role of a science teacher in providing feedback and remediation.
- Application of various tools and techniques that can be used in assessment of learning in physical science
- Diagnosing learning difficulties and misconception in Physical Science.
- Construction of a unit test in physical science using different types of test items, weightage, table of specifications and scoring key
- Assessment of practical skills in physical science.
- Use of ICT in assessing Physical science.
- Developing and maintaining student portfolio in physical science

Unit IV:

- Professional competencies of a physical science teacher.
- Need for updating content and pedagogical competencies, pre-service and in-service courses and initiatives, agencies to nurture the best teachers, NCERT activities for teachers.
- Participation in science fairs, exhibitions, and science club activities
- Planning contextual activities- celebration of science day, birthdays of great physicists and chemists, seminars, conferences, online sharing, distance learning, membership to organisations- NSTA, IPA, IAPT, Indian Chemical Society, and INSC. NCERT publications and journals
- Meaning, nature, scope, designing and implementing innovative approaches to teaching science.
- Teacher as a Researcher

Sessional Activities:

- Writing unit plan for at least 2 units of secondary science.
- Writing lesson plan for at least 2 topics of secondary science
- Preparation of a teaching aid/model/experiment to be exhibited on Institution Annual day.
- Simulated teaching of class VII-X topics.
- Design and development of unit test.
- Developing rubrics for laboratory work, assignment, field trip, project etc.

- Text book analysis for content organization/ validness of curriculum mentioned in NCF 2005.
- Case study of successful science teacher.
- Development of a teaching portfolio.
- School visit to study the science labs, museums etc.

References:

- Pedagogy of Physical Science, Text book for B.Ed, Part I, NCERT
- Pedagogy of Physical Science, Text book for B.Ed, Part II, NCERT
- National Curriculum Framework 2005, NCERT, New Delhi.
- Steve Alsop, Keith Hicks (2007). Teaching Science : A Handbook for Primary and Secondary School Teachers, Kogan Page, New Delhi.
- Judith Bennett (2003) Teaching and Learning Science : A guide to recent research and its applications, Continuum, London.
- Robin Millar (1984) Doing Science : Images of Science in Science Education, The Falmer Press, London.
- State Textbook in Physics and Chemistry for classes VIII, IX and X.
- Nathan S Washton (1967). Teaching Science Creatively, Saunders Company, London.
- History of Physics in the 20th Century, Internet Browsing.
- Novak D J and D Bob Gowin (1984) Learning how to learn, Press Syndicate of the University of Cambridge, Ohio.111
- Carin A and B R Sund (1964), Teaching Science through Discovery, Charles E. Merrill Books Inc.,
- Columbus Ohio. 11. Ralph Martin, Colleen Sexton, Kay Wagner, Jack Gerlovich (2000) Science for All Children: Methods for Constructing Understanding, Allyn and Bacon, London.
- School Science Review, the Association for School Education, College Lane, Hatfield, Hertfordshire, AL 109 AA, UK.
- Physics Education, Institute of Physics Publishing, Dirac House, Temple Block, Bristol BS1 6BE, UK.
- Physics Teacher, American Association of Physics Teachers, Department of Physics and Astronomy, University of Maryland, College Park, MO 20742.
- Kamala Mukunda, 2009. What did you ask at school today? A Handbook on Child Learning.
- Donald Schon,(1983) The reflective practitioner, How professionals think in Action Basic Books, ISBN 0465068782
- Donald A. Schon, (1987) Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions. San Francisco, Jossey-Bass, 1987 ISBN: 978-15-5542-220-2

CPS#M2: PEDAGOGY OF MATHEMATICS

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives

The student teacher will be able to

- understanding of nature of teaching proof and problem solving in mathematics
- ability to select suitable tools for mathematical test construction and measurements
- adopt different strategies to meet the diversified needs of learners and appreciates the availability of various learning resources in mathematics
- decision making ability to use appropriate assessment tools for mathematical assessment
- Awareness about various professional development components.

Unit-1 Teaching of Proof and Teaching of Problem-solving

- Meaning and nature of Proof; kinds of proof- direct, proof by mathematical induction, proof by contradiction, proof by contra positive, proof by cases, proof by counter examples ; planning and teaching of various theorems in mathematics (secondary level)
- Definition of problem, problem solving; Meaning and nature of Problem solving, strategies of problem solving- Means-ends analysis, backtracking, backward movement, heuristics; Polya's Problem solving steps; solving various mathematical problems
- Skills of teaching mathematics: various ways of introducing lessons, explaining skills, problem solving skills, illustrative skills, scaffolding skills, integrating ICT skills, questioning skills, and computation skills.

Skills in using graphs, and various other learning resources

Unit-2 Learning resources in mathematics

- Creation of visual aids-charts, models, graphs; usage of graphical tools- calculator, ready reckoners, logo, sketch pad; selection and integration of tools in relation to content and learning environment; Audio-visual aids- animations, film shows; e-resources and open and free soft wares
- Graphic calculators, logo, cabri, geogebra, geometrical sketch pads, using open and free soft wares for computations; concept of online learning, creating BLOGS.
- Mathematics Laboratories in school; Mathematics club ; activities carried out in mathematics club - Exhibition, quiz, fairs and field trips

Unit-3 Assessment of learning in mathematics

- Selection of appropriate tools for formative and summative assessment in mathematics; construction of a unit test: construction, administration, scoring, interpretation of a unit test and providing feedback to learners.
- Diagnosing the learning difficulties of learners (Error analysis- procedural errors, conceptual

errors, computational errors) and providing remedial measures (Peer tutoring, direct instruction, mentoring); planning for student portfolio in mathematics using rubrics for various activities.

- Use of reflective practice in mathematics teaching

Unit- IV. Professional development of Mathematics teachers

- Professional competencies of a mathematics teacher.
- Need for updating content and pedagogical competencies, pre-service and in-service courses and initiatives, agencies to nurture the best teachers, NCERT activities for teachers.
- Participation in mathematics fairs, exhibitions, and club activities
- Planning contextual activities- celebration of birthdays of great mathematicians.
- Participation in mathematics seminars, conferences and workshops
- Online sharing, distance learning, Knowing about professional bodies of mathematics at state, National and international level ; Various journals available for Mathematics publications, membership to various organizations related to mathematics
Designing and implementing innovative approaches to teaching mathematics.
- Mathematics Teacher as a Researcher

Sessional work:

- Practicum on teaching a lesson in mathematics.
- For all the Pedagogical transactions the following content knowledge (9th, 10th, 11th, and 12th standard syllabus) to be made use of and these can be revised as per the change in curriculum of respective state.
- Arithmetic: Number system, Ratio and Proportion, Fractions, Commercial mathematics and Data handling, sets, Matrices
- Algebra:- Polynomials, Graphical representations of various equations, trigonometry,
- Geometry:- Lines and angles; Triangles and its related theorems; polygons; analytical geometry,
- Writing observational records on peer teaching observed during practicum on teaching
- Writing reflective diaries
- selecting any one of the theorem and teaching it by adopting the strategies of teaching proof
- Selecting any one kind of problem in mathematics and demonstrate its procedure of solving
- selecting a topic in algebra or in geometry and teaching it using appropriate learning resources
- Construction of unit test (administration, scoring, stastical analysis and reporting) on a selected unit
- Analyzing the errors committed by learners at secondary level, in regular test(FA1or FA2) and analyzing its causes and suggesting various remedial measures for it

References:

- Butler and Wren (1965), The Teaching of Secondary Mathematics- Fourth Edition, London,

McGraw Hill Book company

- Cooney T J and others (1975), Dynamics of Teaching Secondary School Mathematics, Boston: Houghton Mifflin
- Focus Group Report (2005), Teaching of Mathematics, New Delhi, NCERT
- Iglewicz, Boris and Stoye, Judith (1973), An Introduction to Mathematical Reasoning, New York, the McMillan company
- John Stillwell(1989), Mathematics and its History- undergraduate Texts in Mathematics, Newyork,Springer-Verlag New york Inc
- NCERT, A textbook of Content-Cum-Methodology of Teaching Mathematics, New Delhi, NCERT
- NCERT(2012), Pedagogy of Mathematics- textbook for Two year B.Ed course, New Delhi
- Polya george (1957), How to solve it, Garden city, New york, Doubleday
- Robert B Davis (1984),Learning Mathematics-The cognitive approach to Mathematics Education,Sydney, Croom Helm Australia Pty Ltd
- Servas W and T varga, Teaching school Mathematics- UNESCO source book
- T V Somashekar, G Viswanathappa and Anice James (2014), Methods of Teaching Mathematics, Hyderabad, Neelkamal publications Pvt Ltd

CPS#BS-2: PEDAGOGY OF BIOLOGICAL SCIENCE

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives

The student teacher will be able to

- Explain various methods and strategies of biology teaching
- Use various approaches to facilitate learning
- Integrate ICT in biology teaching
- Develop and use various learning resources in biology teaching
- Construct unit test in biology
- Explore various assessment strategies for evaluating learning in biology
- Explore various professional development opportunities
- Plan and conduct action research in secondary schools

COURSE CONTENT:

Unit I: Methods and Strategies for Facilitating Learning:

- Teaching concepts and generalisations, inductive approaches, using advance organizers,

- problem solving approach, investigatory approach, project method, cooperative learning method
- Strategies for creating an inclusive biology classroom
- Laboratory approaches- inductive, deductive, verification and problem solving
- Using field trips, projects, quiz, exhibition, science fair, science clubs/nature clubs/eco clubs, study tours, observation of environment related days in learning biology
- ICT integration in biology teaching

Unit II: Planning for teaching and assessing learning in Biological science

- Skills of teaching : ways of introducing a lesson; questioning and types of questions; skills involved in explaining; different types of explanations; skills of illustrating and giving analogy; scaffolding; modeling (difficult experiments, handling equipments etc)developing skills of inquiry and higher order thinking abilities, closing the lesson); skills of integrating ICT skills, demonstrating skills etc.) discussions/dialogue
 - Unit and lesson plan writing followed by teaching .
 - Need for reflection in teaching and writing reflective diary/journal
 - Learning standards in Biological Science - comparison of Indian (Learning outcomes) and International learning standards in biological science.
 - Process and product assessment in biology; Performance Assessment criteria in assessing projects, experiments, group work and individual activities in Biological science.
 - Continuous assessment in Biological science and the role of a science teacher in providing feedback and remediation.
 - Diagnosing learning difficulties and misconception in Biological Science.
 - Construction of a unit test in Biological science using different types of test items including contextual based, weightages, table of specifications and scoring key
 - Assessment of practical skills in Biological science.
 - Use of ICT in assessing Biological science.
 - Developing and maintaining student portfolio in Biological science

Unit III: Learning Resources in Biology Teaching

- Textbook as a learning resource, Handbooks, Teacher Resource books, laboratory manuals, Encyclopedia
- Developing and using Charts, models, science kits posters, worksheets, museum, botanical garden, national parks, aquaria, and herbarium
- Specimens – collection and preservation methods.
- Preparation of slides
- Science laboratories: designing, management, and safe practices
- Making low-cost equipment from locally available resources, using the immediate environment and the community resources for teaching of biological science
- Developing and using digital resources: websites, videos, games, simulations, mobile apps, presentations, OER, interactive multimedia resources, e-books, podcasts, digital concept maps, and digital graphics

Unit IV: Professional development

- Professional competencies of a biology teacher need for updating content and pedagogical competencies
- Various in-service courses and agencies available for biology teachers to develop their professional competencies
- Professional development activities: seminars, conferences, online and offline courses, teacher exchange programs, competitions, publications, development of teaching portfolio
- Role of professional associations in professional development
- Developing professional competencies in dealing with gender issues, equity and inclusion, ethical issues, environmental issues, human health and population
- Action research, reflection and evidence based practice in science teaching
- Importance of self-directed professional development
- Teacher leadership: using transformative pedagogical practices

Sessional Activities

- Writing unit plan for at least 2 units of secondary science.
- Writing lesson plan for at least 2 topics of secondary science
- Preparation of a teaching aid/model/experiment to be exhibited on Institution Annual day.
- Simulated teaching of class VII-X topics.
- Design and development of unit test.
- Developing rubrics for laboratory work, assignment, field trip, project etc.
- Text book analysis for content organization/ validness of curriculum mentioned in NCF 2005.
- Case study of successful science teacher.
- Development of a teaching portfolio.
- School visit to study the science labs, museums etc.

References

- Amanda Berry, et.al. (2015). Re-examining Pedagogical Content Knowledge in Science Education (Teaching and Learning in Science Series). Routledge: New York
- Carin A and B R Sund (1964), Teaching Science through Discovery, Charles E. Merrill Books Inc.,
 - David Sang & Robert Frost (2005). Teaching Secondary Science Using Ict
 - DK Publishing (2013). Timelines of Science
 - Don P. Kauchak, & Paul D. Eggen (2013). Introduction to Teaching: Becoming a Professional (5th Edition)
 - Ernst Mayr (1985). The Growth of Biological Thought: Diversity, Evolution, and Inheritance
 - J. A. Cover, Martin Curd, & Christopher Pincock (2012). Philosophy of Science: The Central Issues (Second Edition)
 - Jeffrey Bennett (2014). On Teaching Science: Principles and Strategies That Every Educator Should Know. Big Kid Science: Boulder, CO

- John Gribbin. (2004).The Scientists: A History of Science Told through the Lives of Its Greatest Inventors. Random House: New York
- Judith Bennett (2003) Teaching and Learning Science: A guide to recent research and its applications, Continuum, London.
- Lois N. Magner (2002).A History of the Life Sciences, Revised and Expanded
- Michael F. Fleming (2002).Biology Teacher's Survival Guide: Tips, Techniques & Materials for Success in the Classroom
- Michael Reiss (2012). Teaching Secondary Biology (Ase Science Practice). HodderEducation:London
- Nathan S Washton (1967). Teaching Science Creatively, Saunders Company, London.
- National Curriculum Framework 2005, NCERT, New Delhi.
- Novak D J and D Bob Gowin (1984) Learning how to learn, Press Syndicate of the University of Cambridge, Ohio.111
- BSCS (2009)The Biology Teacher's Handbook, 4th Edition
- Ralph Martin, Colleen Sexton, Kay Wagner, Jack Gerlovich (2000) Science for All Children: Methods for Constructing Understanding, Allyn and Bacon, London.
- Robert J. Marzano.(2007). The Art and Science of Teaching: A Comprehensive Framework for Effective Instruction (Professional Development). ASCD:Alexandria, VA
- Rodger W. Bybee, et.al. (2007). Teaching Secondary School Science: Strategies for Developing Scientific Literacy (9th Edition)
- Sally McKeown (2012). Brilliant Ideas for Using ICT in the Inclusive Classroom. Routledge:New York
- Samir Okasha (2002).Philosophy of Science: A Very Short Introduction. Oxford UniversityPress:Oxford
- Sandra K Abell,& Mark J Volkmann. (2006). Seamless Assessment in Science: A Guide for Elementary and Middle School Teachers
- Stephen P. Gordon. (2003). Professional Development for School Improvement: Empowering Learning Communities
- Steve Alsop, Keith Hicks (2007). Teaching Science : A Handbook for Primary and Secondary School Teachers, Kogan Page, New Delhi.
- Susan Loucks Horsley et.al. (2009). Designing Professional Development for Teachers of Science and Mathematics. Sage: New Delhi
- Thomas S. Kuhn (2012). The Structure of Scientific Revolutions: 50th Anniversary Edition. University of Chicago Press:Chicago
- West Ed, & WGBH Boston (2003).Teachers as Learners: A Multimedia Kit for Professional Development in Science and Mathematics

CPS-4: ASSESSMENT AND EVALUATION

Credits: 4 (3L+ 1T +0P)

Contact hrs per week: 5

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The student teacher will be able to

- Understand the nature of assessment and evaluation and their role in teaching- learning process.
- Understand the importance of assessment in continuous and comprehensive manner
- Plan assessment tasks, techniques, strategies and tools to assess learner's competence and performance in curricular and co-curricular areas,
- Devise marking, scoring and grading procedures,
- Analyze, manage and interpret assessment data.
- Devise ways of reporting on student performance
- Develop the skills of reflecting-on and self-critiquing to improve performance.

COURSE CONTENT:

Unit I: Introduction to Assessment & Evaluation

- Concept of test, measurement, Assessment, examination, appraisal and evaluation in education and their inter relationships.
- Purpose and objectives of assessment/ Evaluation- for placement, providing feedbacks, grading promotion, certification, diagnostic of learning difficulties.
- Importance of assessment & evaluation for Quality Education – as a tool in Pedagogic decision making (writing instructional objectives, selection of content, teaching learning resources, methodology, strategies & assessment procedures followed).
 - Forms of assessment : -
 - (Formative, Summative, diagnostic; prognostic, placement; Norm referenced; Criterion referenced based on purpose)
 - (Teacher made tests Standardized tests: based on nature & scope)
 - (Oral, written, performance: based on mode of response)
 - (Internal, External, self, peer, & teacher, group Vs individual- based on context)
 - Based on nature of information gathered (Quantitative, Qualitative)
 - CCE, school based assessment ; Standard Based- based on Approach
- Recent trends in assessment and evaluation:
 - Assessment for learning, assessment of learning and assessment as learning; Relationship with formative and summative, Authentic assessment.
 - Achievement surveys- State, National and International; Online assessment; On demand assessment/ evaluation.
 - Focus on Assessment and Evaluation in Various Educational commissions and NCFs

Unit II: Developing Assessment Tools, Techniques and Strategies -1

- Concept of Cognitive, Affective, Psychomotor domain of learning
- Relationship between educational objectives learning experiences and evaluation.
- Revised taxonomy of objectives (2001) and its implications for assessment and stating the objectives-
- Knowledge dimensions:- factual, conceptual, procedural and meta-cognition.
- Cognitive, Affective, Psychomotor domains – Classification of objectives
- Stating objectives as learning out comes: General, Specific.
- Construction of achievement tests- steps, procedure and uses (Teacher made test/Unit Tests) - Constructing table of specifications & writing different forms of questions –(VSA, SA, ET & objective type, situation based) with their merits and demerits; assembling the test, preparing instructions, scoring key and marking scheme; and question wise analysis
- Construction of diagnostic test – Steps, uses & limitation; Remedial measures- need types and strategies
- Quality assurance in tools – Reliability: Meaning & Different methods of estimating reliability (Test-retest; equivalent forms, split- half); Validity: Meaning & Different methods of estimating reliability (Face, content, construct), Objectivity and Practicability/ Usability Inter dependence of validity, reliability and objectivity

Unit III: Developing Assessment Tools, Techniques and Strategies -II

- Meaning & construction of process-oriented tools- Interview; Inventory; observation schedule; check-list; rating scale; anecdotal record;
- Assessment of group processes-Nature of group dynamics; Socio-metric techniques; steps for formation of groups, criteria for assessing tasks; Criteria's for assessment of social skills in collaborative or cooperative learning situations.
- Promoting Self assessment and Peer assessment – concepts and criteria
- Portfolio assessment – meaning, scope & uses; developing & assessing portfolio; development of Rubrics

Unit IV: Analysis, Interpretation, Reporting and Communicating of student's performance

- Interpreting student's performance
- Descriptive statistics (measures of central tendency & measures of variability, percentages, rank correlation)
- Graphical representation (Histogram, Frequency Curves)
- Grading – Meaning, types, and its uses
- Norms – Meaning, types, and its uses
- Reporting student's performance – Progress reports, cumulative records, profiles and their uses, Portfolios, Using descriptive Indicators in report cards
- Role of feedback to stake holders (Students, Parents, Teachers) and to improve teaching – learning process; Identifying the strengths & weakness of learners.

Sessional Activities

- Discussion on existing assessment practices in schools and submitting the report.
- Constructing a table of specification on a specific topic (subject specific)
- Constructing a unit test using table of specifications and administering it to target group and interpreting the result.
- Construction of any one of the process oriented tools and administering it to group of students & interpreting it.
- Analysis of question papers: teacher made and various Boards
- Analysis of report cards-State and Central (CBSE)
- Analysis of various education commission reports and NCFs for knowing various recommendations on Assessment and Evaluation
- Maintaining their own portfolios on the course “ Assessment and Evaluation” as an hands on experience during the semester

References:

- Ebel, R.L. and Fresbie, D.A. (2009).Essentials of Educational Measurement. New Delhi: PHI Learning PVT. LTD.
- Garrett, H.E. (2008). Statistics in Psychology and Education. Delhi: Surjeet Publication.
- Gupta, S.K. (1994). Applied Statistics for Education. Mittal Publications.
- Mehta, S.J. & Shah, I.K. (1982).Educational Evaluation. Ahmedabad: Anand Prakashan (Gujarati).
- NCERT (2015) Learning Indicator, New Delhi
- NCERT (2015) CCE Packages, New Delhi
- NCERT (2016) Learning outcomes, New Delhi
- Rani, P. (2004).Educational Measurement and Evaluation. New Delhi: Discovery Publishers.
- Rawat, D.S. (1970). Measurement, Evaluation and Statistics in Education. New Delhi: New Raj Book Depot.
- Reynolds, C.R., Livingston, R.B., and Willson, V. (2011).Measurement and Assessment in Education. New Delhi: PHI Learning PVT. LTD.
- Ten Brink, T.D. (1974). Evaluation – A Practical Guide for Teachers. New York: McGraw Hill Book Co.
- Thorndike, R.M. (2010). Measurement and Evaluation in Psychology and Education. New Delhi: PHI Learning Pvt. Ltd.
- Yadav, M.S. and Govinda, R. (1977). Educational Evaluation, Ahmedabad: Sahitya Mudranalaya.
- Linn, Robert and Norman E Gronland (2000); Measurement and Assessment in teaching, 8th edition, by Prentice Hall, Inc, Pearson Education, Printed in USA
- Ved Prakash, et.al. (2000): Grading in schools, NCERT, Published at the publication Division by the secretary, NCERT, Sri Aurobindo Marg, New Delhi
- Tierney, R. J., Carter, M. A., & Desai, L. E. (1991). Portfolio Assessment in the Reading – Writing Classroom. Norwood, MA: Christopher-Gordon Publishers
- Glatthorn, A. A. (1998). Performance Assessment and Standards-based Curricula: the Achievement Cycle. Larchmont, NY: Eye no Education

- Gredler, M. E. (1999). Classroom Assessment and Learning. USA: Longman.
- Likert, R. (1932). A technique for the Measurement of Attitudes. Archives Psychology, 40.
- Mehrens, W. A. & Lehmann, I. J. (1991). Measurement and Evaluation in Education and Psychology (8th ed.): Chapter 10: Describing Educational Data.
- Oosterhof, A. (1994). Classroom Applications of Educational Measurement (Second Edition). New York: Macmillan College Publishing Company Inc.
- Payne, D.A (2003).Applied Educational Assessment. Australia: Wadsworth: Thomson Learning.
- Popham, W.J. (1981). Modern Educational Measurement. New Jersey, Engle Wood Cliffs: Prentice-Hall Inc.
- Popham, W. J. (2002). Classroom Assessment: What teachers need to know (Third Edition). Boston: Allyn& Bacon.

Web Resources

- Assessment in school education, (2013)
- <http://azimpremjifoundation.org/sites/default/files/userfiles/files/Issue%20XX%20Section%20C.pdf>
- Compendium of Tools, (2013), CBSE
- <http://cbse.nic.in/ePub/webcbse/webcbse/Revised%20Compendium%20of%20Tools/Revised%20Compendium%20of%20Tools/docs/Revised%20Compendium%20of%20Tools.pdf>
- <http://www.cbse.nic.in/cce/index.html>
- www.ncert.nic.in
- <http://nroer.in/home/>

ENGAGEMENT WITH FIELD
School attachment Programme-II (SAP-II)

Credits: 2 (0L+ 0T+ 2P)
Contact hrs per week: 2 weeks

Marks: 100
C1 + C2: 30
C3: 70

UNDERSTANDING CLASSROOM CONTEXTS AND PROCESSES

The activities suggested for school attachment-II are based on the courses learnt by the student teachers during the second semester, so that they can see the relevance of what was learnt under different courses to real class room and school environment. They will be able to connect different theoretical and the pedagogical principles related to the nature of learner and learning process, to the actual class room learning and the roles of learners and teachers in the entire process. The activities will provide an experiential learning of how knowledge construction takes place and the diversity experienced in the process. They will be able to see the application of pedagogical principles through observing teachers in class room contexts. The student teachers will also get to know how the evaluation policies are translated into school assessment practices through observations and interactive experiences. The activities will be carried out at upper primary and secondary levels for a week each. This will provide an understanding of the development of learners in terms of their understanding, cognitive abilities and the transition in their learning processes

Objectives

Student teachers will be able to

- Understand the dynamics of class room processes.
- Understand the diversity in learning based on student responses to learning tasks
- Identity the sources/resources used by the teacher for teaching
- Understand the role of planning, preparation and transaction in the teaching learning process.
- Understand the different strategies and approaches used in teaching based on the nature of content and the skills to be developed.
- Analyze the relevance of principles of curriculum organization and transaction to actual implementation process of curriculum in schools
- Understand the practices of CCE in improving learners performance
- Analyze the assessment tools and techniques employed with respect to their purpose, learner

friendly, and quality.

- Develop lesson plans in the respective subject areas of specialization
- Understand the strategies adopted for developing art and creative sensibilities in learners

Suggested tasks (Upper primary & Secondary)

- Analyze how the curriculum proposed at the national /state levels are translated into class room practices by observing teacher's classes of any one subject
- Identify the resources and facilities used by the teacher for teaching a lesson and interact with teacher to identify the resource mobilization.
- Interact with teachers to understand how unit and lesson planning are done in their subjects
- Understand the dynamics of classroom processes and multiple roles of teacher & learners.
- Understand the Classroom management strategies employed by the teacher.
- Identify misconceptions of learners in the classes observed and the possible causes for it.
- Understand school policies and practices to address student learning difficulties- remediation, extra study hours etc. - at macro level- across subjects and at micro level within the class room.
- Observe at least 3 lessons in each pedagogical subject delivered by regular teachers with the help of observation schedule.
- Develop 4 lessons (two lessons in each pedagogy) with the use of learning materials/teaching aids and one unit plan.
- Analyzing a test- question papers in subjects to understand what is assessed; types of questions/items used; and with reference to the objectives of the unit/lesson
- Participate in conducting CCE as scheduled in schools
- Reflect on the processes employed in CCE and the observed outcomes.

Records to be submitted for assessment

- Submission of 4 lessons in each pedagogy.
- Observation records (3 lessons) in each pedagogy.
- Report on CCE Practices and remediation programmes
- Report on analysis of test papers
- Report on class room transactions and learning processes
- Report on the analysis of school and the class room practices in realizing the curricular expectations evolved at national/state level.

* **The activities will be assessed for C1 and C2.**

* Viva-Voce will be carried out on selected activities for C3.

SEMESTER III

INTERNSHIP IN SCHOOL SUBJECT I & II

Credits : 16+16

Marks: *100

Duration: (1 week-Pre internship+ 14 Weeks Internship)

C1 + C2: 30

C3: 70

- A. Science :** ISS-1: Internship in School Subject 1 – Physical Science & ISS-2 :Internship in School Subject 2 – Mathematics
- B. Biological Science:** ISS-1: Internship in School Subject 1 – Physical Science & ISS-1 : Internship in School Subject 2 – Biological Science
- C. Social Science :** ISS-1 : Internship in school subject 1 : English & ISS-2 : internship in school subject 2 : Social Science

(Evaluation in each school subject shall be as per the break up shown below)*

The school internship will be organized in three phases:

Table: Break-up of internship duration and credit wise

Phases of Internship	Duration	Credits (for each pedagogy subject: ISS. 1 & ISS. II)	Assessment
Pre internship	1 week	1 credit	C1
Internship	14 weeks	14 credits	C3
Post internship	3-5 days	1credit	C2

Pre internship (one week)

During the pre internship phase, the student teachers will teach at least 2 complete lessons of 40 - 45 minutes duration in each pedagogy in the neighborhood schools under the guidance and supervision of Institute supervisors. Five to six students may be attached to each faculty who would act as mentor in guiding the student teachers in planning lessons. After this, the same mentors would assess

the teaching of student teachers in respective schools followed by post lesson discussions and feedback. It is advisable to hold the post lesson discussion immediately after the class in the group of student teachers allotted, so that everyone in the group would be benefitted by the feedback which may be generally applicable to all, and some observations in particular related to the class. The student teachers would become aware of desirable moves that can be adopted and the irrelevant moves to be avoided. The student teachers will also observe 2 lessons in each pedagogy of their peer teaching in schools. They will also write reflective note on the 4 lessons (two in each pedagogy) after their teaching. This exercise of orienting the student teachers to teach in real classroom situation is necessary before they are sent for internship to the schools for 15 weeks. One day orientation may be organized to make student teachers aware of their responsibilities and duties to be performed during internship. The orientation programme may include:

- Number of lessons to be taught in each pedagogy
- Number of observations of peer teaching in each pedagogy
- Organizing co-curricular activities and subject specific activities
- Participation in daily routine of school
- Participation all school organized activities and functions
- Records to be prepared (evaluation, activity, school profile, reflective diaries etc)
- Discipline and dress code to be observed
- Rules and regulations to be followed in schools
- Conduct action research programme and prepare a report
- Identify learning difficulties of students and plan remedial classes
- Engage in substitute classes allotted etc

Pre internship conference - Orientation of Cooperating teachers and the school Heads.

- A pre internship orientation for all Mentor Teachers/cooperating teachers and Heads of the selected schools may be organized in the Institute. The student teachers may also attend the orientation in order to understand their roles in schools. Interactive sessions may be organized on the following themes during pre-internship conference to develop awareness.
- Objectives and various dimensions of internship
- Roles and responsibilities of Cooperating teachers, Principals, Institute Supervisors
- Process involved in unit planning/ lesson planning
- Pedagogical approaches followed in each pedagogy

- Methods to assess learners continuously (CCE) and probable tools and techniques to be used.
- Process of developing unit test and its administration
- Analysis and interpretation of students performance on unit test
- Records to be maintained by student teachers during internship.(general Activity records – co-scholastic activities organized , subject activity records, (e.g.: science quiz, mathematics quiz, etc) school profile, evaluation records including a report on continuous assessment in each pedagogy, reflective diaries in each pedagogy)
- Pre-lesson and Post-lesson discussions - role of cooperating teachers and Inst supervisors)
- Discussion on student teacher performance assessment tool (evaluation profile) and how to use it.
- Pre- lesson discussion of lessons to be demonstrated (this is to provide hands-on-experience to the cooperating teachers)
- Demonstration of model lessons by faculty/student teachers in each school subject.
- Two or three lessons are to be given in different pedagogical course integrating ICT. Arrangements may be made for school children of respective class to be in the demonstration class. The cooperating teachers will use the assessment profile in assessing the student teachers who give model lessons.
- Post lesson discussion of the lesson taught by the student teacher will be carried out in the group of cooperating teachers, institute supervisors and student teachers. This is also to expose the cooperating teachers in guiding student teachers during internship.
- Interactive meetings may be organized between the cooperating teachers and the student teachers who are assigned a particular school in a particular zone to know the details about the units to be taught, availability of resources and other details of schools, so that the student teachers can go well equipped to the respective schools for internship.

INTERNSHIP (14 weeks – Upper Primary; Secondary-2 blocks)

Every student teacher shall undergo an internship of 15 weeks in the identified cooperating schools. This period may be split into 2 blocks – one block at upper primary and second block at secondary level. During this period the student teacher shall be attached to the cooperating school and he/she shall undertake such duties as are assigned to him / her by the Head Master/Principal of the school in all school related activities and function totally as full-fledged teacher.

** In case of Post graduate students, the number of lessons to be taken at upper primary may be replaced with teaching at higher secondary level. In the pedagogy classes, teaching at higher secondary level with illustrations from higher secondary school subjects and the additional strategies suitable for that level may be discussed by the respective pedagogic faculty.*

1. The student teacher shall teach at least 60 lessons in the school, taking equal number of lessons (30) from each of the school subjects, under the supervision of the mentor/cooperating teacher.
2. Sixty lessons include teaching 2 subjects at upper primary ($5+5=10$) and at secondary level ($25+25=50$).
3. Out of these at least 1 lesson in each pedagogy at upper primary level and 3 lessons in each pedagogy at secondary level must be totally ICT based.
4. The institute supervisors can guide the student teachers in planning the ICT based lessons which are different from the regular lesson planning.
5. The assessment profiles may also be designed separately for assessing the ICT based lessons.

Tasks /activities to be performed during Internship

I Understanding School Context & Planning for teaching: (this will be carried out in the first week of the internship).

- During the first week, the student teachers will familiarize themselves with the school environment, routine of the school, time table, units to be taught, observing the classes of regular teachers to understand the learners whom they have to teach, exploring the resources etc. The following activities will be carried out in the first week of the internship.
- Prepare school profile (Type of School, school lay out, infrastructure, library, laboratories, play ground, computer lab, and other facilities). And other activities to be carried out as specified in school attachment-1.
- Description of Residential set up of schools in case of JNVs or other residential schools if considered any for internship.
- Prepare a report on the school functions and activities (refer to sch. Attachment- 1 for details)
- Collecting time table and the units to be taught from the respective subject teachers for taking classes
- Prepare 3 to 4 unit plans and discuss with cooperating teachers and institute supervisors on visit.
- Understand the classroom environment, learners and learning contexts through observation

and interaction.

- Observe at least 5 lessons of a regular teacher in each school subject.
- Observe the curriculum support resources such as laboratories, libraries and other learning resources that can be used for teaching.

II Planning, teaching, assessment and other activities

- Prepare 3 to 4 unit plans depending on the syllabus to be covered during the term
- Prepare 60 lesson plans- as specified above at upper primary and secondary and deliver the same in each subject with the support of ICT, and other teaching-learning aids and resources.
- Observation of peer teaching: 25 in each school subject at each level (5+5= 10 upper primary; 20+20=40 secondary)
- Develop, administer, score and analyze at least 8 unit tests: four in each school subject (1+1=2 upper primary; 3+3=6 secondary)
- Integrating ICT in regular teaching
- Develop the specified number of lessons purely ICT based
- Assessing learners continuously using work sheets, individual and group activities, observational tools, rubrics etc.
- Planning and administering unit tests followed by analysis and interpretation.
- Identifying learning difficulties and Planning and implementing remedial strategies
- Conducting one action research in each of the pedagogic subjects at any level.
- Prepare and maintain student portfolios
- Assisting school in conducting CCE
- Organize and participate in: morning assembly, literary and cultural activities, Club activities, Exhibitions, Excursions and field trip, Mock parliament, Quiz, Games and sports and PTA/SMC meetings in both blocks.
- Maintaining a reflective diary of his/her school experience in general both at UP and secondary
- Maintaining a reflective diary on class room teaching in each of the school subject (after the completion of each lesson)

III. Participation in School Activities

- Organize co-scholastic activities, like- sports and games, debates, art and cultural activities, quiz, exhibition, essay writing, youth parliament, club activities etc.
- Conduct subject-specific activities like science, mathematics, language quiz, class level competitions, preparing students in participate in state, regional and national level

competitions etc.

- Participate in PTA meetings.

Note: Once in 10 days interactive meetings may be held with the school Principals, cooperating teachers and the student teachers by the visiting institute supervisors to take stock of things, share observations, reflections and experiences to enhance the quality of internship.

Records to be submitted

- Lesson plans/ Unit plans
- School profile: infrastructure; science labs computer lab, Social Science Lab - physical facilities, Equipment, School Library-facilities
- Records of Participation/organization of school activities
- Records of observation of peer teaching in each pedagogy
- Records of observation of regular teacher/mentor teacher's class in each pedagogy
- Report of action research in each school subject
- Report of case study at any level.
- Assessment record in each pedagogy
- Student teacher's portfolio
- Reflective Journal in each pedagogy

Post Internship

The post internship is required to be organized in the Institute just after completion of internship in teaching programme. The following activities shall be organized in the Post Internship phase:

- Preparation of brief report by each student teacher on his/her internship experiences.
- Presentation of the reflections on internship by student teachers, which will be conducted in smaller group/subject wise and assessed by the supervisors.
- Some of the video clippings of lessons delivered during internship will be shown for critical reflection
- Inviting feedback from cooperating schools/mentor teachers/HM/Principal/institute faculty.
- Conducting viva-voce on student reflective diaries and reports

Internal Assessment

The overall assessment of the performance of student teachers shall be based on the feedback received from all associated with the programme, including mentor teachers/HM/Principal, peers, supervisors of the institute; and various records submitted by the student teachers. The credits and the weightages for the above activities may be worked out by the Institutes in the

States according to the university regulations.

CLC - COMMUNITY LIVING CAMP

Credits: 1 (0L+0T +1P)
Contact hrs per week: 1 week

Max Marks=50
C1 +C2 = 25
C3=25

Working with community provides an experiential knowledge of the characteristics of a particular community, social structure, roles of the community leaders, cultural practices, educational background and awareness levels of community, their participation in school development etc. It also provides a platform to understand the social, health and the educational status and the problems existing in the community. This activity may be carried out in the nearby villages, slum/tribal areas and so on.

Objectives

The student teachers will be able to

- Understand the social and the cultural characteristics of the community
- Understand the need for a relationship between the community and the school
- Analyze the role of community members in the schools located in the area.
- Understand the educational and the social status of the community
- Identify the problems related to health, hygiene, environment, education etc.
- Develop an awareness of health, hygiene, safe environment and need for schooling among the community members
- Identify the community resources (such as art, craft, cottage industry etc) that can be utilized in school activities.

Transaction Mode

Discussion, Rally, Competitions (Debates) Posters and Banner displays Working in community setting, surveys, interviews, action research, case study, dissemination of success stories etc.

Suggested Activities

- Study of the nature of community participation in a secondary school
- Survey of community resources for participation in school activities
- Report on social customs, cultural traditions and values
- Report on healthy and hygienic conditions of the environment.
- Study of at least 20 households to identify the socio- economic and educational status of the

community members.

- Study of non-formal education centers for dropouts and out of school children in a locality

Developmental activities

- Tree plantation programme in the campus/nearby village
- Aids awareness, electoral awareness, road safety, human rights, women rights, literacy programmes etc.
- Cleanliness campaign in the community to develop an awareness about its needs
- Awareness programme on nutrition
- Motivation campaigns to reduce school absenteeism.
- Micro – planning exercises for assessing the educational status of the community
- Training of community in first aid

It is suggested that these activities may be conducted individually or collectively under the supervision of teacher educators. The performance of student teachers in all above activities will be assessed at the end of the programme. Report preparation and presentation on any three activities will be assessed by the Institute faculty. Attendance student teachers on the community site should be made mandatory. The participation of student teachers in the community activities should be assessed through observation. Every evening a meeting with student teachers may be organized to take stock of the day events, their interactions and experiences in the community. Reflective diary of day to day experiences in the community recorded by the student teachers may also be a part of assessment

Records to be submitted:

- Report on any one of the developmental activity carried out
- Report on the community profile.
- Reflective diary

Assessment for C1 and C2: Report on the activities carried out and the educational status of the community

Assessment for C3: Report on Community Profile and Viva Voce

SEMESTER IV

PC-4: GENDER, SCHOOL AND SOCIETY

Credits: 2 (1L+ 1T +0P)

Contact hrs per week: 3

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives

The student teacher will be able to

- Understand the concept of gender and the related terms.
- Analyze the status of women in India from historical time to the present time
- Understand the importance and need for women empowerment
- Analyze the gender issues and concerns in the education system
- Analyze the causes of gender inequality
- Realize the governmental measures and initiatives in promoting girl education.
- Understand the constitutional provisions of human rights and women rights.
- Understand the laws with respect to safeguarding the rights of women and girl child
- Analyze the text books and other instructional materials with respect to gender bias and other related issues of gender.
- Critically appraise the women development programmes

Unit 1: Introduction to Gender, Gender Roles and Development

- Meaning of Gender; Difference between Gender and Sex; The Concept of Gender, sexuality and Development; The concept of Transgender.
- Gender Dynamics and Development
- Social Construction of Gender
- Types of Gender Roles as stressed since ancient period
- Gender Roles and Relationship Matrix
- Gender-based Division and Valuation of Work
- Exploring Attitudes towards Gender

Unit 2: Gender, Society and Law

- History and current scenario of Indian Women: Status of women in ancient India.
- Concept of Patriarchy and Matriarchy and issues related to Indian Women.
- Gender roles in society through variety of institutions such as family, caste, religion, culture, the media and popular culture (films, advertisements, songs etc), law and state.

- Stereotypes in society.
- Issue related to women/girl child: female infanticide and feticide, sex ratio, honour killing, dowry, child marriage, property rights, divorce, widowhood
- Laws related to women (Rape, Dowry, Remarriage, Divorce, Property inheritance, Trafficking) Declining sex ratio, PNDT (Pre Natal Diagnostic Techniques) act; violence against women, domestic violence act, sexual harassment at work place, indecent representation of women (prohibition act), Cybercrime]
- Women's reservation bill – history and current status.
- The Indian constitution and provisions accorded to women.
- Human rights , women's rights, rights of the girl child, rights of the transgender
- Government schemes and initiatives in promoting the education of girl child.
- Gender Movements – Beti Bachao, Beti Padhao, Skilling Women folk etc.
- POSCO Act.

Unit 3: Gender and School

- Gender bias in school enrolments, dropouts, and household responsibilities, societal attitudes towards Girl's education, gender inequalities, and value accorded to women's education.
- Issues related to Gender in School: Sexual Abuse, Sexual Harassment, and Perception of safety at school, home and beyond.
- Importance of vocational training and income generation for women.
- How schools nurture or challenge creation of young people as masculine and feminine selves.
- Role of schools, peers, teachers, curriculum and textbooks in challenging gender inequalities or reinforcing gender parity.

Unit 4: Gender and Education

- Teaching Strategies to develop gender sensitivity.
- Critical evaluation of textbook with respect to gender
- Representation of gendered roles, relationships and ideas in textbooks and curricula.
- Adult education and non-formal education for women's development.

Transactional Strategies: Lecture, Lecture-cum-discussion, Case Study, Field Visits, Film Show (selected documentary films), Preparation of posters on gender, Presentations, Project work

Sessional activities:

- Visit schools and study the sexual abuse and sexual harassment cases and prepared report.
- Text book analysis for identifying integration of gender issues, gender biases reflected in it.
- Study of sex ratio and analysis of it state wise based on census data.
- Presentation on laws related to rape, dowry, remarriage, divorce, property inheritance,

trafficking etc.

- Preparation of a Bulletin Board on Gender relation issues.
- Debate on women reservation bill and other Acts.
- Group Activities on Domestic violence and other personal issues and its remedies.
- Visits to institutions like WSRC, Dowry prohibition cell, Women help line, NGO working for women etc.
- Advocacy about proper gender role with Parents/Community.
- Presentation of posters

* (In addition, school and community based activities may be organized).

References

- Aggrawal, N. (2002). *Women and law in India*. New Delhi: New Century Pub.
- Agnes, F., Chandra, S., & Basu, M. (2004). *Women and law in India*. New Delhi: Oxford University Press.
- Goonesekere, S. (ed.) (2004). *Violence, law and women's rights in South Asia*. New Delhi: Sage.
- Jaising, I. (ed.) (2005). *Men's laws women's lives: A constitutional perspective on religion, common law and culture and South Asia*. New Delhi: Women Unlimited.
- Kapur, R. (1992). From theory to practice: Reflections on legal literacy work with women in India. In M. Schuler, & S.R. Kadirgamar (eds.), *Legal Literacy: A tool for women's empowerment* (pp. 93-115). New York: UNIFEM.
- Maswood, S. (2004). *Laws relating to women*. New Delhi: Orient Law House.
- Schuler, M. & Kadirgamar, S.R. (1992). Legal literacy as a tool for women's empowerment. In M. Schuler, & S. R. Kadirgamar (eds.), *Legal literacy: A tool for women's empowerment* (pp. 21-70). New York: UNIFEM.
- Sen, S. (2013). *Women rights and empowerment*. New Delhi: Astha Publishers.
- Siddiqi, F.E. & Ranganathan, S. (2001). *Handbook on women and human rights*. New Delhi: Kanishka Publishers.
- Stone, L. & James, C. (2011). Dowry, bride-burning, and female power in India. In C.B. Brettell & C.F. Sargent (eds.), *Gender in cross-cultural perspective* (5 ed., pp. 308-317). New Delhi: PHI Learning Private Limited.
- NCERT (2014), Training and Resource Material on Adolescence Education, New Delhi.

Web resources

- Sensitivity in Media Operations and Content (2012) UNESCO
- <http://unesdoc.unesco.org/images/0021/002178/217831e.pdf>,
- Video on Improving Gender Equality - EFA Crowdsourcing Challenge, 2012, UNESCO, published by The Pearson Foundation, 3 minutes,
http://www.unesco.org/archives/multimedia/index.php?s=films_details&pg=33&id=2367
- Position Paper National Focus Group on Gender Issues in Education, NCERT
- http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/gender_issues_in_education.pdf

- Assessment and Certification of Adult Learners: The Indian Model, http://mhrd.gov.in/sites/upload_files/mhrd/files/document-reports/A.M.%20Rajasekhar.pdf
- <http://www.aeparc.org/> ; <http://nroer.in/home/>

PC-5: CREATING AN INCLUSIVE SCHOOL

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives

The student teacher will be able to:

- Understand the meaning and significance of inclusive education.
- Appreciate the special needs of Individuals with diverse needs.
- Familiarize themselves with the concept of Inclusive Education.
- Understand the nature and needs of different categories of disabled children.
- Understand the concept of Special Education, Integration and Inclusion.
- Understand the different considerations and provisions for facilitating inclusion.
- Understand and Acquire the Skills of Adapting Curriculum to meet the need of the Students with Diverse needs

COURSE CONTENT

Unit I : Basic Concepts and Introduction to Inclusive Education

- Meaning of Impairment, Disability and Handicap; Concept of Special Educational Needs and Diverse Needs, Difference between Special Education, Integration and Inclusive Education.
- Significance of Inclusive Education; Factors Affecting and Promoting Inclusion.

Unit II: Nature and Needs of Diverse Learners-Identification of Diverse Learners in the Classroom

- Sensory Impairment: Hearing impairment and Visual impairment
- Physical Disabilities: Orthopedic impairment, Cerebral Palsy, Special Health Problems, Congenital defects; Slow Learners and Under Achievers; Intellectual Disability; Learning disabilities and ADHD; Autism Spectrum Disorders; Multiple disabilities ; Emotional and Behavioural Problems; Gifted and Creative; Socially Disadvantaged, Economically Deprived, Religious and Linguistic Minorities, Inhabitants of Geographically Difficult Areas

Unit III: Preparing Schools for Inclusion-General Considerations and Provisions

- Concept of Inclusive School, Competencies and Characteristics of inclusive Teacher
- Physical Consideration, Socio-Emotional Considerations, Curricular Considerations
- Provision of Assistive devices, equipment's and technological support. Special provisions in Evaluation

Unit IV: Inclusive Practices in Classroom

- Making learning more meaningful: Responding to special needs by developing strategies for differentiating content, curriculum adaptation and adjustment, lesson planning and TLM.
- Pedagogical strategies to respond to needs of individual students: Cooperative learning strategies in the classroom, peer tutoring, buddy system, reflective teaching, multisensory teaching. Use of IT suitable for different disabilities.

Sessional activities

- Collection of data regarding children with special needs.
- Visit to Inclusive Schools and to observe classroom transaction of any one of such school and make a report of the same.
- Identifying one/two pupils with special needs in the primary schools and preparing a profile of these pupils.
- Preparation of teaching aids, toys, charts, flash cards for children having any one type of disability. (Visit to Resource Room)
- Preparation of Lesson Plan, instruction material for teaching students with disability in inclusive school.
- Developing list of teaching activities of CWSN in the school.
- Visits to different institutions dealing with different disabilities and Observation of their Classroom.

* In addition, school and community based activities may be organized.

References:

- Fimian, M.J., Fafard, M., and Howell, K.W.: *A Teacher's guide to Human Resources in Special Education: Para Professionals, Volunteers, and peer tutors*. Boston: Allyn and Bacon, Inc.
- Furth, H. (1964). *Thinking without Language*. New York: Free Press.
- Hallahan, D.P. and Kauffman, J.K. (1988). *Exceptional Children: Introduction to special Education*. N.J.: Englewood Cliffs.
- Jangira, N.K. (1986). *Special Education Scenario in Britain and India*. Gurgaon: The Academic Press.
- Jangira, N.K. (2013). NCERT: The Mother of Inclusive Education, Regional Institute of Education NCERT, Ajmer. (Also available on Google search Jangira special education).
- Julba, A. (2014) Teachers creating Inclusive classrooms: Issues and challenges – A research study
- Kapoor, S. (2015). Index of Inclusive School Quality, Brotherhood, Delhi.
- Kothari, R.G. and Mistry, H.S. (2011). *Problems of students and Teachers of the special schools – A study of Gujarat state*. Germany: VDM Publication.
- Maitra, K. & Saxena, V. (Ed) (2008) *Inclusion: Issues and Perspectives*, Kanishka.
- Meadow, K.P. (1980). *Deafness and child development*. Berkley, C.A.: University of California Press.
- Messily, K. (2012). *Confronting Marginalisation in Education: A Framework for Promoting inclusion*, Routledge, London.
- Mithu, A. and Michael, B. (2005). *Inclusive Education: From rhetoric to Reality*, New Delhi: Viva Books Pvt. Ltd.
- NCERT (2006) Position Paper: National Focus Group on Education of Children with Special Needs, NCERT, New Delhi.

- NCERT (2013) Training and Resource Material on Adolescence Education, New Delhi, available on www.aeparc.org
- Oza, D. and Pandit, R. (2011). *Management of behavioural problems of children with mental retardation*. Germany: VDM publication.
- Premavathy, V. and Geetha, T. (2006): Integrated and Inclusive Education DSE(VI) Manual: New Delhi, Krishna Publication.
- Reed, M. (1984). *Educating Hearing Impaired Children*. Milton Keynes: Open University Press.
- Sharma, P.L. (1988). *A Teacher's Handbook on Integrated Education of the Disabled*. New Delhi: NCERT.
- Ramaa S : Website: s-ramaa.net (for various publications)
- Voluntary Health Association of India. *Disabled 'Village Children' – A Guide for Community Health Workers, Rehabilitation Workers, and Families*.
- World Bank (2003) Inclusive Education: Achieving Education for all including those with Disabilities and special Education Needs

Web Resources

- IBE-UNESCO (2016). Training Tools for Curriculum Development - Reaching Out To All Learners: a resource pack for supporting Inclusive Education, ibe.training@unesco.org, <http://www.ibe.unesco>
- Video on A World for Inclusion (2007) by UNESCO, directed by David Atrakchi, 20 minutes http://www.unesco.org/archives/multimedia/index.php?s=films_details&pg=33&id=23
- Children with Disabilities (2012), by UNESCO, 23 minutes, http://www.unesco.org/archives/multimedia/index.php?s=films_details&pg=33&id=2758
- Inclusive Education: Approaches, scope and Content (2008), by UNESCO, produced by International Bureau of education, 11 minutes, http://www.unesco.org/archives/multimedia/index.php?s=films_details&pg=33&id=3314
- Inclusive Education: Learners and Teachers (2008), by UNESCO, produced by International Bureau of education, 14 minutes, http://www.unesco.org/archives/multimedia/index.php?s=films_details&pg=33&id=3316
- Preparing Teachers in Asia-Pacific for Inclusive Education, (2012), by UNESCO, 3 minutes, http://www.unesco.org/archives/multimedia/index.php?s=films_details&pg=33&id=2030
- Preparing teachers for inclusive education: Part 3 & 4, by UNESCO, produced by Lesotho, Ministry of Education, 21 minutes, http://www.unesco.org/archives/multimedia/index.php?s=films_details&pg=33&id=418
- Toward Inclusive schools - Special needs in the classroom, by UNESCO, directed by Mike Fowler, 6 minutes, http://www.unesco.org/archives/multimedia/index.php?s=films_details&pg=33&id=488
- Training Video: Special Needs in the Classroom, (1992), by UNESCO, directed by Mel Ainscow, 46 minutes, http://www.unesco.org/archives/multimedia/index.php?s=films_details&pg=33&id=405
- Including Children with Special Needs Primary Stage (2014), NCERT, http://www.ncert.nic.in/pdf_files/SpecialNeeds.pdf
- Including Children with Special Needs Upper Primary Stage, (2015), NCERT, <http://www.ncert.nic.in/gpPDF/pdf/tiicsnups101.pdf>
- Julka, A. (2007) Meeting Special Needs in Schools: A Manual, NCERT, http://www.ncert.nic.in/html/pdf/inclusive_education/COVER.pdf

- Position Paper National Focus Group on Education of Children with Special Needs, NCERT, http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/special_ed_final1.pdf
- Learning Curves, Inclusive education (2014), Azim Premji Foundation, <http://www.teachersofindia.org/en/periodicals/learning-curve-issue-xxiii>

PC-8: KNOWLEDGE AND CURRICULUM

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives:

The student teacher will be able to

- Understand the concept and the need for curriculum in schools.
- Explore the influences of the knowledge categories, social, cultural, economic and the technological aspects in shaping the present school curriculum and the text books.
- Analyze the principles employed in sequencing the school curriculum and the syllabus at different levels.
- Identify various learning sites and resources operating as curriculum supports in the system.
- Analyze the multiple roles of schools in implementation of curriculum.
- Discuss the roles and responsibilities of curriculum stakeholders.
- Analyse the role of teachers in operationalising the curriculum.
- Examine the processes and criteria commonly used to evaluate curriculum in pursuit of improvement.
- Explore the evaluation approaches adopted to revise the curriculum at the national and state levels.
- Analyze the national curriculum frameworks for necessary reforms proposed and their implications at school level.
- Develop an image of oneself as a curriculum informant, designer, agent, and evaluator.

COURSE CONTENT:

Unit I: Concept and the nature of curriculum

- Meanings of curriculum; different perspectives of curriculum; need for curriculum in schools.
- Educational policy reforms leading to curriculum reforms; Relationship between curriculum framework, curriculum, syllabus and text books- their significance in school education.
- Meaning and concerns of core curriculum-its need and significance in Indian context; Meaning and concerns of Hidden curriculum and spiral curriculum and their relevance to learning.
- Types of curriculum: subject-centered, activity-centered, environmental centered, and community-centered and their relevance.

Unit II: Foundations of Curriculum Development

- **Forms of knowledge & Curriculum:** Forms of knowledge and structure of a Discipline, and their characterization in different school subjects; Logical grammar of different school subjects
- **Nature of learner & learning:** Nature of learner - needs and interests, and different perspectives on learning (behaviourists, cognitivists and social constructivists) and their implications to curriculum development
- **Socio –cultural:** Importance of society-school relationships ; Societal factors that affect the curriculum ; Multiculturalism, multilingual aspects, and societal aspirations; Social reconstruction, social efficiency, inequality in educational standards, need for common goals and standards;
- **Technological determinants :** Science and technological advancements, Using the resources of the information society in curriculum development
- **Some of the critical issues:** environmental concerns, gender concerns .inclusiveness, value concerns, social sensitivity, and globalization.

Unit III: Process of curriculum Development

- Understanding shifts in emphasis in approach to curriculum; from subject centered and behaviouristic learning to integrated approach involving development of perspectives, activity centered and constructivist orientation;
- **Behaviouristic orientation:** Formulating aims and objectives – (general, specific -subject wise and level wise); Selecting content and learning experiences – Principles involved; Organizing the content and learning experiences- Principles (continuity, sequence and integration: organizing elements- concepts, skills, and values); breadth of coverage and depth of understanding; applicability and relevance to school curriculum planning
- **Constructivists orientation:** curriculum embedded in real life contexts; authentic learning in real life contexts leading to knowledge construction; applicability and relevance to school curriculum planning

Unit IV Curriculum Implementation and Curriculum evaluation

- Operationalising curriculum into learning situations; Planning and converting curriculum into syllabus and curriculum engagement activities.
- Role of teachers in operationalising curriculum in generating dynamic curricular experiences through i) flexible interpretation of curricular aims ii) concept mapping iii) contextualization of learning v) selecting varied experiences and long range and daily planning, choice of resources, planning assessment etc.
- Planning and use of curricular materials: Text book; teachers hand book, source book, work book, manuals, and other learning materials such as kits, AV and software materials..
- School culture and climate in implementing the curriculum.
- Supports to curriculum engagement: available infrastructure and curriculum sites and resources (library, laboratory, playground, neighbourhood etc); Use of community resources in curriculum engagement .
- Role of external agencies – National, Regional and State in developing the learning supports (including training of teachers) for curriculum implementation.
- Meaning of curriculum evaluation; Need for curriculum evaluation
- Process of curriculum evaluation and renewal: collecting opinions and views on school

curriculum and text books from different stakeholders; students' attainability of curricular standards as one of the criterion; evaluation of the discrepancies observed between anticipated and observed inputs, transactions and outputs; critical analysis of text books ;evaluation of other curricular materials;

- Role of National, Regional and State bodies in empowering the teachers in evaluating curriculum

Sessional activities :

- Review of national curriculum frame works and write a report for presentation and discussion
- Analysis of teachers' handbooks, text books, workbooks, source books followed by Presentations.
- Readings of certain curriculum reviews and articles bearing significance to the course outlined and reflections on them

References:

- Olivia, P (2004): Developing the curriculum (6th Ed). Allyn & Bacon, Inc. ISBN: 0205412599.
- Curriculum planning for better teaching and learning by J.G. Saylor and W Alexander (Holt, Rinehart and Winston).
- Yashpal Committee (1993): Learning without Burden, MHRD, and India.
- Position paper: National Focus Group on 'Curriculum, Syllabus, Textbooks', NCERT.
- Lewy, Arie (1977): Handbook of Curriculum Evaluation, International Institute for educational Planning, France and Longman Inc.
- Giroux, Henry et.al (1981): Curriculum and Instruction: Alternatives in Education by MC Cutchan Public Corp, Printed in USA.
- Dewey, John (1959): The Child and the Curriculum, Chicago, the University of Chicago Press.
- Hilda T (1962): Curriculum and Development- Theory and Practice; Harcourt, Brace and World, Inc.
- Howson, Geoffrey (1978): Developing a New Curriculum, London: Heinmann
- NCERT (1988) National Curriculum for Elementary and Secondary Education: A framework.
- NCERT (2000) National Curriculum Framework For school Education.
- NCERT (2005) National Curriculum Framework. NCERT publications
- Schubert W (1986): Curriculum Perspectives, Paradigms and Possibilities, New York: Macmillan.
- Zias, R (1976): Curriculum Principles and Foundations; New York; Thomas Crowwell.
- Hirst, Paul (1975) : Knowledge and curriculum, (International Library of the Education volume 12): A collection of Philosophical papers, International library of Philosophy of Education, Routledge publishers
- Kumar, Krishna and Malla Reddy : Curriculum Development and Educational Technology.

VPE#EL-1: VALUE AND PEACE EDUCATION

Credits: 4 (2L+ 2T +0P)
Contact hrs per week: 6
Exam Duration: 3 hrs

Marks: 100
C1 + C2: 30
C3: 70

Objectives

The student teacher will be able to:

- Understand the need and importance of education for peace and values.
- Understand the nature, characteristics and types of human values.
- Understand the five core values of Truth, Righteous conduct, Peace, Love and Non-Violence.
- Appreciate the developments in Peace Education in India and Abroad.
- Understand various methods, techniques and approaches of value development.
- Appreciate the preamble to the constitution and values inherent in it.
- Understand various models of value education.
- Appreciate the importance of living together and imbibe in their attitude and behaviour.

COURSE CONTENT

Unit I: Concept, Meaning and Nature of Value

- Concept and meaning of value and Peace:
- Indian and Western perspectives on value and Peace.
- Reflections of great Indian thinkers on values and Peace (Gandhiji, Swami Vivekananda, Sri Aurobindo, Rabindranatha Tagore, J. Krishnamurthi)
- Understanding Peace in the individual, Social, National and International context
- Nature and characteristics of values
- Sources and selection of values -culture and human needs

Unit II: Concept, Meaning and Nature of Peace

- Historical development of Peace education in India and in the world
- Preamble to the Indian Constitution and values inherent in it
- Exposition of the five human values of Truth, Righteous Conduct, Peace, Love and Non-Violence with illustrations from life and literature.
- Creation of United Nations, UNESCO, UNICEF and their role in promoting value and Peace Education.
- Judgment of the Supreme Court on Value Education

Unit III: Concept and need for Value-based Education and Education for Peace

- Concept of value based education and Education for Peace with special reference to peace to Indian view of life;
- Paradigm shift from Peace education to Education for Peace.

- Need for and importance of value based education and Education for Peace in the present scenario.
- Aims and objectives of value based and Peace education
- Recommendations of Sri Prakasha Committee (1959) on value education.
- Recommendations of Parliamentary Committee of HRD on Values Education (1996-90) headed by Shri S.B. Chauhan.

Models of Value Education.

- Models of value education; Rationale building model, the consideration model, valuing process and clarification model.
- Integration of human values with all (school) academic subjects.

Unit IV :Pedagogy of Value Education and Education for Peace

- Approaches and Techniques of teaching human values:-
- Direct approach: value based Story-telling, Group activities (dramatization, literary activities, games and sports, service activities), Counselling, and organizing value based co-curricular activities.
- Indirect Approach; Incidental Approach with illustrations
- Integrated approach: Integration into curricular, co-curricular activities and subjects (with illustrations of integration from Language, Mathematics, science and social science , art and aesthetics , Yoga and health education,
- Teacher as Role Model.
- Role of school ambience and environment in development of values.

Sessional activities

- Develop / compile stories with values from different sources and cultures, organize value based co-curricular activities in the classroom and outside the classroom, develop value based lesson plans, integrating values in school subjects.
- Study of any Model of integrated value education – case study of models expressed by Sri Sathya Sai, J. Krishnamurti, etc.
- Visit to Ramakrishna Institute of Moral and spiritual Education
- (In addition, school and community based activities may be organized).
- On violation of peace as reported through mass-media.

References:

- Barash, P. David (2000). Approaches to Peace, Oxford University Press, New York.
- Bernard, Jessie (1957). The Sociological study of conflict. International Sociological Association, The Nature of Conflict, UNESCO Paris.
- Galtung, J. (2003). Searching for Peace – The road to TRANSCEND, Sterling Virginia.
- Galtung, Johan (1996). Peace by Peaceful Means: Peace and Conflict, Development and Civilization. Sage Publications, New Delhi.
- Galtung, Johan (1984). The Struggle for Peace Gujarat Vidyapith, Ahmedabad.

- Gandhi, M.K. (1944). Non-Violence in Peace and War Navajivan Publishing House, Ahmedabad.
- Govt of India (1983). Report on Education in Human Values in Teacher Training Programmes, New Delhi, Ministry of Human Resource Development.
- Harris Ian. M. (1998). “Peace Education” Mc Farland & Company, Inc Publisher London
- Howlett, Charles F., John Dewey and Peace Education, Encyclopedia of Peace Education, Teacher College, Columbia University 2008.
- Kapani, Madhu (2000). Education in Human Values – concept and practical implications, New Delhi; Sterling Publishers.
- Krishnamurti, J.: “Total Freedom”, Krishnamurti Foundation Chennai.
- NCERT National Curriculum Framework (2005). Position Paper, National focus Group on Education for Peace, NCERT, New Delhi (2006).
- National Curriculum Framework (2005) position paper, National Focus group on Education for Peace, NCERT, New Delhi.
- NCTE (1998). Curriculum Framework for Quality Teacher Education, NCTE, New Delhi.
- Pandey, S. (2004). Education for Peace, Self Instructional Package for Teacher Education, NCERT, New Delhi.
- Sri Sathya Sai Bal Vikas Education Trust (1985). Curriculum and Methodology for integrating Human Values Education, Prashanthi Nilayam (International Education).
- Sri Sathya Sai International Center for Human Values (2009). Education in Human Values: Course Book for Training of Master Trainers, New Delhi.
- The Curriculum framework for Quality Teacher Education (1998) NCTE, New Delhi
- UNESCO (2001) Learning the way of Peace, “A Teacher Guide to Education for Peace”, UNESCO, New Delhi.

Web resources

- Education for values in schools- a framework, NCERT
- http://www.ncert.nic.in/pdf_files/Framework_educationCOMPLETEBOOK.pdf
- Values Education A Handbook for Teachers (2012), CBSE
- http://cbseacademic.in/web_material/ValueEdu/Value%20Education%20Kits.pdf
- Position Paper National Focus Group on Education for Peace, NCERT
http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/education_for_peace.pdf

GC-EL-2: GUIDANCE AND COUNSELLING

Credits: 4 (2L+ 2T +0P)

Contact hrs per week: 6

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 30

C3: 70

Objectives

The student teacher will be able to:

- appreciate the nature, purpose and need for guidance and counselling;
- understand the need and relevance of Guidance and counselling.
- Demonstrate an understanding of educational, vocational and personal guidance
- develop an understanding of the process of Guidance and Counselling
- understand the process of organization of guidance services in schools
- develop capacity of applying the techniques and procedures of guidance and counselling
- describe various testing and non- testing techniques
- develop the skill of administration and interpretation of psychological tests
- understand the concept and importance of career development.
- analyze the role of the teacher in the provision of Guidance and Counselling
- understand the qualities required for good Counsellor

COURSE CONTENT

Unit I: Meaning and Nature of Guidance

- Guidance: Concept, aims, objectives, functions and principles.
- Need & Procedure for (Educational, Psychological and Social) guidance.
- Purposes and Principles of organization of different guidance Services
- Organization of guidance services at Secondary Level: Need and Importance
- Group Guidance: Concept, Need, Significance and Principles, Organization of Guidance programs in schools.
- Role of Guidance Personnel in organization of guidance services in School : Counsellor, Career Master, Psychologist, Doctor, Teacher Counsellor, Head of the Institution, Teacher, Social Worker

Unit II: Meaning and Nature of Counselling

- Counselling: Meaning and nature; Difference between Guidance & Counselling; Principles and approaches of counselling, Individual and Group Counselling; Skills in Counselling- Skills for

Listening, Questioning, Responding, & Communicating, Listening Attentively to the concerns of the counselee, Negotiating Self Discovery, Decision Making, Problem Solving etc and values such as Patience, Empathy etc.; Methods and Process of Counselling

- Academic, Personal, Career and Behaviour problems of students with special needs, viz. socio-emotional problems of children with disabilities and deprived groups such as SC, ST and girls, need for Counselling; Professional Ethics and Code of Conduct ; Qualities and Qualifications of an effective Counsellor

Unit III: Tools and Techniques of Guidance

- Testing and Non-Testing Techniques for Studying and Appraisal of students : a) Testing Techniques: Intelligence/Mental Ability tests, Aptitude tests, attitude scales, Interest inventories, and Personality Tests, b) Non-testing Techniques: Interview, Observation, and Case Study, c) Tools-Questionnaire, anecdotal record, Cumulative Record Cardsetc,
- Role of the teacher in Assessment and Testing.

Unit IV: Career Guidance and Counselling

- Educational and Career Information in Guidance and Counselling: Meaning, Importance, collection, types, classification of occupational information; Dissemination of Occupational Information: Class talk, career talk, Group discussion, Preparation of Charts and Poster, Career Exhibition, Career conference; Guidance for gifted, slow learner, socio-economically disadvantaged children; Career development: Meaning and Importance; Teacher's role in Career planning, Vocational training and placement opportunities for CWSN. Broad outline with respect to the emerging courses and career options available in India; Guidelines for Establishment of Guidance Cell or Career Corners in Schools

Sessional Activities:

- Group Guidance-Preparation of Class Talk and One Career Talk
- Visit to different Guidance Centre
- Design a checklist/Questionnaire to collect information on students and classify them under educational, psychological or social problem.
- Preparation of Cumulative Record
- To prepare a Case study and Analysis of Case study
- Administration, Scoring & interpretation of at least two tests: One Mental Ability Test and One Aptitude Test
- Job Analysis of a Counsellor
- Preparation of list of problem behaviours based on observation. Detailed study of the Guidance and Counselling Services available in a given School
- Prepare a Chart and Poster for dissemination of Career Information
- Familiarize and write a report of any one of the Personality Tests used in Guidance and Counselling

References:

- Aggarwal, J. C. (2004). Educational Vocational Guidance and Counselling, Delhi: Doaba House.
- Asch, M. (2000). Principles of Guidance and Counselling, New Delhi: Sarup and Sons.
- Bhatia, K. K., (2002). Principles of Guidance and Counselling, Ludhiana: Vinod Publications
- Bhatnagar, R. P.; Rani. S. (2001); Guidance and Counselling in Education and Psychology.
- Chauhan, S. S. (2008). Principles and Techniques of Guidance. UP: Vikas Publishing House Pvt. Ltd.
- Coorey, S.M (1953). Action Research to Improve School Practices, New York: Teacher's Columbia University
- Gibson, R.L. and Mitchell (2008). Introduction to counselling and Guidance. New Delhi: PHI Learning Pvt. Ltd.
- Granz, R. M. (2005). Foundation and Principle of Guidance, Boston: Allyn & Bacon.
- Gupta, V. K. (2004). Educational Guidance and Counselling, Ludhiana: Ankur Publications.
- Jones, J. A. (1970). Principles of Guidance, Bombay: Tata, New York: McGraw Hill.
- Joneja G. K. (1997); Occupational Information in Guidance, NCERT publication
- Kakkar, S.B (2015) Educational Psychology, *PHI Learning: Publications*
- Kocher, S. K. (2007). Educational Guidance and Counselling, New Delhi: Sterling.
- Myres, G. E. (2005). Principles and Techniques of Vocational Guidance, New York: McGraw Hill.
- Nanda, S. K. and Sagar, S. (1972). Fundamentals of Guidance. Chandigarh: N.B.S. Educational Publishers.
- Nayak A.K. (2004); Guidance and Counseling
- NCERT (2008). Counselling Process and Strategies (Module 2). New Delhi: NCERT.
- NCERT (2008). Guidance for Human Development and Adjustment (Module 3) New Delhi: NCERT.
- NCERT (2008). Introduction to Guidance (Module 1). New Delhi: NCERT.
- NCERT (2005). National Curriculum Framework-2005, NCERT, New Delhi

Web resources

- Introduction to Guidance and Counseling African Virtual university
<http://oer.avu.org/bitstream/handle/123456789/153/GUIDANCE%20AND%20COUNSELING.pdf?sequence=1>
- Ethical Principles of Psychologists and Code of Conduct by APA,
<http://www.apa.org/ethics/code/principles.pdf>
- Guidance and Counselling,

http://www.ncert.nic.in/departments/nic/dse/activities/advisory_board/pdf/guidelines_for_guidance_and_counseling.pdf

- <http://www.egyankosh.ac.in/>

AR-EL-3: ACTION RESEARCH

Credits:4 (2L+2T+0P)

Contact hours per week: 6

Exam duration: 3 Hours

Max Marks : 100

C1+C2:30

C3: 70

Objectives

The student teachers will be able to

- Understand the need for action research in schools
- Understand the various steps involved in conducting Action Research.
- Identify the problems for action research in real classroom situations.
- Plan and conduct classroom action research
- Analyse data using appropriate statistical techniques.
- Prepare a research report

Unit - I: Action Research – Meaning, Importance and types

Meaning of Research and Education Research; Broad Classification of research- Basic Research and Applied Research;

Need, Nature and Importance of Action Research, Types of Action Research with illustrations.

Unit - II: Steps involved in Action Research

Identification of a Problem ; Steps involved in conducting Action Research, Drafting Action Research Proposal, construction of simple teacher made tools/tests, carrying out action research , Analysis of data and Reporting.

Unit - III: Statistical measures to analyze the data

Classification and tabulation of Data, Measures of Central Tendency-Mean, Median and Mode; Measures of Variability - Mean Deviation, Standard Deviation and Quartile Deviation; Graphical Representation of Data, Histogram, Bar Diagram, Pie Chart, Ogive, Testing of Differences: t-test,

simple measures of correlation, Normal Probability curve - Properties and Uses.

Unit - IV: Reporting the research outcomes

Reporting: Research Report Format, Style, Typing, Pagination, Tables, Figures, Reference and Bibliography, Appendices.

Application of research outcomes – Points to be considered.

Sessional Activities

- Review of action research reports
- Identify problem and execute Action Research in any one of the following areas: (1) teaching staff (2) Students (3) Discipline (4) Teaching strategies (5) Community Participation (6) Parental Attitudes (7) Children with Special Needs (8) use of learning resources (9) learning problems of students in different subject areas (10) effect of remedial measures (11) participation of students in co-curricular activities and any other.
- Analysis, interpretation, reporting of the action research and submission of the action research report under the guidance of the faculty member.

References:

- Corey, Stephen M, (1953), Action Research to improve School Practices, Bureau of Publications, Teachers College, Columbia University, New York.
- Corey, Stephen M and Shukla, J K (1962) ' Practical Classroom research by teachers: Classroom experimentation to improve teaching, Govt.of India Press, faridabad, Civil Lines, Delhi
- Can W and Kemmis s (1986) ' Becoming Critical : Education, Knowledge and Action Research', Lewes, Sussex : Falmer Press
- Clark, A W (Ed) (1976) ' Experimenting with organisational life : The Action Research Approach', New York, Plenum Press
- Connelly, f M and Claudinin, J d (1988) ' Teachers as Curriculum Planners: Narratives of Experience', New York, Teachers College Press
- Davis, E (1981) ' Teachers As Evaluators', Sydney: George Allen and Unwin Ebbutt, D (1983) 'Educational Action Research: Some general concerns and specific quibbles'; Cambridge Institute of Education
- Elliott, J (1991), 'Action Reserach for Educational Change', Mitton Keynes: Open University Press
- Gregory, r (1988), 'Action Research in the Secondary School', London: Routledge, Chapman and Hall
- Hook, C (1985), 'Studying Classrooms', geelong, Victoria, Deakin University Press
- Hopkins, D (1985), 'A Teacher's Guide to Classroom Reaserch', Philadelphia, Pa : Open University Press

- Hustler, D., Carridy, A and Cuff, E (Eds) (1986), 'Action Research in classrooms and Schools', London: Allen and Unwin
- Kemmis, S and Mc Taggart, R (Eds) (1982) 'The Action Research Reader', Geelong Victoria: Deakin University Press
- Nixon J (Ed) (1981) 'A Teacher's Guide to Action Research: Evaluation, Enquiry and Development in the Classroom', London: Grant mc Intyre
- Garret H E (1971) statistics in Psychology and Education, Bombay: Vakits, Ferrer, Simons (Pvt.) Ltd.
- Best, John w (1961) Research in Education, Englewood Cliffs, Prentice Hall Inc. Grondland, Norman e and Linn, Robert L (1990), Measurement and Evaluation in Teaching (6th ed.), New York, MacMillan Publishing Co.

EPC-3: DRAMA AND ART EDUCATION

Credits: 2 (1L+0 T +1P)

Contact hrs per week: 3

Exam Duration: 3 hrs

Marks: 100

C1 + C2: 50

C3: 50

Objectives:

The student teacher will be able to:

- Understand the use of 'Drama' as Pedagogy.
- Use 'Role play' technique in the teaching learning process.
- Understand the importance of dramatic way of presentation.
- Integrate singing method in teaching learning process.
- Understand various 'Dance forms' and their integration in educational practices.
- Use art of drawing and painting in teaching learning process.
- Develop creativity through different creative art forms.
- Understand the efficacy of different art forms in education.

COURSE CONTENT

Unit I: Drama and its Fundamentals

- Creative writing – Drama writing, Drama as a tool of learning, Different Forms of Drama
- Role play and Simulation, Use of Drama for Educational and social change (Street play, Dramatization of a lesson), Use of Drama Techniques in the Classroom: voice and speech, mime and movements, improvisation, skills of observation, imitation and presentation

Unit II: Music (Vocal & Instrumental)

- *Sur, Taal and Laya (Sargam)*, Vocal - Folk songs, Poems, Prayers, Singing along with “Karaoke”, Composition of Songs, Poems, Prayers, Integration of *Vocal & Instrumental* in Educational practices

Unit III: The Art of Dance

- Various Dance Forms - Bharat Natyam, Kathakali, Kuchipudi, Yakshagana- Folk dance and various other dances
- Integration of Dance in educational practices
- (Action songs, *Nritya Natika*)

Unit IV: Drawing and Painting

- Colours, Strokes and Sketching- understanding of various means and perspectives, Different forms of painting- Worli art, Madhubani art, Glass painting, Fabric painting and various forms of painting, Use of Drawing and Painting in Education -Chart making, Poster making, match-stick drawing and other forms, Model making – Clay modeling, Origami, Puppet making, Decorative – Rangoli, Ekebana, Wall painting (Mural), Kalameshuthu or any other local art

Transactional Strategies

Lecture cum Discussion for each Unit (Unit 1 to 4) followed by simulated/ authentic practices, Workshop schedule, Slide / Film show, Project work, Demonstration, Simulation, Group work and field trips involving meetings with folk singers and other skilled practitioners will especially form part of the transaction scheme. In addition to the above any one or more of the following:

Practicum

Suggestive List:

- Developing a script of any lesson in any subject of your choice to perform a Play / Drama.
- Developing a script for the street play focusing on “Girl’s education and Women empowerment”.
- Preparing a pictorial monograph on “Various folk dance of South India.
- Preparing a pictorial monograph on “Various Classical Dance forms in India”.
- Preparing a calendar chart on “Various Musical Instruments in India”.
- Develop an Audio CD based on newly composed Poems of any Indian language.
- Preparing some useful, productive and decorative models out of the waste materials.
- Visit the Faculty of Performing Arts in your city and prepare a detailed report on its multifarious functioning.
- Development a Review of a theatre programme if possible
- Organize a competition on some Decorative / Performing Art forms in the school during your School Internship programme and prepare a report on it.
- Organizing a workshop on some selected Creative Art forms in the school during your School Internship programme and prepare a report on it.

*** In addition, school and community based activities may be organized with provisions for visits to innovative centres of pedagogy and learning, innovative schools, educational resource centres, etc. Action research based on teaching learning and school and community could be conducted.**

Evaluation Strategies

Sessional, practicum, unit test project work related presentations.

Suggested Readings

- Natyashastra by Bharathamuni
- Deva, B.C. (1981). An Introduction to Indian Music. Publication Division, Ministry of Information and Broadcasting, Government of India.
- NCERT (2006). Position Paper by National Focus Group on Arts, Music, Dance and Theatre
- Theory of Drama by A. Nicoll

Web Resources

- Position Paper National Focus Group on Arts, Music & Dance, NCERT
- http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/art_education.pdf
- Arts in school education, (2012), <http://azimpremjifoundation.org/pdf/LCXVIII.pdf>
- Online courses on Arts, <http://www.dsource.in/course/index.php>
- Learning Indicators and Learning Outcomes at the Elementary Stage, (2014), NCERT http://www.ncert.nic.in/departments/nie/dee/publication/pdf/LI_Final_Copy_Revised_29.12.14.pdf

EPC-4: HEALTH AND PHYSICAL EDUCATION

Credits: 2 (1L+ 0T +1P)

Contact hrs per week: 3

Exam Duration: 2 hrs

Marks: 100

C1 + C2: 50

C3: 50

Objectives

The student teacher will be able to:

- to build a scenario of Health Education in India.
- to develop a Knowledge Base of the Most Common and Uncommon Diseases in India; their Diagnosis & Remediation.
- Prospective Teacher Educators to learn the Techniques Related to Health Risks & Learn How to Fix these.
- Prospective Teacher Educators to study the Health Education Vision & Mission of India.
- To acquire the skills for physical fitness, correct postures, habits and activities for development
- Acquire skills to practice yogasanas and meditation and learn the skills of concentration, relaxation, dealing with stress and strain
- Understand and develop psychological abilities as life skills to deal with growing up issues like HIV and AIDS and prevention of substance issues
- Understand the process of assessment

COURSE CONTENT

Unit I: Health Education Scenario in India

- Introduction to the concept of health, significance and importance in the context of ancient and modern Indian perspective
- Identity of Educational Institutional Plants: Structure, Infra-Structure and Environment, Time-Space-Personnel-Material Constellation Educational Management System, Emerging Health & Total Quality of the Educational Institutions, Status of Health Education in India from Pre-Natal Education through Higher Education, Yoga & Yog, Health & Hygiene, Clean Toilets, Work & Leisure, Quality of Health – Role of Education, Administrators, Teachers, Students, Supporters.

Unit II: Tech-related Health Risks

- Identification of the technological health hazards – Smartphone Stress, Acne caused by the Cell Phones, Blackberry Stress Injuries to the Thumb, Radiation from the cell phones, Cell Phone Sickness, Cell Phone & Car Accidents, Allergies & Phones, Crazy Phones, Computers Causing Wrist Pain, Back & Neck Pain, Decreased Sperm Count from the WIFI, Laptop Burns, Laptop Headaches, Sleeping Problems from the Laptops, Decreased attention span from using Facebook, The Internet Causing Anxiety, Headphone Use leading to Accidents, Hearing Loss from Headphones, Visual Impairment, Death from Social Networking, Environmental Degradation, Aggression, Social Crimes--- Evolving Controlling & Regulatory Mechanisms.

Unit III: Approaches to Sound Health

- Games, Sports & Athletics.
- Physical fitness, strength, endurance and flexibility, its components, sports skills, indigenous and self-defence activities.
- Games and sports – athletics (general physical fitness exercises), games (lead-up games, relays and major games) rhythmic activities, gymnastics and their impact of health.
- Fundamental skills of games and sports; Sports for recreation and competition; Rules and regulation of sports; sports ethics; sports awards and scholarships, sports- personship.
- Yoga – Raja Yoga, Karma Yoga, Bhakti Yoga, Jnana Yoga.
- Safety and security – disasters in and outside schools, ways of prevention, safety from snake and dog bites, animal attacks, prevention and treatment.
- Occupational health hazards and its prevention; Commonly-abused substance and drugs and ways of prevention and inhabitation.
- Libraries, Laboratories, Classrooms, Halls, Play Fields, Water Tanks, Swimming Pools, Community Pools, Roads Human Development Index (HDI), Health: Vision, Goals and Objectives of Government of India, Experiments on Influence of Surroundings & Thought, Science of Laughter & Smiles, Health Observation Programs, Impact of TV Serials.
- Role of Institutions (schools, family and sports), health services, policies and major health and physical education-related programme, blood banks, role of media.

Unit IV: First Aid – Principles and Uses

- Structure and function of human body and the principles of first aid., First aid equipments.
- Fractures-causes and symptoms and the first aid related to them, Muscular sprains cause,

symptoms and remedies, First aid related to hemorrhage, respiratory discomfort, First aid related to Natural and artificial carriage of sick and wounded person, Treatment of unconsciousness, Treatment of heat stroke, General disease affecting in the local area and measures to prevent them.

Practicum

- Surfing to know the diseases in India.
- Preventive & Ameliorative measures for health hazards.
- Playing Games.
- Athletics.
- Yoga.
- Reflective Dialogues on Serials, such as, Satyamev Jayate on Health of the People.
- Preparation of inventories on myths on exercises and different type of food.
- Make an inventory of energy rich food and nutritious food (locally available) indicating its health value.
- Make an inventory of artificial food and provide critical observations from health point of view.
- Home remedies as health care.
- Role of biopolymers (DNA) in health of child.
- Medicinal plants and child health.
- Strategies for positive thinking and motivation.
- Preparation of first aid kit.

*** In addition, school and community based activities may be organized.**

References:

- Arora,P. (2005) Sex Education in schools, Prabhat Prakashan
- K.Park “Preventive and Social Medicine” Banarsidas Bhanoth, Publishers Nagpur Road, Jablapur, India.
- NCERT (2013). Training and Resource materials on Adolescence Education, NCERT, New Delhi (This material is also available on www.aeparc.org. www.ncert.nic.in)
- NCERT (2014). Population Education, Source Material, NCERT, New Delhi.
- Stephen, J. Williams, Paul R. Torrents, “Introduction to Health Service”, Delmore Publications.

Physical Education

- Deboarh, A. Wuest, Charles, A. Bucher: “Foundation of Physical Education Exercise Science and Sports”, Tata McGraw Hill Pvt. Ltd., New Delhi.
- John, E. Mixton, Ann, E. Jewett: “An Introduction to Physical Education, W.B. Saunders Company, London.
- John, Cheffers; Tom, Eval: “Introduction to Physical Education – Concept of Human Movement”. Prentice Hall Engle Wood: New Jersey.
- Bette J., Logdson & Others, “Physical Education for Children”, Lea and Febiger, Philadelphia.
- Roberts, S. Weinberg & Daniel Gould, “Foundation of Sports and Exercise Psychology”, Human Kinetics Publication.
- A.K. Uppal, Lawrance Gray Kumar, “Biomechanics in Physical Education and Exercise Science: Friends Publication, New Delhi.
- Jack, H. Wilmore, David, L. Costil, W. Larry Kenney, “Physiology of Sports and Exercise: Human Kinetics Publication.

Yoga

- Swami Satyanand Saraswati, “Asana Pranayama Mudra Bandh”, Bihar School of Yoga, Munger.
- M.M. Ghore, “Anatomy and Physiology of Yogic Practices”. Lonavala Yoga Institute, Lonavala.
- Gharote, M.L. (2004). Applied Yoga, Kaivalyadhama S.M.Y.M. Samiti, Lonavala.
- “Yogasana” Morarji Desai National Institute of Yoga, New Delhi.
- “Pranayama” Morarji Desai National Institute of Yoga, New Delhi.
- MDNIY (2010). “Yoga Teachers Manual for School Teachers, New Delhi.
- NCERT (2015). Yoga: A Healthy Way of Living Upper Primary Stage, New Delhi.
- NCERT (2015). Yoga: A Healthy Way of Living Secondary Stage, New Delhi.
- Agarwal, Satya P. (1998). The social role of the Gītā: how and why, Motilal Banarsidass, ISBN 978-81-208-1524-7, retrieved 17 June 2010.
- Goel, Devraj & Goel, Chhaya (2013). Universe of Swami Vivekananda & Complete.
- Wholistic Social Development, CASE Publication under UGC SAP, The M.S. University of Baroda, Vadodara.
- Jason Liu and Dr. Gwendalle Cooper (2009) *Scientific Analysis of the Effects of Falun Dafa* Presented at International Conference of Psychologists, February 27, 2009 by Catherine Hennessy.
- Mehroo D. Bengalee (1976). *Child Guidance*. Sheth Publishers, Educational Publishers, 35, Everest, Pedder Road, Bombay.
- Ministry of Health & Family Welfare, Government of India, *Annual Report to the People on Health*, December 2011.
- Porter, Noah (2003). *Falun Gong in the United States: An Ethnographic Study*, Master Thesis, Department of Anthropology, College of Arts and Sciences, University of South Florida.
- Wu JY, Feng, L, Park , H-T, Havlioglu N, Wen L, Tang H, Bacon KB, Jiang Z, Zhang X, Rao Y. (2001). *Molecule that guides Nerve Calls Directs Immune Cells*, Science Daily, Apr. 20.

Web Resources

- Position Paper National Focus Group on Health and Physical Education, NCERT
- http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/health_prelims_final.pdf
- Learning curves: sports in education, (2013) Azim Premji Foundation <http://azimpremjifoundation.org/pdf/learning-curve-17.pdf>
- www.FalunDafa.org
- [www.http://greatist.com/health/19-worst-tech-related-health-risks](http://greatist.com/health/19-worst-tech-related-health-risks)

