

**தமிழ்நாடு ஆசிரியர் கல்வியியல் பல்கலைக்கழகம்**

**TAMILNADU TEACHERS EDUCATION UNIVERSITY**

**DEGREE OF BACHELOR OF EDUCATION (B.Ed)**

**(FOR THE PROGRAMME IN COLLEGES OF EDUCATION - FULL-TIME  
AND REGULAR PRE-SERVICE TEACHER EDUCATION)**

**REGULATIONS**

**(with effect from the academic year 2008-2009)**

**1. ELIGIBILITY FOR ADMISSION TO THE COURSE :**

A candidate shall be eligible for admission to the course leading to the Degree of Bachelor of Education provided :

- (i) The candidate should have passed the UG Degree examination in the 10+2+3 stream, with the same main subject in part III, for which he/she is seeking admission to B.Ed Programme.
- (ii) Candidates who have taken more than one main subject in part III (Double Triple Major) of the UG degree have to choose only one of the main subject and apply for that optional only.
- (iii) Candidates with the following marks in Part III (Major and Allied subjects) in the Bachelor's Degree are eligible for admission to the B.Ed. Programme O.C. - 50%, B.C. - 45%, M.B.C. - 43%, S.C./S.T. - 40% . In the case of Physically and Visually challenged candidates, a minimum pass in the Degree is enough, the admission criteria however shall be as per the norms prescribed by the University or the State Government from time to time.

The basis of selection shall be in accordance with the statutory provisions of the University / Government of Tamilnadu in force from time to time.

**2. ELIGIBILITY FOR ADMISSION TO THE EXAMINATION**

A candidate shall be admitted to the B.Ed Degree examination only if he/she forwards, along with his/her application for Examination, satisfactory evidence of having qualified himself/herself for a degree in any University accepted by the Syndicate as equivalent thereto, in the form of a certificate of equivalence/recognition/eligibility issued by the University, and also produces a certificate that he/she has undergone a course of study as prescribed hereinafter in a College of Education affiliated to the University, having put in not less than 80 percent of attendance.

### 3. DURATION

The course of study shall be for a duration of one academic year. There will be 10 days for admission and another 10 days for examination exclusively. The 180 working days will include internship, teaching practice and school - community based activities. The course work will be 1080 hours.

### 4. PROGRAMME CONTENT

The programme will consist of a theory component and a practicum component.

L - Lecture; T- Tutorial; P - Practical / Project work

Sl.No.	Subject	Credit	L	T	P	Total
<b>I</b>	<b>Core Courses</b>					
1.	Education in Emerging Indian Society	4	60	20	20	100
2.	Psychology of Teaching and Learning	4	60	20	20	100
3.	Educational Innovations and Technology	4	60	20	20	100
<b>II</b>	<b>Elective Course</b>	2	30	10	10	50
<b>III</b>	<b>Optional Courses</b>					
1.	Optional I	4	60	20	20	100
2.	Optional II	4	60	20	20	100
<b>IV</b>	<b>General</b>					
1.	Personality Development Sessions	-	5	-	-	5
	<b>Total (Theory)</b>	<b>22</b>	<b>335</b>	<b>110</b>	<b>110</b>	<b>555</b>

## **DETAILS OF COURSES IN THEORY COMPONENT**

### **A. CORE COURSES**

#### **GROUP A - CORE COURSES (ALL THE THREE CORE PAPERS ARE COMPULSORY)**

1. Education in Emerging Indian Society
2. Psychology of Teaching and Learning
3. Educational Innovations and Technology

#### **GROUP B : ELECTIVE COURSE**

A student shall choose any ONE of the papers provided for by his/her college from among the list of approved papers given below.

1. Human Rights Education
2. Peace Education
3. Environmental Education
4. Guidance and Counselling
5. Curriculum Development
6. Education for the Mentally Handicapped
7. Physical and Health Education
8. Computers in Education

#### **GROUP C : OPTIONAL COURSES - SCHOOL SUBJECT-ORIENTED METHODOLOGY COURSES**

Each student has to choose TWO school subject-oriented methodology courses from the list of courses mentioned below.

All graduates shall offer their respective major subject of study as one optional. The second optional can be the subject they have offered as ancillary or English / Tamil or as per the guidelines as and when given by the Govt. of Tamil Nadu.

Graduates and Post-Graduates who have offered Tamil or English as their main subject of study can offer both the optionals from the same subject namely, Tamil or English as the case may be.

Post graduates in subjects other than English and Tamil will, however, offer both the optionals from the subject in which they have acquired their post-graduate degree.

1. English
2. Tamil
3. Mathematics
4. Physical Science
5. Biological Science
6. History
7. Geography
8. Home Science
9. Commerce and Accountancy
10. Elements of Economics
11. Computer Education
12. Political Science

## II. PRACTICUM COMPONENT

1. Internship and Teaching Practice - The practice teaching will have to be undergone in a recognised High / Higher Secondary / Matriculation / Matriculation Higher Secondary or Senior Secondary School. The duration of the internship will be 40 (forty) working days.
2. School based and community based activities.
3. Submission of Records / Reports pertaining to all activities under practicum

L - Lecture ; T- Tutorial; P - Practical / Project work

Sl.No.	Practicals	Credits	No. of Hours			
			L	T	P	Total
<b>I</b>	<b>GROUP "A"</b>					
1.	Practice Teaching Optional - I	4	-	-	100	100
2.	Practice Teaching Optional - II	4	-	-	100	100
	<b>Total (Group A)</b>	<b>8</b>	<b>-</b>	<b>-</b>	<b>200</b>	<b>200</b>

<b>II</b>	<b>GROUP "B"</b>					
1.	Micro/Macro Teaching, Observation and Lesson Planning	4	-	20	80	100
2.	Educational Technology (AV Aids, CAI, Websites, Web Pages Etc.,)	2	-	10	40	50
3.	Tests and Measurements	2	-	10	40	50
4.	Test Book Evaluation and Review	1	-	10	15	25
	<b>Total (Group B)</b>	<b>9</b>	<b>-</b>	<b>50</b>	<b>175</b>	<b>225</b>
<b>III</b>	<b>GROUP "C"</b>					
1.	Action Research and Case Studies (individual and Institutional)	1	-	5	20	25
2.	Physical and Environmental Education	1	-	10	15	25
3.	Camp, Study Tour, Community Service and SUPW	1	-	-	25	25
4.	Psychological Experiments (5)	1	-	-	25	25
	<b>Total (Group C)</b>	<b>4</b>	<b>-</b>	<b>15</b>	<b>85</b>	<b>100</b>

#### SUMMARY

Sl.No.	Practicals	Credits	No. of Hours			
			L	T	P	Total
<b>I</b>	<b>Theory Component</b>					
1.	Core Courses (3)	12	180	60	60	300
2.	Elective Courses (1)	2	30	10	10	50
3.	Optionals (2)	8	120	40	40	200
4.	Personality Development Sessions	-	5	-	-	5
	<b>Total (Theory)</b>	<b>22</b>	<b>335</b>	<b>110</b>	<b>110</b>	<b>555</b>
<b>II</b>	<b>Practicum Component</b>					
1.	Group "A"	8	-	-	200	200
2.	Group "B"	9	-	50	175	225
3.	Group "C"	4	-	15	85	100
	<b>Total (Practicum)</b>	<b>21</b>	<b>-</b>	<b>65</b>	<b>460</b>	<b>525</b>
	<b>Grand Total</b>	<b>43</b>	<b>335</b>	<b>175</b>	<b>570</b>	<b>1080</b>

**GUIDELINES FOR SUBMISSION OF REPORTS/RECORDS PERTAINING TO  
SCHOOL BASED AND COMMUNITY BASED ACTIVITIES**

**I. Creative Records. (Minimum One Record from Each Group)**

<b>Sl.No.</b>	<b>Group 'A'</b>	<b>Sl.No.</b>	<b>Group 'B'</b>
1.	Pictures from Print Media	1.	Scrap Book
2.	Photographs	2.	Preserved Specimens
3.	Chalk Board Sketches	3.	Samples
4.	Picture Series	4.	Booklets
5.	Composite Scenes	5.	Magazines
6.	Nature Albums	6.	Journals etc.,
7.	Net Based Materials etc.,		

**II.TEXT BOOK REVIEW**

1. Author - Qualification, experience etc.,
2. Publication.
3. Mechanical features - paper quality, size, print, illustration, binding etc.
4. Subject matter - suitability, presentation etc.,

**III. ACTION RESEARCH**

1. Identification of the Problem
2. Statement of objectives
3. Hypothesis
4. Data Collection and Analysis
5. Verification
6. Findings
7. Suggestions for corrective action
8. Follow up

#### **IV. CASE STUDY OF AN INDIVIDUAL**

1. Identification.
2. Collection of Data
  - (a) Personal Data - Name, sex, age, class, division, address etc.,
  - (b) Other Data - Family, Health, Academic, Achievement, etc
3. Analysis of the problem.
4. Suggested Remedial Action.
5. Follow up.

#### **V. CASE STUDY OF AN INSTITUTION**

1. Aims and Objectives.
2. School Organization - Management Hierarchy.
3. Staff structure - Teaching / Non Teaching Staff.
4. Infrastructure - Buildings-Rooms/Halls for various purposes.
5. Furniture and Fittings.
6. Library, Laboratories, Language Lab, Computer Centre etc.,
7. Financial Support - Management Funds, government Aids, Fee Collection etc.,
8. Supervision - Administrative, Academic, Disciplinary, etc.,
9. Environment - Cleanliness
10. Interpersonal Relationships - Management-Principal-Teachers-Students Parents-Community.
11. School Activities-Assembly-Punctuality, Attendance (Teachers & Students), Quality of Instruction/Evaluation, Co-Curricular activities, Extra Curricular Activities, Cultural, Sports activities etc.,
12. Evaluation and Report Writing.

#### **VI. PHYSICAL EDUCATION**

1. Aims and Objectives
2. Modern Trends
3. Teaching/Coaching/Exercising - Jogging, Walking, Yoga, Meditation etc.,

4. Preparing for Competitions.
5. Organising Sports Meet/Games/Tournaments.
6. Intra Mural Competitions.
7. Fixures - Organizing - Conducting events.
8. Rules and Regulations - Major / Minor Games/ Sports Events.
9. Evaluation.
10. Report Writing.

## **VII. ENVIRONMENTAL EDUCATION**

1. Aims and Objectives
2. Survey of School-Class Room/Library/Laboratory/Toilets/Tea Rooms Surroundings/Home/Street etc (For Neatness, Cleanliness, Ventilation, Seating arrangements Etc.)
3. Personal Hygiene.
4. Communicable Diseases.
5. Awareness of AIDS.
6. Preventive Measures.
7. First Aid and Simple Medical Remedies.
8. Report Writing.

## **VIII. CAMP ACTIVITIES**

1. Aims and Objectives.
2. Identification of Camp Site.
3. Planning of Activities.
4. Duties and Responsibilities of various Groups & Leaders.
5. Service Activities.
6. Cultural Activities.
7. Guest Lectures.
8. Other Instructional Programmes.
9. Camp Fire.
10. Valedictory Function.



11. Evaluation of all Camp activities.
12. Suggestions for Improvement.

### **IX. COMMUNITY SERVICES**

1. Services - Garbage removal, Clearing Vegetation, Digging drains, Rain Water Harvesting in School premises, College premises, Streets, Slums etc.
2. Decoration for Functions.
3. Tree Plantation / Gardening.
4. Social service activities such as Adult Literacy Programmes, Teaching Hygiene, Sanitation and Health Education to Slum Dwellers etc.,
5. Organising campaigns for social causes.

### **X. EDUCATIONAL TOUR**

1. Aims and Objectives.
2. Proposal.
3. Planning-Preliminary Enquiry, Liason with Agencies/ Authorities, Budgeting, Logistics, Safety & First Aid, Communication, Sequencing, Contingency Plan & Blue Print.
4. Organizing - Command and Control Structure.
5. Execution - Observation, Note Pad - Note taking.
6. Evaluation - Feedback on successes and failures, Suggestions for improvement.
7. Tour Report.

### **XI. SUPW**

1. Aims and Objectives.
2. Categories - Products - Goods/ Services.
3. Products - Goods Preparation.  
(Toys, Detergents, Shampoo, Greeting Cards, Envelopes, Note Books, and Shell/Nylon wire products, Food Processing etc.,)
4. Products - Services.  
(Photography, Energy conservation projects, Repair of domestic Appliances, Tailoring, Gardening etc.,)
5. Report on Planning, Processing and End Product.

## **XII. PSYCHOLOGICAL EXPERIMENTS (ANY FIVE OUT OF THE FOLLOWING)**

1. Intelligence
2. Learning
3. Transfer of Training.
4. Aptitude
5. Adjustment
6. Concept Formation
7. Level of Aspiration
8. Interest
9. Personality Types
10. Attention
11. Perception
12. Motor Skills
13. Creativity
14. Achievement Motivation

## **XIII. GENERAL**

### **A. TEACHER QUALITIES/PERSONALITY DEVELOPMENT**

1. Bearing
2. Punctuality
3. Discipline
4. Sociability (Inter personal Relationship)
5. Communication Skill
6. Leadership Traits
7. Initiative
8. Perseverance
9. Self Respect
10. Espirit De Corps (Team Spirit)
11. Courtesy etc.

**B. Attendance**

1. 95% - 100% - 5 Marks.
2. 90% - 95% - 4 Marks
3. 85% - 90% - 3 Marks
4. 80% - 85% - 2 Marks

**DISTRIBUTION OF MARKS  
THEORY COMPONENT  
GROUP A : CORE COURSES**

Sl.No.	Group A	Univ.Marks (75)	Internal Marks (25)*	Max. Marks (100)	Univ. Exam Duration
1.	Education in Emerging Indian Society	75	25	100	3 Hrs
2.	Psychology of Teaching and Learning	75	25	100	3Hrs
3.	Educational Innovations and Technology	75	25	100	3 Hrs
	<b>Total</b>	<b>225</b>	<b>75</b>	<b>300</b>	

**GROUP B : ELECTIVE COURSE**

Sl.No.	Group B	Univ.Marks (75)	Internal Marks (25)*	Max. Marks (100)	Univ. Exam Duration
1.	Elective Subject	75	25	100	3 Hrs
	Total	75	25	100	

**GROUP C : OPTIONAL COURSES - SCHOOL SUBJECT-ORIENTED  
METHODOLOGY COURSES**

Sl.No.	Group C	Univ.Marks (75)	Internal Marks (25)*	Max. Marks (100)	Univ. Exam Duration
1.	Optional - I	75	25	100	3 Hrs
2.	Optional - II	75	25	100	3 Hrs
	<b>Total</b>	<b>150</b>	<b>50</b>	<b>200</b>	

**Grand Total for Theory 600**

**GROUP 'A' : TEACHING COMPETANCE AND PRACTICE TEACHING**

Sl. No.	Description	Maximum Marks		
		Optional I	Optional II	Total
<b>I</b>	<b>Preliminaries</b>			
1.	Observation of Demonstration Lessons			
	(a) By Teacher Educators			
	(b) By Peers			
	(c) by Mentors			
2.	Practice in Micro Skills			
<b>II</b>	<b>Classroom Teaching (Macro Lessons)</b>	<b>150</b>	<b>150</b>	<b>300</b>
	(a) Under the supervision of teacher educator - 3 Micro & 10 Macro Lessons in each Optional			
	(b) Under the supervision of Mentor - 20 Macro lessons in each optional			
	Total for Group 'A'	150	150	300

**GROUP 'B' : LESSON PLANS, PRACTICAL RECORDS, EDUCATIONAL TECHNOLOGY AND EVALUATION**

Sl. No.	Description	Maximum Marks		
		Optional I	Optional II	Total
<b>I</b>	<b>Lesson Plans, Observation &amp; Records</b>			
	(a) Lessons Plans - Micro Lesson Plans & Observation	10	10	20
	(b) Macro Lessons - Observation	5	5	10
	(c) Macro Lessons - Lesson Plans	10	10	20
	(d) Practical Records, Assignments etc., given during practice teaching	5	5	10

	(e) Creative Records (Albums, Scrap Book, Booklets, Magazines, Journals etc.) - Minimum two records	5	5	10
<b>II.</b>	<b>Text Book Review</b> (Any one pertaining to optional subject)	5	5	10
<b>III.</b>	<b>Educational Technology</b>			
(a)	Software - Preparation of teaching aids (Charts, Models, transparencies for OHP, Flash Cards, Materials for flannel/magnetic boards etc.) Minimum one in each lesson per optional	10	10	20
(b)	Hardware - Handling Audio Visual Equipments (OHP, Camera, Audio/Video Players, LCD Projector etc.) - Any five types of equipment (Group Work)	5	5	10
<b>IV</b>	<b>Self Learning Package -</b>			
	Programmed Learning one Programme with minimum 20 frames (Group Work)	10	10	20
<b>V</b>	<b>Computers in Education</b>			
(a)	Educational Software for Multimedia Presentation on any one topic (Group Work)	5	5	10
(b)	Identifying and cataloguing websites related to each optional (Minimum 3 websites in each optional) & Comparative Evaluation of two web pages bearing the same unit for quality and relevance - One Evaluation per optional (Group work)	5	5	10

<b>VI</b>	<b>Tests and Measurements</b>	15	15	30
(a)	Construction of Test Items - Separately for each optional			
	(i) Objective type (4 types) - 10 items			
	(ii) Short Answer Type - 10 Items			
	(iii) Essay Type - 10 Items			
(b)	Preparation of Blueprint (separately for each optional)			
(c)	Construction of Question Paper (As per the pattern followed in schools) - Separately for each optional			
(d)	Administration of the test in a class - One test per Optional			
(e)	Scoring and interpretation of Scores - One test per Optional			
	<b>Total for Group 'B'</b>	<b>90</b>	<b>90</b>	<b>180</b>

**GROUP 'C' : SCHOOL BASED AND COMMUNITY BASED ACTIVITIES**

Sl. No.	Description	Maximum Marks		
		Optional I	Optional II	Total
I (a)	Action Research - Individual task	-	-	10
(b)	Case Study Report - Comparative Study of two individual students - individual Task	-	-	10
(c)	Case Study Report - Institutional - Group Task	-	-	5
II (a)	Physical Education Record - Group Task	-	-	5
(b)	Environmental Education Record - Group Task	-	-	5

III(a)	Camp Activities - Report- Group Task	-	-	5
(b)	Community Services - Report - Group Task	-	-	5
(c)	Educational Tour - Report - Group Task	-	-	5
(d)	SUPW - Group Task (to submit the product /output/sample with report)	-	-	5
IV	Psychological Experiments (Five out the 14 listed in syllabus) (Refer Page 9)	-	-	50
<b>V</b>	<b>General</b>			
1.	Development of personality and Teacher like qualities (Student teachers are to be assessed for development of these qualities - Refer Page 9)	-	-	10
2.	Attendance (Refer Page 9)	-	-	5
	<b>Total for Group 'C'</b>			<b>120</b>

#### PRACTICUM SUMMARY

Sl. No.	Description	Maximum Marks		
		Optional I	Optional II	Total
1.	Group 'A' - Teaching Practice	150	150	300
2.	Group 'B' - Lesson Plans, Practical Records, Educational Technology and Tests & Measurements	90	90	180
3.	Group 'C' - School Based and Community Based Activities	120	-	120
	<b>Total (For Practicals)</b>	<b>360</b>	<b>240</b>	<b>600</b>

Note : Internal Evaluation of Practical Work will be based on practical assignments, performance of school and community activities and evaluation of teaching practice including submission of Reports/Records pertaining to these activities.

Total for Theory = 600 Marks  
Total for Practicum = 600 Marks  
**Grand Total = 1200 Marks**

## 5. QUESTION PAPER DESIGN :

Each theory subject question paper will be designed for 3 Hours in three Sections Part - I, Part - II and Part - III with the number of questions and allotments of Marks as described below :

<b>Section</b>	<b>Type of Question</b>	<b>Marks</b>	<b>Total</b>
Part - I	Very Short Answer (Ten questions out of Twelve)	10 x 2	20
Part - II	Short Answer (Five questions out of Eight)	5 x 5	25
Part - III	Two Essay with Internal Choice	2 x 15	30
	<b>Total Marks</b>		<b>75</b>

## 6. PRACTICAL EXAMINATION BY BOARD OF SUPERVISING EXAMINERS

The Board will examine the teaching competence of every candidate and his/her practical work. The Board shall report to the University the marks awarded to each student in the three divisions (Group A, B and C) in the practical examination viz., Evaluation of Teaching Competence / Practical Records / Work Book and Evaluation of School and Community Based Field Activities.

Students should maintain Work Book / Record Note Book and reports of the activities related to all practicum components under Groups A, B and C. Records of the lessons taught and assessment of teaching competence and skills shall be made available by the respective college faculty members to the principals for scrutiny. The final Reports / Records / Work Books shall be made available to the Board of Supervising Examiners appointed by the University whose decision on the marks to be awarded shall be final.

## 7. PASSING MINIMUM

Every candidate should appear for all the papers in the written and the practical examinations in the first attempt. A candidate shall be awarded the B.Ed degree only if he/she has passed both the practical examination and the written examinations. A candidate who fails in one or more papers in the written examination shall be permitted to appear again only for those papers in which he / she fails. A candidate who fails in the practical examination and passes in the written examination shall be deemed to have failed in the practical examination only and shall be permitted to appear again for the same.

A candidate shall be declared to have passed the written examination if he / she secures not less than 50% in each of the six papers, with a minimum of 45% in the external



examination in each paper. All other candidates shall be deemed to have failed in the written examination.

A candidate shall be declared to have passed the practical examination, if he / she secures (a) not less than 50% in the practical examination in the teaching competence in each of the two optional subjects and (b) not less than 50% of the marks allotted for other educational practicals.

## **8. CLASSIFICATION OF SUCCESSFUL CANDIDATES**

Successful candidates shall be classified separately for (a) the written examinations and (b) the practical examination. In each case, candidates who pass the examination in the first attempt and secure not less than 60% of total marks shall be placed in the first class; and those who obtain between 50% and 59% shall be placed in the second class. Candidates who do not pass all the papers and in the practicum in the first attempt shall be declared to have passed in the second class irrespective of the marks they secure.

# **TAMILNADU TEACHERS EDUCATION UNIVERSITY**

## **DEGREE OF BACHELOR OF EDUCATION (B.Ed)**

**(with effect from 2008-2009)**

### **SYLLABUS**

#### **GROUP A : CORE COURSES**

##### **1. EDUCATION IN EMERGING INDIAN SOCIETY**

###### **OBJECTIVES :**

At the end of the course the student teacher will have an understanding of

1. Contemporary Indian Society
2. Forces at work in Contemporary Indian Society
3. The Structure of the Indian Education System
4. Changing role of the Teacher through the moments of History.
5. Statutory Agencies in the field of Education
6. Problems of Indian Society and Education
7. Values and the Teacher

##### **I. CONTEMPORARY INDIAN SOCIETY, ITS THREE MOMENTS :**

Traditional, Modern and Post Modern Society - Features of each and the insights into human behaviour.

##### **II. EMERGING TRENDS IN SOCIETY**

Liberalisation, Globalisation and Privatisation - Consumerism - Mass Media - Market Forces - Technology as the prime mover of Social Change -

Impact : Emergence of the Knowledge Society - Adaptive Demands on Society - Education and the individual in the Global Village - Vision for the Indian Education in the 21st Century.

##### **III. ADVENT OF INFORMATION TECHNOLOGY**

Advances in Information and Telecommunication Technologies - Internet and Telematics - Implications on the Educational System and the Classroom Teacher.

#### **IV. INDIAN EDUCATION POLICIES AND PROGRAMMES**

Education in Concurrent List - Directive Principles - Article 45 - Universalization of Elementary Education - Constitutional Commitment - National Education Commissions & Policies - Mudaliar Commission - Kotari Commission 1964 - NEP 1978 - NEP 1986. Wastage and Stagnation - Uniform pattern of Education - Medium of Instruction - Quality Versus Quantity in Education - Minimum levels of Education - Women's Education - Sex Education - Special Education for the challenged and the gifted - Sarva Shiksha Abyan, Adult Education - Vocational Education.

#### **V. EDUCATION AT DIFFERENT LEVELS**

The Three levels of Education - Pre-primary, Primary, Secondary and Higher Secondary Education, Statutory Boards of Education - CBSE, ICSE, State Boards, Matriculation and Anglo Indian Boards, Higher Education - Universities - Organisational Structure, Autonomous Institutions - Institutional Autonomy.

#### **VI. STATUTORY BODIES IN THE FIELD OF EDUCATION**

MHRD, UGC, NIEPA, NCTE, NCERT, NAAC, RCI, AICTE, SCERT, Directorates of Education at state level, State Council for Higher Education, DTERT etc.

#### **VII. PROBLEMS OF INDIAN SOCIETY AND EDUCATION**

Population explosion, Problems of Poverty, Illiteracy and Inequalities - Gender bias, Caste, Creed, Religion, and Region, Child labor and transit schools, AIDS, Terrorism, Emotional Integration - Unemployment and Underemployment - Brain Drain - Need for Privatisation of Education at all levels.

#### **VIII. SOCIAL VALUES AND THE TEACHER**

Choice of Values - Democracy, Non-Violence, Truth - Teaching of Values - Autonomy and Discrimination as Mediating concepts - Relative Roles of the Family, School and the Society in Value Education - Traditional Indian Values - Religious, Customary and Cultural values - The teacher's own personal values - Research and resources in Value Education.

#### **SUGGESTED READINGS**

Bell, D (1961) *The End of Ideology*, New York : The Free Press

Bell, D (1975) *The Coming of the Post Industrial Society*, New York : Basic Books

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## **CORE COURSE**

### **2. PSYCHOLOGY OF TEACHING AND LEARNING**

#### **OBJECTIVES**

At the end of the course the student teacher will be able to

1. acquire knowledge of the nature and scope of Educational Psychology
2. understand the basic concepts of Educational Psychology
3. apply Psychology in the classroom context
4. acquire the ability to use the tools and techniques of Psychological Assessment

#### **I. INTRODUCTION TO PSYCHOLOGY :**

Definition of Psychology - Schools of Psychology - Behavioural, Psychoanalytic, Cognitive - Methods of Psychology - Branches of Psychology - Educational Psychology - Concepts, Nature and Scope - Importance of Educational Psychology for the Teacher.

#### **II. HUMAN GROWTH AND DEVELOPMENT :**

Concept of Growth and Development - Distinction between Growth and Development - Maturation and Development - Nature versus Nurture controversy - General Principles of Growth and Development - Dimensions of Development - Physical, Cognitive, Emotional, and Moral - Phases of Development - Childhood and Adolescence - Developmental Tasks - Developmental Tasks and Education.

#### **III. COGNITIVE DEVELOPMENT :**

Cognitive Process - Attention, Factors relating to Attention - Span of Attention - Inattention and Distraction - Sensation and Perception - Factors relating to perception - Imagery - Concepts - Nature and types - Stages in Concept formation - Bruner's Theory - Concept Maps - Piaget's Stages of Cognitive Development - Reasoning and Problem Solving - Meta cognition - Implications for the teacher.

#### **IV. LEARNING**

Nature and importance of Learning - Types of Learning - Theories of Learning - Thorndike, Pavlov, Skinner, Kohler and Gagne - Learning Curve - Transfer of Learning, Facilitating Transfer - Remembering and Forgetting - Curve of Forgetting - Individual Differences in Learning.

#### **V. MOTIVATION**

Motivation and Learning - Functions of Motives - Kinds of Motives - Theories of Motivation - Hull's Drive Reduction, Maslow's Hierarchy of Needs, Achievement Motivation - Components - Fear of Failure and Hope of Success - Motivation in the classroom context - Praise and Blame, Rewards and Punishments - Feedback / Knowledge of Results - Level of Aspiration.

#### **VI. INTELLIGENCE AND CREATIVITY**

Theories of Intelligence - Single, Two Factor and Multi Factor Theories - Guilford's Structure of the Intellect - Emotional Intelligence, Multiple Intelligence - Individual Differences in distribution of Intelligence - Intelligence Tests and their uses.

Creativity - Relationship and differences between intelligence and creativity - Convergent and Divergent Thinking, Lateral Thinking - The process of Creativity - The Gifted and their identification - Promotion of the Gifted.

#### **VII. PERSONALITY**

Meaning and Definitions of Personality - Major determinants of Personality - Theories of Personality - Psychoanalytic, Humanistic, Transpersonal, Assessment of Personality - Important Tools and Techniques - Integrated Personality.

#### **VIII. GROUP DYNAMICS**

Competition and Co-operation - Group Behaviour - Leadership Traits - Classroom Climate.

#### **IX. MENTAL HEALTH AND MENTAL HYGIENE**

Conflict and Frustration - Concept of Adjustment - Causes of Maladjustment - Symptoms of Maladjustment, Defence Mechanisms - Problem Children, Juvenile Delinquency - Concepts of Mental Health and Mental Hygiene.

## **X. GUIDANCE AND COUNSELLING**

Definitions of Guidance and Counselling - Distinction between Guidance and Counselling, Need, Nature and Types - Educational, Vocational and Personal - Identification of children with acute counselling needs - Counselling techniques - Individual and Group techniques, Psychotherapy and Psychoanalysis.

### **SUGGESTED READINGS**

Adams, J.A. (1992); *Learning and Memory : An Introduction*, Home Wood, Illinois : Dorsey Press.

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Weiner,B,. (1996); Human Motivation, New York : Halt, Richert & Winston.

## **CORE COURSE**

### **3. EDUCATIONAL INNOVATIONS AND TECHNOLOGY**

#### **OBJECTIVES**

At the end of the course, the student teacher will have an understanding of

1. The nature of innovation
2. The process of emergence of innovations
3. innovations in education and their trends
4. Educational Technology and approaches to teaching - learning
5. modern methods of teaching
6. the role of mass media in learning



## **I. INNOVATION**

Meaning, Principles - Barriers to Promotion of Innovation - Generation of Innovations : Origin, Specification, Trial, Adaptation and Consolidation.

## **II. CONDITIONS FOR THE EMERGENCE OF INNOVATIONS :**

Individual - Tolerance for Ambiguity, Autonomy : Institutional - Open Climate, Freedom - Democratic Leadership Style; Societal : Perception of an Acute Need , Political and/or Public Support- Charismatic Leadership.

## **III. EDUCATIONAL PHILOSOPHIES AND EXPERIMENTS**

Indian and Western Philosophies of Education - Experiments in Education - Togore, Mahatma Gandhi, Sri Aurobindo, J. Krishnamoorthi, Rousseau, Froebel, John Dewey, Montessori, Helen Parkburst - Dalton Plan.

## **IV. EMERGING TRENDS IN EDUCATION**

Gurukula, Madrasas, Role of Missionaries in Education, British Influence on Indian Education, Education in Independent India - Community School, Neighbourhood Schools, SMART Schools - School Complex - Distance Education and Open Learning, National Open School, Continuing Education, Virtual Class - Ability Education in Field contexts in specialized institutions through pertinent field agencies - Navodaya Vidyalaya, Kendriya Vidyalaya, Sainik Schools, Defence Academies - Deschooling, Floating Universities.

## **V. EDUCATIONAL TECHNOLOGY**

Concept of Educational Technology, Meaning, Definition, need and scope - Limitations - Educational Technology as a complex and comprehensive approach to teaching and learning - Components of Educational and Information Technology - Educational hardware and Software - Role of Teacher in Educational Technology.

## **VI. SYSTEMS APPROACH IN EDUCATION :**

Definition, - Phases of Systems Approach - Analysis, Design and Management - Steps in System Analysis - Principles of System Design - Application of Systems Approach to educational improvement and Class room instruction.

## **VII. MODERN METHODS AND APPROACHES TO TEACHING.**

Teacher Centered versus student centered approaches - Individualised methods - Self instructional Methods and Materials - Personalised System of Instruction (PSI) Programmed

Learning - Objectives and Principles, Steps involved in preparing programmed material - Group Discussion, Debate etc.,

### **SUGGESTED READINGS**

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Wittich,W.A and Schuller, C.F (1973) *Instructional Technology : its Nature and Use*. New York : Harper & Row

## **ELECTIVE**

### **1. HUMAN RIGHTS EDUCATION SYLLABUS**

#### **OBJECTIVES**

At the end of the course the student teacher will be able

- (1) to have an understanding of human rights have knowledge of the documents relating to human rights
  - (2) to appreciate the need for human rights
  - (3) to know modes of implementation of human rights
  - (4) to select and apply suitable methods of teaching about human rights.
1. The Concept of Human Rights - Roots in Natural Law - Dimensions of Human Rights : Civil and Political Rights; Economic, Social and Cultural Rights.
  2. Documents Universally Defining Human Rights : Salient features of Charter of the United Nations, 1945; Universal Declaration of Human Rights, 1948; International Covenant on Economic, Social and Cultural Rights, 1966; International Covenant on Civil and Political Rights.
  3. Need for Teaching Human Rights - Intrinsic : Human Rights as an end in itself : Extrinsic : as one of the three dimensions of peace education namely, Human Rights; Knowledge and Understanding about Other Countries, People and Culture; and United Nations Organisations.
  4. The Indian Context : Constitutional Provisions and Safeguards - Fundamental Rights and Directive Principles of State Policy - Institutional Mechanism : National and State Human Rights Commissions - Role and Functions, Current Problems : Ragging and Eve Teasing.
  5. Rights of Minorities, Women and Children, Child Labour - Scheduled Castes(SC) and Scheduled Tribes(ST) - Constitutional Provisions and Safeguards - Mechanisms for Implementation.
  6. Methods of Teaching Human Rights - Lectures, Discussion, Case Study Method; Role Playing and Simulation : Mock Trials and Appeals ; Cooperative Learning ; Social Activities.

## **SUGGESTED READINGS**

- Andreopoulos , G and Pierre Claude (Ed) (1996) Human Rights Education : Conceptual and Practical Challenges, Philadelphia, University of Pennsylvania Press.
- Arjun Dev, Indira Arjun Dev and Gupta Das (1996) Human Rights - A Source Book, New Delhi. NCERT,
- Bansal, V.K (1987) Right to Life and Personal Liberty in India. New Delhi : Deep and Deep Publications.
- Chatrath, K.J.S (Ed) (1998) Education for Human Rights and Democracy, Shimla. Indian Institute of Advanced Study, Rashtrapati Niwas, Chaudari, A.S (1990)
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- Krishna Iyer V.K (1990) Human Rights and Inhuman Wrongs. Delhi : B.R. Publication Corporation.
- Hara Gopal, G (1997) Human Rights Education - A Transformative Perspective, Indian Journal of Human Rights Vol..1, No.2
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- Shiman, David et.al (1988) Teaching About Human Rights. Denever : Centre for Teaching International Relations.
- Smith, Lesley (1988) Dimensions of Childhood : A Handbook of Social Education At Sixteen Plus London : Health Education Authority and UNICEF, U.K.

## **ELECTIVE**

### **2. PEACE EDUCATION**

#### **OBJECTIVES**

At the end of the course the student teacher will

1. understand the concept of peace education
2. understand the dynamics of transformation of violence into peace
3. understand the nature of conflicts and their resolution
4. imbibe the knowledge, attitudes and skills needed to achieve and sustain a global culture of peace
5. adopt peace education in the curriculum

## **1. INTRODUCTION**

Peace Education - Meaning and concept of peace - Need for peace education - Aims and Objectives of Peace Education - Status of peace education in the curriculum - Organizations which work for global peace.

## **2. NON VIOLENCE FOR PEACE :**

Relationship between peace and violence - Role of violence in our lives and the lives of others - Exposure to violence through media - Consequences - Crises and their management, - How peace education can help to deal with violence & bring about non-violence - factors that influence non-violence.

## **3. NON- VIOLENCE IN EDUCATIONAL SETTING**

Factors Contributing to Violence in Schools - Violence and Aggression - Perception of Threat and Aggressive Behavior - Rejection and Withdrawal - Measures to bring about non-violence in schools - Strategies that can be adopted in school, classroom; individuals and long term solutions to maintain non- violence.

## **4. PEACE AND CONFLICT RESOLUTION**

Bases of conflicts - Positive and negative aspects of conflicts - Types of conflict - learning if conflict management and conflict resolution - Role of Peace Education in resolving conflict - Reducing conflicts among students.

## **5. PEACE IN THE INDIAN CONTEXT**

Peace in Ancient Indian Literature : Thirukkural, - Emperor Ashoka's Kalinga War, Conversion and Propagation of Peace - Jainism and Buddhism - Gandhian Philosophy of Peace and Non-Violence; Techniques of Non-Violent Resistance- India, a Peace-Loving Country : Policy of Panch Sheel and Non-Alignment

## **6. EDUCATING FOR A CULTURE OF PEACE-I**

Ecological thinking and respect for life (ages 8-12) - Tolerance and respect for human rights (ages 11-16) - Critical thinking and active non-violence (ages 12+) - knowledge, attitude and skills to be learnt in each of them - classroom activities.

## **7. EDUCATING FOR A CULTURE OF PEACE-II**

Social justice and civic responsibility (ages 14+) - leadership and global citizenship (ages 16+) - knowledge, attitude and skills to be learnt - classroom activities - The role of Peace education in developed and developing countries - Adoption of peace education in the curriculum.

## **SUGGESTED READINGS**

Aber, J.L. Brown, J.L.A.Henrich, C.C. (1999) Teaching conflict resolution : An effective

School-based approach to violence prevention - New York : Columbia University, National Centre for Children in Poverty.

Adams,D. (Ed) (1997) UNESCO and a Culture of Peace : Promoting a Global Movement. Paris, UNESCO.

Andrews, M.L. (1992) Educating for Peacemaking Abilities (Ed.D.) Cambridge, MA :Harvard University.

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Bullard,S. (1996) Teaching Tolerance - Raising Open minded, Emphathic Children. NewYork : Doubleday.

Diwahar,R.R. and Agrawal, M. (eds.) (1984) Peace Education (special issue) Gandhi Marg, New Delhi.

Eisler,J (1994) Comprehensive Conflict Result Program (1993-94), New York : N.Y.City Board of Education Fountain,S. (1999) Peace Education in UNICEF, NY : UNICEF.

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The role of education in developed and developing countries for international understanding and peace : Conference Proceedings, Seoul.1982

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[http :99members,aol.com / Angries Out](http://99members.aol.com/AngriesOut)

## **ELECTIVE**

### **3. ENVIRONMENTAL EDUCATION**

#### **OBJECTIVES :**

At the end of the course the student teacher will

1. understand the concept of environment and ecology.
1. understand the nature and scope of Environmental Education.
2. understand the causes of Environmental Degradation.
3. apply the remedial ways to protect the environment in daily life.
4. understand the need for conservation of natural resources.
5. acquire knowledge of population growth and its impact on environment.
6. acquire knowledge about the technological system.
7. acquire the knowledge of tools and techniques for the evaluation of environmental education.

#### **1. BASIC CONCEPTS**

Concept of Environment and Environmental Science - History of Ecology - Ecology and Economic Development - Socio-Economic Impacts of Degradation of Environment and Importance of Environmental Education - Nature and Scope of Environmental Education - Guiding Principles of Environmental Education and Major Constraints for its Implementation at School Level.

#### **2. ENVIRONMENTAL HAZARDS**

Environmental Pollution : Physical and Chemical : Land, Air, Water, Noise, Radiation - Extinction of Flora and Fauna, Deforestation, Soil erosion - Need for Management of Environment, Protection of the Environmental Heritage - Ways of Protecting, Preserving and Restoring the Environment .

#### **3. SUSTAINABLE DEVELOPMENT**

Definition and Dimensions - Depletion of Natural Resources - Symptoms of Non-Sustainability - Conditions for achieving the Goals of Sustainable Development

#### **4. INDIA AND ENVIRONMENTAL ISSUES AND POLICIES**

Environment Problems of India - Environment Protection and Policies in India - Environment Movements in India : Chipko Movement, Narmadha Valley Movement

## **5. ENVIRONMENTAL AWARENESS**

The Stockholm Conference 1972, The Nairobi Conference 1982, The RIO Summit 1992, The RIO Declaration.

## **6. ENVIRONMENTAL EDUCATION IN THE SCHOOL**

### **CURRICULUM IN INDIA**

Need for - Current Status : Pre-school, Elementary, Secondary and Higher Secondary - CBSE syllabus - State Syllabus : (Tamil Nadu).

## **7. CURRICULUM AND METHODS IN ENVIRONMENTAL EDUCATION**

Dimensions of Curriculum in Environmental Education - Natural resources (forests - Development, wild-life, fisheries biodiversity) - Human Ecology : Human beings as part of environment, human adaptations to environment - population and its effect on environment - Science and Technology : Industrial growth and technological inventions and their impact on the environment- degradation of resources .

Methods - discussion, seminar, workshop, dialogues, problem-solving, field surveys, projects, exhibitions, role of media - print, films, T.V

## **8. EVALUATION IN ENVIRONMENTAL EDUCATION :**

Outcomes in environmental education - estimating awareness. Understanding and application of knowledge for protection of environment. Tools and techniques - achievement and performance tests, attitude and value scales, their use and limitations.

### **SUGGESTED READINGS**

Aggarwal, S.P., and Aggarwal, J.C. (1996) Environmental Protection, Education and Development, New Delhi : New Concepts.

Bandhu, Hesh N.L. Ramanathan Education for Environmental Planning & Conservation, Dehradun, Nataraj Pub.

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## **ELECTIVE**

### **4. GUIDANCE AND COUNSELLING**

#### **OBJECTIVES**

At the end of the course the student teacher will be able to

1. recognise the necessity of guidance and counselling in schools.
2. recall the principles underlying guidance.
3. describe the different services in the guidance programme.
4. acquire the skills necessary to administer standardised tests effectively
5. interpret the scores obtained on a few selected standardised tests correctly
6. differentiate guidances and counselling
7. recall the qualities required for a good counsellor
8. appreciate the need for today's teachers to be effective counsellors

#### **1. INTRODUCTION :**

The nature of guidance - basic concepts - Guidance an integral part of education - The need for guidance, goals of guidance - Principles of guidance

#### **2. CONTEXT OF GUIDANCE / COUNSELLING :**

Guidance : Overview of the guidance movement in India - The place of educational, vocational and personal guidance in schools - Guidance services in schools - Orientation services - Dissemination of Information to Pupils : Information - Educational and occupational information services - Collection of information from various sources - The need for guidance, goals of guidance - Principles of guidance .

## **COUNSELLING :**

Counselling service : Definitions of counselling - The counselling relationship - Directive, Non-directive and Eclectic Counselling - Counselling skills - Listening - Establishing rapport - Non-judgemental attitude - Tolerance - Empathy - Awareness of individual differences - Follow up - Qualities of a Good Counsellor - Ethics - uses and misuses of tests -The Teacher as a Counsellor

## **3. TOOLS AND TECHNIQUES OF PUPIL APPRAISAL :**

Observation, Cumulative Record Card, Anecdotal Records, Autobiography, Sociogram, Interview, Questionnaire, Rating Scale - Tests - mental testing - characteristics of a good test - Ability to interpret tests - how to administer and score tests - Brief introduction to other tests.

## **4. PERSONALITY / GROUP BEHAVIOUR / MENTAL HEALTH AND HYGIENE :**

Personality - Meaning - Definitions - Types of personality Factors influencing Personality - Assessment of Personality - Integrated Personality - Concept of group in the class room situation - Conflicts in Group situation - Gandhian Technique of conflict resolution - Concept of Mental Health and Hygiene - Adjustment mechanisms in the class room - Mental Health in the Indian Schools - Mental Health problems of adolescents in India.

## **5.ACTION CLINICAL RESEARCH :**

Definition - Need and significance of action research - steps involved - ability to identify a problem-choosing the appropriate method(s)

## **PRACTICAL WORK :**

- a. Assessment of pupil's knowledge regarding occupation - Report.
- b. Administration and scoring of group tests - Report.
- c. Group discussions, panel discussions - Report.
- d. Details of Employment Exchanges - Report.
- e. Drafting letters to different agencies for collecting information - Report.

## **SUGGESTED READINGS**

Bernad, H.W and Fullmer, D.F (1977), Principles of Guidance 2nd Ed. New York : Crowell.

Bhargava, M (1982). Modern Psychological Testing and Measurement Agra. H.P. Bhargava Book Publishers

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## **ELECTIVE**

### **5. CURRICULUM DEVELOPMENT**

#### **OBJECTIVES**

At the end of the course the student teacher will

1. understand the concept and definitions of curriculum.
2. understand the advantages and constraints of each types of curriculum.
3. understand and apply the process of Curriculum Development.
4. be able to select and apply appropriate strategies for Curriculum Transaction
5. be able to evaluate Curricula.

#### **1. CONCEPTS AND DEFINITIONS :**

Concepts of curriculum - Classifications of Curriculum Concepts; Definitions - Curriculum & Syllabus - Relationships and differences; Need for Curriculum Development;

Curriculum Determinants; Systems approach to Curriculum Development National aspirations & needs, Culture, Social Change, Value System.

## **2. TYPES OF CURRICULUM :**

Curriculum Organisation - Educational Objectives & Curriculum Organisation, Subject matter & Curriculum Organisation, ABC's curriculum organisation; Learning & Curriculum Organisation; Types of Curricula - Subject Centered, Co-related, Fused, Core, Student-Centered - Their relative values and weaknesses.

## **3. CURRICULUM DESIGNING :**

Assessing Needs; Formulating Objectives; Selection of Contents; Organisation of content; Selection of Learning experiences; Organisation of learning experiences - Models of Curriculum Development : Ralph Taylor, D.K, Wheeler and Hilda Taba.

## **4. CURRICULUM TRANSACTION :**

Strategies for Curriculum Transaction - Organisation for Instruction. - Distance learning Modes - Resources for Curriculum Transaction - Computer and the Internet.

## **6. EVALUATION OF CURRICULUM :**

The Curriculum cycle - Evaluation as comparing objectives and outcomes - Focus of Curricular Evaluation : Subject content, organisation and mode of transaction - Outcome of Curriculum Evaluation : Change / refinement of content, Organisation and modes of transaction.

Models of curriculum evaluation, Taylor's Model, Stane's Model, CIPP model - Goal Free evaluation.

## **SUGGESTED READINGS :**

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Bloom, B.S. (1965) - Taxonomy of Educational Objectives - Handbook1 : Cognitive Domain; Longmans, Green & Co.

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Foshay, A.W (Ed) (1980) Considered Action for Curriculum Improvement : Association for Supervision and Curriculum Development Yearbook. Alexandria, Va : ASCO.

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- Saylor, J.G; Alexander, W.M. : & Lewis, A.J. (1981) Curriculum Planning for Better Teaching and Learning (3rd Ed) New York : Holt, Rinehart & Winston.
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- Steahouse, L (1975). An Introduction to Curriculum Research and Development London : Heinemann.
- Taba, Hilda (1962) Curriculum Development - Theory and Practice New York, Harcourt.
- Taylor, P.H & Richards, C.M (1979) An Introduction to Curriculum Studies New York : Humanties Press.
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[http :II pzool.health.org](http://pzool.health.org)

## **ELECTIVE**

### **6. EDUCATION FOR THE MENTALLY HANDICAPPED**

#### **OBJECTIVES**

At the end of the course the student teacher will be able to

1. understand the nature of mental retardation
2. identify the mentally retarded persons
3. identify the causes and associated conditions of mental retardation.
4. refer the mentally retarded persons to appropriate agencies for medical services.
5. Understand the curriculum for the different levels of the mentally challenged persons.
6. integrate the mentally challenged persons in the community
7. Understand sociological and behavioural concepts in helping the mentally challenged person and the family in rehabilitation.

#### **Mental Retardation - Nature, Needs and Identification**

Historical perspective on the concept of mental retardation - Definition of Mental Retardation - AAMR, WHO (ICD), Legal definition in India used for certification, incidence and prevalence - classification of mental retardation - medical, educational, and psychological characteristics - screening and identification of mental retardation- causes and prevention; peri-natal, prenatal, and postnatal.

#### **ASSOCIATED IMPAIRMENTS**

Introduction to associated conditions and educational implications - sensory impairments, motor impairments; cerebral palsy, congenital deformities- Down Syndrome - Epilepsy - Emotional disorders.

## **CONCEPT AND TYPES OF ASSESSMENT.**

Definition of assessment, concept, scope - purpose of assessment - Objectivity in assessment - Types of assessment - continuous and periodic assessment, Problems and implications of Assessment - Behavioural and Clinical Assessment - Norm Referenced Tests (NRT) and Cumulative Referenced Tests (CRT) - interpretation of assessment and Programme planning.

## **CURRICULUM AND EVALUATION :**

Curriculum for the different levels of mentally handicapped - Evaluation - need - formative and summative evaluation.

## **MENTAL RETARDATION - SOCIAL PERSPECTIVES**

Mental retardation and mental illness - Differences - mental retardation and its psychosocial aspects - sexual problems / exploitation, delinquency, child labour, child abuse, rights and advocacy - Constitutional provisions and their implications - Legislation relating to services for mentally challenged children.

## **WORKING WITH PARENTS, FAMILY AND COMMUNITY**

Impact on parents and parental attitudes - guidance and counselling for parents and family members of mentally challenged children -empowering families - community awareness and cooperation - community based Rehabilitation.

## **SUGGESTED READINGS**

Baine,D. (1988). Handicapped Children in Developing Countries, Assessment, Curriculum and Instruction. University of Alberta, Alberta.

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Williams (1991). Special Education Book. Open University Press.

## **PRACTICALS**

1. Visit to a Special School
2. Case Study Record

## **ELECTIVE**

### **7. PHYSICAL AND HEALTH EDUCATION**

#### **OBJECTIVES :**

To enable the student Teachers understand the meaning of Physical Education.

To enable student Teachers organize Physical Education activities

To help the student Teacher understand and the Physical fitness-Yoga

To appreciate the concept of Health Education

To enable the Student Teachers understand about athletic injuries, take care during emergencies and provide first aid.

#### **UNIT NO - I**

Concept and meaning of Physical and Health Education - Aims, Goals, Objectives and Scope of Physical and Health Education - Olympics - Ancient and Modern.



## **UNIT NO - II**

Plan and Preparation of General lesson plan, methods of Teaching Physical activities, Intramural and extramural tournaments. Sports meet - organizing and conducting tournaments. Single league and single knockout.

## **UNIT NO - III**

Recreation - meaning and definition, Aims and objectives. Programming and planning of Recreational activities. Basic skills and scales of Kho-Kho, Khabaddi and volleyball. Yogasana - Eight limbs of yoga - Need and importance of Asanas [padmasana, yogamudra, patchemuthraasana, Bhujangasana, salabhasana, Halasana, pathahasthasana].

## **UNIT NO IV**

Communicable disease - Typhoid, Cholera, dysentery, diarrhea, Tuberculosis Malaria, Chicken box, - Agencies of transmission, sign, symptoms and prevention. Food Nutrition, constituents of good nutritive food-carbohydrate, fat, protein, vitamins and minerals - Balanced diet - Malnutrition. Personal hygiene, health habits and sanitation. Health service, Health Instruction and Health supervision in schools.

## **UNIT NO V**

First aid - Meaning, need and importance of first aid - Common Sports injuries and their first aid treatment - [sprain, strain, contusion, fracture and dislocation. Abrasion, Laceration punctured wounds].

Bandages - Types of Bandages and kind of safety Education decision - Road, House, School, play ground and Industry. Effects of Drug addiction, smoking, alcoholism.

### **Reference :**

1. Anderson, Bob (1997), Stretch yourself for Health and Fitness, Shelfot Publication, USA.
2. Bucher A. Charles. (1992), Foundation of Physical Education and sport. New Delhi - B1 Publication Janpath.
3. Dambrosia. D., Robert. D (1993) Prevention and Treatment and running injuries. New jersey, Slack Incorpor Road : Thorofare.
4. Eriksson. O Bengt et.al (1990) Sports medicines, health and Medication, Enfield: Guninness Publishing Road.

5. Gopi Krishna. (1993), The Purpose of Yoga. New Delhi: Ubs Publishers Ltd.
6. Hedge. (1997) How to maintain good health. New Delhi : UBPSD Publishers.
7. Kamlesh Sangral. (1977). Methods in Physical Education / Ludhiana: Parkash Brothers.
8. Kirtani Reema, (1996). Physical Fitness. New Delhi : Khel sahitya sports publication.
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10. Mukesh Kumar. (1998), Sports and Games. New Delhi : Sports Publications.
11. Ramachandran, L.T. Dharmalingam. (1993) Health Education. A New approach. New Delhi: Vikas Publishers Ltd., Jangpura.

## **ELECTIVE**

### **8. COMPUTERS IN EDUCATION**

#### **OBJECTIVES**

At the end of the course, the student teacher will be able

- (a) to acquire knowledge of computers, its accessories and software.
- (b) to have an understanding of the basics (fundamentals) of operating a computers.
- (c) to acquire the skills of operating a computer in multiferous activities pertaining to teaching.
- (d) the features of MS Office and their operations.
- (e) computer operations using MS-Word, Powerpoints and Spread Sheet.
- (f) to apply the knowledge gained in respect of to process various data - students as well as simple library financial transaction of the school.
- (g) to appreciate the value of CAI/CML packages on optional subjects and use them in class room instruction.
- (h) World Wide Web and Internet concept and global accessing of information.
- (i) Integrating technology into classroom teaching learning strategies.

#### **I. BASICS OF COMPUTER**

Introduction to computer and its accessories - parts of a computer, Classification of computers, Computer Accessories - Software, Floppy, CD, CD(R/W), Stationery etc.,

Hardware (Scanner, CD Writer, Printer and its types, Multi Media Speakers, Web Camera etc.)

## **II. WINDOWS AND WORD PROCESSING**

Concept of Word processing - Basics of Windows operating system - Using a Document - Data entry, editing, saving and retrieval of data - Formatting a text - handling multiple documents, Manipulation of Tables - Columns and Rows. Computer Virus - infection, causes and remedies.

### **Hands on Training :**

- (a) Construction of a Question paper
- (b) Creating learning materials - Hand outs.
- (c) Administrative use - Letter correspondence and E-Mail.

## **III. SPREADSHEET AND POWER POINT**

- (a) Basics of Spreadsheet, Manipulation of Cells, Columns and Rows.  
Hands on Training (a) Data Processing, storing and retrieving simple Financial Transactions of the school such as school budget and accounting.
- (b) Tabulation of Bio data of staff and students of the school in which the student teacher is attached for practice teaching.
- (c) Students progress record - Tabulation of results of an academic test.
- (d) Basics of Power point - Creating a presentation, The Slide Manager Preparation of different types of slides, slide design, colour and background, Manipulation and presentation of slides.

### **Hands on Training**

- (a) Multimedia presentation on a topic relevant to the Optional Subject.
- (b) Using of available CAI/CML packages on topics relevant to Optional subject.

## **IV. INTERNET, WEB PAGES AND WEB DESIGNING**

- (a) Basics of computer networking - LAN AND WAN, Internet - WWW, Webside and web pages, Internet connectivity - Browsing the internet - Browsing software - URL addresses, Search engines, Exploring websites and downloading materials from websites, E-Mail - sending, receiving and storing mail, Chatting.

- (b) HTML - Editing Tools - Hyperlink and Images, Creating a Web Page - HTML tags, tables, frames, and forms. Learning from cyber resources. Hands on Training (a) Cataloguing websites related to relevant school curriculum.
- (b) Comparative evaluation of web pages on a unit in the subject relevant to school curriculum.

### **SUGGESTED READINGS**

Asokek. Ghosh (2001), Microsoft Web Publishing, New Delhi, Prentice Hall of India.

Byran Pfaffenberger, (1997) Discover the Internet, Comdex Computers Publishing, New Delhi.

Eliane Mannel and Nancy Stevenson (1999), The Essential Microsoft Word 2000, New Delhi, BPB Publications.

Greg Perry (1998) Teach yourself Windows in 24 Hours, Tech Media Publication, New Delhi.

Harsha & Kotecha (2002), All about Computers in easy steps, New Delhi, Dream tech press.

Harley Halin, The Internet - Complete Reference, Tata Mc Graw Hill Publishing Co. Ltd., New Delhi.

Jency Joyce & Maniame Moon (2002), Microsoft Windows XP, New Delhi, Prentice - Hall of India.

Michael Meadhra & Faithe Wepmen (1998), Learn Windows 98 - in a week end, Galgotia Publishers, New Delhi.

Peter Weverka and David A. Reid (1999), The Complete Reference Word 2000, New Delhi, Tata Mc Graw - Hill Publishing Company Ltd.,

Peter Norton, Introduction to Computers (1998), Tata Mc Graw Hill Publishing Co. Ltd., New Delhi.

Rajaraman .V (1996), Fundamentals of Computers, Prentice Hall of India Pvt. Ltd., New Delhi.

Sharon Crawford (1998), Windows 98, New Delhi, BPB Publications.

Stephen Copestake (2002), Power Point 2002, New Delhi, Dream tech Press.

Stephen Copestake (2004), Excel 2002, New Delhi, Drem tech Press.

## **OPTIONAL SUBJECTS**

### **OPTIONAL 1/1**

#### **ENGLISH PAPER - I**

##### **OBJECTIVES**

- a. To enable the teacher trainees to see the role of English in India in the right perspective and the rationale for learning English as a second language.
- b. To familiarise teacher trainees with the various aspects of the B.Ed. programme with special reference to the nature of the language skills to be developed and evaluated.
- c. To enable teacher trainees to acquire knowledge of the current trends in the teaching of English.
- d. To familiarise teacher trainees with techniques of oral preparation and practice of language items.
- e. To enable teacher-trainees to acquire knowledge about the recent trends in English Language Teaching and Learning

##### **UNIT - I - PRELIMINARY STATEMENT :**

- a) The role of English in India today - The rationale for learning English.
- b) The aims of teaching English as a Second Language - Cultural, Literary, Utilitarian, Linguistic and Integrative aims.
- c) Contribution of Linguistics and Psychology to the teaching of English.
- d) Teaching the Communication Skills - Listening, Speaking, Reading and Writing.
- e) Elements of English Language - Phonology, Graphology, Lexis and grammar.
- f) Teaching English as a 'Skill' than a knowledge subject.
- g) Learning the mother tongue and learning a second language - Interference and Transfer from the mother tongue - Implications for teaching methods.

##### **UNIT - II - TEACHING SKILLS :**

- a) Bloom's Taxonomy of Educational Objectives - Cognitive, Affective and Psychomotor domains - General and Specific Instructional objectives.

- b) Micro-Teaching - Principles - Skills - Introducing the lesson - Explanation Using the Blackboard - Reinforcement - Stimulus variation - Questioning - Link Lesson.
- c) Observation - Demonstration lesson - Teacher Educator - Guide teacher - Peer group.
- d) Macro-teaching - Lesson Plan - Teaching Prose - Teaching Poetry - Teaching Aids - Evaluation.

### **UNIT - III - EDUCATIONAL TECHNOLOGY**

- a) Teacher made aids - Flash cards, Pictures, Charts, Models, Blackboard sketches.
- b) Mechanical aids - Overhead Projector - Tape Recorder - Radio - Television.
- c) Programmed Learning - Language Laboratory.
- d) Computer Assisted Language Learning - Power Point Presentation - Identifying Websites.

### **UNIT - IV - METHODS AND APPROACHES**

- a) Approaches to syllabus construction - Notional - Situational - Structural - Skill based - Communicative syllabus.
- b) Methods of teaching English - Grammar - Translation - Bi- lingual - Direct - Situational - Oral - Structural - Communicative method.

### **UNIT - V - EVALUATION**

- a) Characteristics of a Good English Test - Objectivity - Reliability - Validity and Feasibility - Item Analysis - Item Difficulty - Discrimination Index.
- b) Testing of Oral Skills - Pronunciation and fluency - Testing grammar and usage - Testing reading comprehension - Testing vocabulary - Testing writing skills.

### **UNIT - VI - STATISTICS**

Frequency distribution - Measures of Central Tendency - Mean, Median Mode - Measures of Variability - Range - Quartile Deviation - Standard Deviation - Correlation - Rank Difference method - Graphical Representation - Histogram - Frequency Polygon - Cumulative Frequency Curve.

## **UNIT - VII - SPOKEN ENGLISH**

- a) Oral practice in new language items - Types of drills - Repetition drills - Substitution tables - Matching tables - Substitution drills - Manipulation drills.
- c) Pronunciation - Elements of English Phonetics - Sounds - Stress - Rhythm - Intonation.
- d) Fluency - Using pictures and objects - Dialogue and Roleplay - Language games - Short speeches and Lectures.

## **UNIT - VIII - READING**

- a) Methods of teaching reading to beginners.
- b) Reading Comprehension - Silent reading - Loud reading - Skimming - Scanning.
- c) Teaching of Vocabulary - Active and Passive vocabulary - Content words and Structural words - Principles of selecting vocabulary.

## **UNIT - IX - WRITING**

- a) Writing skills - Mechanical skills - Grammatical Skills - Discourse skills - Judgement skills.
- b) Types of composition exercises - Controlled, Guided and Free - Oral Composition - Group work - Mixed ability grouping - Marking Code.

### **Practical work :**

- Examination of the prescribed syllabus in English for the Secondary and Higher Secondary levels.
- Preparation of lesson plan for teaching prose, structural items, vocabulary items, comprehension passages poetry and composition.
- Examination of the design and content of readers prescribed for the primary, secondary and higher secondary classes.
- Practice in quick black board sketches for purposes of introducing new items.
- Preparation of exercises, or drills for practice of language items presented.
- Practice in transcribing passages or dialogues into phonetic script
- Examination of minimal pair drills and other types of pronunciation exercise.
- Collection of language games

- Preparation of material for role play and dramatization
- Reading comprehension and note-making exercise
- Preparation of different types of vocabulary exercise.
- Examination of different dictionaries suitable for teachers' reference and for use by school pupils
- Examination of examples of controlled and guided composition tasks found in various course books
- Preparation of material for teaching picture composition
- Examination of poems prescribed for all the three levels
- Practice in reading poems aloud
- Preparation of aids
  - i. An album of blackboard sketches
  - ii. An album of collected pictures
  - iii. Picture set
  - iv. Composite scene
- Practice in the use of linguaphone records and tape records
- Conducting a radio lesson
- Development of VAI/CAI programme for a teaching item
- Preparation of a simple linear programme for a unit in grammar
- Preparation of blue prints
- Construction of a test paper containing the different types of test items including objective type items.
- Preparation of remedial material for one unit.

#### **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum.



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- Alexander L.G. Guided Composition in English Language Teaching, Longman, 1971.
- Allend Campbell, Teaching English Language, Tata McGraw Hill, 1972
- Bright, J.A. and Mc Gregor G.P., Teaching English as Second Language, Longman, 1976.
- Bennett, W.A., Aspects of Language and Language Teaching, Cambridge, University Press, 1969
- Billows, F.L., The technique of language teaching, 1962.
- Christopher S.Ward et.al., (ed) Computers and language Learning. Singapore SEAMEO - Regional Language Centre. 1998.
- Clyde E., Weinhold, English II, Holt Reinehart and Winson, 1962.
- Dahin, The Language Laboratory and language learning, Longman, London, 1967.
- Elaine Powling, "Practical Experiences of CD-ROM based language learning", British Journal of Educational Technology. Vol.30.
- Frisby, A.W., Teaching English, English, Longman, 1970.
- Garrett, Statistics in Psychology and Education, Vakils, Ferrer and Simons Limited, Bombay 1979.
- Gillian Brown, Listening to spoken English : applied linguistics and language, Longman, 1977.
- Geoffrey Bernard, Better spoken English, Macmillan & Co., London, 1969.
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- Hill, L.A., Selected articles on the teaching of English as a foreign language, 1967.
- Knud Suhibsbye. A modern English Grammar Oxford University Press, London, 1969.
- Moody, H.L.B. The teaching of literature, Longman, London, 1977.
- Maerk Lwester, Introdcutory Transofmritional Grammariof English, Macmillan, 1977.

Pit Corder, S. An intermediate English Practice Book, Orient Longmans, 1985.

Pit Corder, S. Introducing applied Linguistics, Penguin Book, 1976.

Richard Sherrington, Television and language Skills, Oxford University Press, London, 1973.

Wilkins, D.A., National Syllabus, Oxford University Press, London, 1978.

Text Books prescribed for Standard IX, X, XI, XII Tamil Nadu Text Book Society, Chennai-6.

## **OPTIONAL 1/2**

### **ENGLISH - PAPER-II**

#### **OBJECTIVES**

To enable the teacher trainees to acquire knowledge of the sound system of English and to familiarise them with the appropriate terminology to describe the sounds in English.

- a. To enable the teacher trainees to understand the connections of English speech and to acquire good pronunciation and fluency of speech.
- b. To familiarise teacher trainees with the syllabii related to high school and Higher Secondary classes.
- c. To help teacher trainees acquire a working knowledge of the grammatical terminology and the grammatical system in English.
- d. To develop in the teacher trainees the ability to write in an appropriate manner for a particular purpose with a particular audience in mind.

#### **UNIT - I - SPOKEN ENGLISH**

##### **(i) Phonetics of English**

- a) The different speech organs and their role.
- b) The individual Sounds - Vowels and Consonants - their place and manner of articulation - The cardinal vowel scale.
- c) The concept of the phoneme and the allophone.
- d) Phonetic transcription.
- e) Stress - Words Stress and sentence Stress - Strong and weak forms.
- f) Intonation - Four basic patterns of intonation in English.

**(ii) Fluency**

- a) Use of conventional formulas - Greeting, apology, invitation, refusal, accepting, thanking.
- b) Describing and interpreting pictures, tables, graphs, maps etc.,
- c) Telling stories and narrating incidents.
- d) Play reading and Dramatisation.
- e) Debates and Interviews.

**UNIT - II - ADVANCED GRAMMAR**

- a) The Noun Phrase - MHQ (Modifier, Headword, Qualifier).
- b) The Verb Phrase - Tense forms - Auxiliary Verbs - Modals.
- c) The sentence - Types of sentences - Subordinate and Co-ordinate clauses.
- d) The Text - Sentence connection - Devices for Cohesion and Coherence.
- e) Concepts - Different ways in which various concepts are expressed - Invitations, Instructions, Suggestions, Possibility, Necessity, Prohibitions, Permission, Probability, Supposition, Comparison and Contrast.

**UNIT - III - LEXIS**

- a) Word formation - Affixation - Conversion - Compounding - Other minor devices.
- b) Patterns of spelling.
- c) Phrasal verbs and prepositional phrases.

**UNIT - IV - REFERENCES & STUDY SKILLS**

- a) Dictionary skills.
- b) SQ3R 3 Methods of Reading.
- c) Use of Library and Reference Work.
- d) Bibliography and Annotated Bibliography.

**UNIT - V**

- a) The English Readers - Types - Intensive, Extensive, Supplementary.
- b) Criteria for selection of Reader - Aims and Purposes - Approaches to Reader Lesson.

- c) Review of textbooks prescribed for Secondary and Higher Secondary Classes.
- d) Critical evaluation of English Curriculum in schools with special references to Standard X.

### **UNIT - VI READING**

- a) Intensive Reading.  
[Intensive study of prescribed texts - A prose selection - A collection of poems.]  
(Books to be selected by colleges and not to be examined externally).
- b) Cloze procedure.
- c) Extensive Reading (3 books to be prescribed for review writing).

### **UNIT - VII COMPOSITION**

- a) Letters - Formal, Informal.
- b) Reports - Instructions - Descriptions.
- c) Situational Composition.
- d) Precis Writing.
- e) Comprehension.
- f) Translation.
- g) Free composition - Paragraph writing, Essay writing.

Note : Students of optional "English" are to be familiarized with the latest - Tamil Nadu Curriculum for "English for Communication", prescribed for Higher Secondary Classes.

### **Practical work :**

1. Preparation of labeled diagrams of speech organs (la-i)
2. Preparation of vowel and consonant charts (la-ii)
3. Preparation of diagrams to show the position of various speech organs in the production of consonant sounds (la-ii)
4. Comparison of Phonemic system in Tamil and English (la)
5. Examination of Phonemic scripts used in various text-books and dictionaries (la-iv)
6. Oral practice in word and sentences stress (la-v)

7. Practice in transcribing passages and dialogues in English into phonetic script (Ia-v)
8. Practice in all the activities listed in (Ib)
9. An oral test assessing the teacher trainees' knowledge and mastery of the various areas in Grammar (II)
10. Exercises and tests assessing the teacher trainees' knowledge and mastery of the various areas in Grammar (II)
11. Construction of syllabus charts for various areas in grammar with reference to the school syllabus (II)
12. Preparation of aids to make the high school and higher secondary pupils understand certain grammatical concepts (II)
13. Identifying and classifying grammatical errors from students' work, using grammatical terminology.
14. Exercise in word formation (II)
15. Practice in the use of dictionary (IV)
16. Note-Making and Summary writing exercise (IV)
17. Preparation of annotated bibliographies on different aspects of English Language (IV)
18. Comprehension exercises (VA)
19. Reviews to be written for three books (VB)
20. Practice in writing different types of composition exercises (VI)

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- Andrew Wright, Visual Materials for the Language teacher, Longmans, London, 1977
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Julian Dakin, The Language Laboratory and Language Learning, Longman, London, 1973.

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Ronald E. Peare, Practice with idioms, Oxford University Press, 1986.

Sarah Freeman, Written communication in English, Oxford Longmans, 1977.

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Tricia Events, Teaching English, Groom Helm, 1982.

Tom McArthur, Patterns of English Book III, Collins, London and Glasgow, 1972.

Tom McArthur, Patterns of English I Building English words, Collins : London and Glasgow, 1975.

Tickoo, Communication Skills in English - LTAI, 1998.

## OPTIONAL 2/1

தமிழ் தாள் ஒன்று

நோக்கங்கள் :

- அ. தாய் மொழியின் இன்றியமையாமையும் தாய்மொழி கற்றலின் நோக்கங்களையும் அறிதல்.
- ஆ. தாய்மொழியின் பல்வேறு பணிகளை அறிதல்.
- இ. தாய்மொழியின் பல்வேறு பயிற்று முறைகளை அறியச்செய்தல்.
- ஈ. செய்யுள் உரைநடைப்பாடங்களைக் கற்பித்தலின் வேறுபாடுகளை அறிதல்.

- உ. இலக்கணம் பயிற்றலின் உள்ள திறன்களை வளர்த்தல்.
- ஊ. இலக்கணம் விதிகள் வரையறைகளைக் கற்பிக்க விளையாட்டு முறைகளைப் பயன்படுத்தப் பயிற்சியளித்தல்
- எ. பல்வேறு வகையான கட்டுரைப் பாடங்களை அறிய செய்தல்.
- ஏ. மொழி பெயர்ப்பு - மொழியாக்கம் ஆகியவற்றின் அடிப்படை விதிகளை அறிந்து கொள்ளச் செய்தல்.
- ஐ. ஆழ்ந்து கேட்டும் உற்றுநோக்கிப் பொருளுணர்தல் திறனை வளர்த்தல்.
- ஓ. சிறந்த படிக்கும் பழக்கங்களை வளர்த்தல்.

சிறந்த எழுத்தாற்றலை வளர்த்தல் பல்வேறு வகையான நடை வேறுபாடுகளை அறியச்செய்தல்.

பாடக்குறிப்பின் பயன்களை அறியச் செய்தல்.

வினா கேட்டலின் அமைந்துள்ள பல்வேறு திறன்களை வளர்த்தல் ஒரு சிறந்த மொழிப்பாட ஆசிரியருக்கான பண்புகளை வளர்த்தல்.

பாடத்திட்டம் அமைத்தலின் நவீன பொறி நுட்பச் சாதனங்களின் பயன்பாடுகளை அறிதல்.

வினாத்தாள் அமைத்தலின் உள்ள பல்வேறு திறன்களை வளர்த்தல்.

பாடத்திட்டம் அமைத்தலின் அமைந்துள்ள கோட்பாடுகளை அறியச் செய்தல்.

முதன்மைப் பாடங்கள் துணைப் பாடங்கள் கற்பதன் நோக்கு போக்குகளில் உள்ள வேறுபாடுகளை உணரச் செய்தல்.

புலன்வழிக் கல்வியின் வகைகளையும் பயன்களையும் உணரச்செய்தல்.

அடிப்படைக் கருத்தைக் கண்டு பகுத்தெடுக்கும் பழக்கத்தை வளரச்செய்தல்.

கல்வி ஏற்பாட்டில் தாய்மொழி பெறும் இடம் :

நோக்கங்கள்- பயன்கள் எண்ணத்தை வெளியிடும் கருவி, திருத்தமாகப் பேச, படிக்க, எழுத - வாழ்க்கை நுகர்வுகள் - கற்பனையாற்றலை வளர்த்தல் - அழகுணராற்றலை வளர்த்தல் - சமூகப்பண்பாட்டு மரபினையறியும் கருவிமொழியாகும், கல்வியின் இன்றியமையாமை - சூழ்நிலையின் குறைகளையும் அறிதல், சமூகக் கடமைகளை மேற்கொள்ளுதல், வாழ்க்கை நடத்தத் தேவையான திறன்களைப் பெறுதல்.

கற்பித்தல் நோக்கங்களும் பாடத்திட்டமிடுதலும் :

புள்ளியின் வகைபாடு - பொது, சிறப்பு கற்பித்தலுக்கான நோக்கங்கள்- மூன்று வகை - அறிவு சார்களம், மன எழச்சி சார்களம். உள இயக்க சார்களம்.

கற்பித்தலுக்கான உளவியல் கொள்கைகள் - காக்கே - ப்ரூனர் - பியாஜி. பாடத்திட்டமிடதலின் முக்கியத்துவம் - பாடத்திட்டமிடுதல். அலகு பாடத்திட்டம், வருடப் பாடத்திட்டம். ஹெர்பார்ட்டின் படிக்கள் - பாடத்திட்டத்தின் படிவம் - பாடக் கொள்கைகளைத் தெரிந்தெடுத்து அமைத்தல். கற்பித்தல், கற்பித்தலுக்கான துணைக் கருவிகள். மதிப்பிடுதல் - மீள்பார்வை - ஒப்படைப்புகள்.

பயிற்று முறை : பயிற்று முறையைத் தெரிந்தெடுத்தல் : வகுப்பறையின் அளவு, மாணவர் எண்ணிக்கை, மாணவர் தரம், நேரம் - பாடம் - பொறுத்து. தொகுத்துக் கற்பித்தல், பகுத்துக் கற்பித்தல், கண்டறி முறை, டால்டன் திட்டம் - தனி ஆள் கற்பித்தல் முறை - திட்டமிட்டுக் கற்பித்தல் - கிளை நேர் வகை. கற்பித்தல் இயந்திரங்கள். ஊயுஐ கணிப்பொறி மூலம் கற்பித்தல் - ஒப்படைப்பு முறை. மேற்பார்வை படிப்பு முறை, தனி ஆள் செயல் திட்ட முறை, வீட்டு வேலை. குழு முறை - குழு விவாதம், கருத்தரங்கம். கருத்துக் கோவை பணிமனை. விரிவுரை செயல்முறை, பரிசோதனை முறை களஆய்வு, கல்விச் சுற்றுலா, விளையாட்டு முறை. குறையறி சோதனையும். குறைதீர் பயிற்சியும். வரலாற்று அணுகுமுறை.

பண்டையோர் கண்ட பயிற்று முறை (சங்க காலம் முதல் தற்காலம் வரையில்) தற்கால முறைகள் - விளையாட்டு முறை. - நடிப்பு முறை செயல்திட்ட முறை தனிப்பயிற்சி முறை - மேற்பார்வை படிப்புமுறை - விரிவுரை முறை - இம்முறைப் பல்வேறு நிலைகளில் (நடுநிலை, உயர்நிலை, மேல்நிலை) பயன்படுத்துங்கால் ஏற்படும் நிறை குறைகள்.

1. செய்யுள், உரைநடைப் பாடங்கள் :

பயிற்றலின் நோக்கங்களும் முறைகளும் - அவற்றின் நோக்கங்களிடையே அமைந்துள்ள வேறுபாடுகள் - பல்வேறு வகையான உரைநடைகளையும், செய்யுட்களையும் கற்பித்தல் மேற்கொள்ளும் வழிமுறைகள் - செய்யுள் நலம் பாராட்டிச் சுவையுணராற்றலை வளர்த்தல்.

2. இலக்கணம் :

கற்பித்தலின் நோக்கங்களும் முறைகளும் - தொல்காப்பியத்தில், நன்னூலிலும் கூறப்பெறும் பண்டையோர் கற்பிக்கும் முறைகள் - உரையாசிரியர்கள் காட்டும் முறைகள், தற்காலிகக் கொள்கை. விதிகளுடன் இணைத்துக் கற்பித்தல் - நல்ல இலக்கணப் பாடத்தின் பொருண்மை - நூற்பா மற்றும் வரை முறைகளின் பயன்கள் - தொடக்கப்பெறும் வகுப்பு - தலைப்புகளைத் தேர்ந்தெடுத்தல். விளையாட்டு முறையில் இலக்கணம் கற்பித்தல் - வரையேடுகளும், துணைக்கருவிகளும் பயன்படுத்தல்.

3. கட்டுரைப்பாடம் கற்பித்தலின் நோக்கங்களும் முறைகளும் :

கட்டுரை எழுதுவதன் வளர்ச்சி நிலைகள்- வகைகள்- சொற்றொடராகப் பயிற்சிகள் வாழ்க்கை வரலாற்றுக் கட்டுரை. சிந்தனைக் கட்டுரை. கற்பனைக்கட்டுரை, படக்கட்டுரை, கதைக்கட்டுரை, விவாதக்கட்டுரை, வரலாற்றுக் கட்டுரை, ஆய்வுக் கட்டுரை, உரையாடல் கட்டுரை (கீழ் நிலை, மேல் நிலை, வகுப்புகளுக்கரியன).



மேல் நிலை வகுப்புகளில் அளிக்கப்பெறும் பயிற்சிகள் :

செய்திகளைத் தொகுத்தல், செய்திகளை வகைப்படுத்தல், செய்திகளை விரிவுப் படுத்தல், நயம் படவும், திறம் படவும் உரைத்தல். சொல்லாட்சித்திறன். காலவரையறையை விஞ்சாது எழுதும் பயிற்சி. தனக்கெனத்தனி நடையமைத்துக் கொள்ளலாம்.

கடிதம் - கடிதங்களின் வகைகள் - கடிதம் எழுதும் முறை - எழுதுதலின் நோக்கங்கள் - சுருக்கி எழுதுதல் - விரித்து எழுதுதல் - மொழிப்பயிற்சி மொழியியல் பயிற்சியில் இன்றியமையாமை, சொற்றொடர் அமைப்பும் பத்தியமைத்தலும் - சொற்றொடர் மாற்றங்கள் பத்திகளுக்குச் சிறு தலைப்புகள் தருதல் - தலைப்புகள் இடுதல் - நிறுத்தற் குறியீடுகள்.

பிழைகளைத்திருத்துதல் - சிலகுறியீடுகளைப் பயன்படுத்துதல் மொழிப்பிழைகளை அகற்றும் வழிமுறைகள்.

(ஈ) வேறு திறன்கள் :

தாய்மொழியினின்று பிறமொழிகளில் மொழிபெயர்ப்பு - பிறமொழிகளினின்று தாய்மொழியில் மொழிபெயர்ப்பு - மொழிபெயர்ப்பில் எழும் சிக்கல்கள் - மொழிபெயர்ப்பின் வகைகள்.

4. கற்பித்தல் திறன்கள் :

நுண்ணிலை கற்பித்தலுக்கான தொடர்வுத் திறன்கள் - வாய்மொழி. அல்லாத தொடர்பு. நுண்ணிலை கற்பித்தலுக்கான கொள்கைகளும் படிகளும் தொடங்குந் திறன். ஊக்குவித்தல், விளக்குந் திறன், கரும்பலகையில் எழுதும் திறன், பல்வகைத்தூண்டல் திறன், வினாத்திறன் கிளர் வினாத்திறன், வலுவூட்டும் திறன், முடிக்குந் திறன், நுண்ணிலை கற்பித்தல் சுழற்சி இணைப்புப் பாடம் தேவை கற்பித்தல்.

(அ) கேட்டல் : வரையரை கேட்டலின் வழி கற்றல் கேட்டல் பழக்கத்தினை வளர்த்தல் பாடல் பகுதிகளைப் படித்துச் சிறு வினாக்களின் வாயிலாக வளர்த்தல் வானொலி கேட்டல் பொருள் மாறாது சுருக்கி எழுதுதலின் பயிற்சி - பத்திகளையும் பெரிய பகுதிகளையும் சுருக்குதல் பல்வேறு நோக்கங்களை நிறைவேற்றப் படித்தல் செய்திகளை அறிதல், நயம் பாராட்டல் போன்றவைகளுக்காக - விளம்பரம் கேட்டலுக்கும் பயிற்றுக்குமுள்ள வேறுபாடுகள்.

(ஆ) பேசுதல் : அழுத்தந்திருத்தமாகப் பேசுதல் இலக்கண வழுவின்றிப் பேசுதல் மரபு மொழிகள் பழமொழிகள் தொடக்க நிலையில் பேச்சாற்றல் சொற்போர் கலந்துரையாடல் வினாடி வினா இவற்றைத் தொடக்கநிலை, நடுநிலை, உயர்நிலை வகுப்புகளுக்குப் பொருத்தமாக அமைத்துக்கொள்ளுதல்.

(இ) படித்தல் : படிக்க கற்பித்தலின் நோக்கங்கள் படிக்கக் கற்பிக்கும் முறைகள் எழுத்துமுறைப் படிப்பு சொல்முறைப் படிப்பு களஞ்சியப் பெருக்கம் படிப்பில்

ஆர்வத்தைத் தூண்டல் வாய்விட்டுப் படித்தல் முறைகள் நன்மை தீமைகள் நூல்களைப் பயன்படுத்துதல் நூலகப் படிப்பு தின, வார, மாத இதழ்கள் படிக்கும் பயிற்சி போன்றன ஆழ்ந்த படிப்பு அகன்ற படிப்பு நோக்கங்கள் நிறைகுறைகள் முதியோர்க்குப் படிக்க கற்பித்தல் செயல்பாடு எழுத்தறிவு நாட்டுப் புறக்கல்வி.

(ஈ) எழுதுதல் : கையொப்பம் எழுத்துப்பிழையின்மை எழுதுவதற்குப் பயிற்சி அளித்தல் சில முதற் பயிற்சிகள் எழுது கருவிகளைப் பிடிக்கும் முறை நல்ல கையெழுத்தின் நல்லியல்புகள் : தெளிவு அளவு, அழகு, இடைவெளி, விரைவு, எழுத்துப்பயிற்சி முறைகள் : வரியாற்றியெழுதுதல் பார்த்து எழுதுதல் சொல்வதையெழுதுதல்.

பிழையின்றி எழுதப் பயிற்சியளித்தல் எழுத்துக் கூட்டல் விளையாட்டு பிழைகளைக் களையும் வழிமுறைகள்.

வாய்மொழிப் பயிற்சி :

அதன் இன்றியமையாமை நோக்கங்கள் பயன்கள் உச்சரிப்பில் ஏற்படும் சிக்கல்கள் மனப்பாடம் செய்தலின் இன்றியமையாமை திருந்திய பேச்சில், பொருந்திய நல்லியல்புள்ள திருந்திய பேச்சினை வளர்க்கத் துணையாகும் இலக்கியங்கள் நாடகங்கள் வாய்மொழிப் பயிற்சியினைப் பல்வேறு நிலைகளில் அளிப்பதற்கான முறைகள் ஆர்வத்தைத் தூண்டும் தலைப்புகளைப் பற்றி உரையாடல் சிறுவர் பாடல்கள் ஆட்டப் பாடல்கள் கதை சொல்லுதல் கலந்துரையாடல் சொற்போர் சொற்பொழிவுகள் மன்றத்தில் பேசுதல்.

6. பாடக்குறிப்பு :

தயாரித்தலின் இன்றியமையாமை நன்மைகள் தீமைகள் ஆசிரியர் மனத்திற் கொள்ளத்தக்கன பாடக் குறிப்பிற்கும் ஆசிரியரின் கற்பிக்கும் குறிப்பிற்குமுரிய வேறுபாடுகள்.

7. வினாக்கள் :

வினாக்கள் கேட்டலின் இன்றியமையாமை வினவுதலின் நோக்கங்கள் பயன்கள் வினாக்கள் வினவுதலின் திறமை வினாக்கள் வினவும் முறைகள் வகைகள் : முன்னிலைச் சோதிக்கும் வினாக்கள், ஆயத்த வினாக்கள், பாட வளர்ச்சி வினாக்கள், கற்பிக்கும் வினாக்கள், வீட்டு வேலை வினாக்கள், தேர்வு வினாக்கள் போன்றன சிறந்த வினாக்களின் சிறப்பியல்புகள்.

8. மொழியாசிரியர் :

கல்வித் தகுதி பயிற்சி பிற ஆசிரியர்களுடன் கலந்துரையாடல் மொழியாசிரியரின் பண்புநலன் மொழிப்பற்று, இலக்கியப்புலமை, எடுத்துக்கூறும் ஆற்றல், குரலில் ஏற்றத்தாழ்வு அமைத்துப் பேசுந்திறன், திறமையாக எழுதுந் திறன், உள்ளங்களை ஒன்றாக்கி இணைத்தல் உளநூல் வல்லுநர் கலையார்வமிக்கவர். பருவமறிந்து பயிற்றும் பண்பு, பயிற்றலின்

அடிப்படையில் விதிகளை அறிந்தவராதல் மாணாக்கருக்கு நல்ல முன்மாதிரியாக இருத்தல். சிறந்த குடிமக்களை உருவாக்கும் பொறுப்பேற்றல் போன்றன.

9. கல்வி ஏற்பாட்டு வளர்ச்சியின் குறிக்கோள் :

அ. சிறந்த பாட நூல்களைத் தயாரிக்கும் பொழுது மனதிற்கொள்ளத்தக்க செய்திகள் நல்ல பாடநூலில் அமைந்திருக்க வேண்டிய நன்மைகள். ஏழைகளுக்கு உதவுவது, நலிந்தோர்க்கு நல்வாழ்வு தருவது போன்ற பிற நன்னெறிகளை மாணவர்களிடையே வளர்க்க தமிழ் இலக்கியங்களில் நீதி இலக்கியங்களைப் படிக்கச் செய்தல்.

ஆ. பாடத்திட்டமும் பாடநூல்களும் : நடைமுறையில் இருக்கும் பாடநூல்களையம் பாடத்திட்டத்தினையும் பற்றிய ஆய்வு ஆழ்ந்த படிப்பிற்கான பாடநூல்களின் தன்மைகள் துணைப்பாட பாடநூல்களின் தன்மைகள் அவற்றை வகுப்பறையில் பயன்படுத்தும் முறைகள் பள்ளி நூலகம் வகுப்பு நூலகம் கருவி நூலகம்.

10. மொழிக் கற்பித்தலின் நுட்பக் கூறுகள் :

கல்வி நுற்பவியல்

பிம்பம் வீழ்த்தும் கருவிகள் ஒலி, ஒளி துணைக் கருவிகள். வானொலி, பட நாடாப் பதிவு, ஒளிப்பதிவு நாடா, கணினி பவர் பாய்ண்ட்.

பிம்பம் வீழ்த்தாக் கருவிகள் வரைபடங்கள், மாதிரிகள், மின் கட்டைகள், படங்கள், கரும் பலகையினைப் பயன்படுத்துதல். பிளானல் பலகை, காந்தப் பலகை, செய்திப் பலகை, திட்டமிட்டுக் கற்பித்தல் இணைய தளங்கள்.

துணைக் கருவினைப் பயன்படுத்துதல் டெச்சிஸ்டோகோப் (கண்ணோட்டத்தினை அளவிடும் கருவி) வாசிக்கும் வேகம் வானொலி, படநாடாப் பதிவு, ஒளிப்பதிவு நாடா மொழிப் பயிற்றாய்வுக் கூடம் கற்பிக்கும் பொறிகள் திட்டமிட்டுக் கற்றல் இவை மொழிபாடம் கற்பித்தலுக்கு ஏற்றவாறு துணைபுரிகின்றன.

மொழிக் கற்பித்தலின் நுட்பக் கூறுகள் :

தொலைக்காட்சியின் இன்றியமையாமை

11. மதிப்பிடல் :

தேர்வுகள் தேர்வின் வகைகள், குறையறி, முன்னறி, அடைவுச்சோதனை, தேர்வு நடத்துதல் கொள்கைகள் திட்ட நகல் வினாவங்கி தேர்வு தயாரித்து நடத்துதல் உருப்படி பாகுபாடு. நம்பகத்தன்மை, ஏற்புடைமை தேர்வினைத் தரப்படுத்துதல் மதிப்பிடுதல்.

தமிழ்க் கற்பித்தலின் விளைவுகள் மதிப்பிடல் பல்வேறு நிலைகளில் கற்பித்தலுக்கான கல்வி நோக்கங்களைப் பகுப்பாய்தல் ஆசிரியர்களால் உருவாக்கும் தேர்வுகள் தரப்படுத்தப்பட்ட தேர்வுகள் தேர்வுச் சீர்திருத்தங்கள் நல்ல தேர்வின் நற்பண்புகள்,

நம்பகத்தன்மை, முறைமைத் தகுதிப்பாடு, புறவயப்பாடு, எளிமைப்பாடு தர அளவுப்பாடு, சமன்பாடு, ஒருமைப்பாடு, பயன்பாடு, குறையறி சோதனைகள் குறைதீர் சோதனைகள் புறநாய்வுத் தேர்வுகள் மொழிப் பாடத்திறனை அறிந்தறிய எவ்வாறு பயன்படுகின்றன.

புள்ளியியல் அளவு கோல்கள் :

மைய அளவைகள் கூட்டுச்சராசரி இடைநிலை சராசரி முகடு, சிதறல் அளவைகள் திட்ட விலக்கம் கால்மான விலக்கம்.

தரத்தொடர்பு கணக்கீடுகள் வரைபடங்கள் செவ்வகப்படம், பைபடம், பலகோணப்படம், ஓகைவ், நூற்றுமானத்தரங்கல் கோட்டம், சரிவு.

### **Learning from Cyber Resources :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum.

செயல்முறை வேலை :

1. கருத்தரங்கம் நடத்துதல்
2. நாடகங்கள் எழுதுதல் - நடித்தல்
3. மலர் தயாரித்தல்
4. கற்பித்தல் பொருள் தயாரித்தல் - தொடர்பான துணைக் கருவிகள் தயாரித்தல்
5. வானொலி பேச்சைக் கேட்டுக் குறிப்பெழுதுதல்
6. வாக்கிய வடிவ மாற்றப் பயிற்சிகள்
7. கட்டுரையின் வகைகள் - தலைப்புகள் தொடர்பான செய்திகள் திரட்டுதல்
8. இலக்கியப் பாத்திரங்கள் - சிறு நூல் (புக்லெட்) தயாரித்தல், பாடத் தொகுப்பு தயாரித்தல்
9. வினா வங்கி தயாரித்தல்
10. குறையறி சோதனையும் குறைதீர் பயிற்சியும்
11. ஒரு குறிப்பிட்ட பாத்திரத்தை ஏற்று நடித்தல்
12. மொழிப் பயிற்றாய்வுக் கூடம் - கல்விப் பயணம்
13. வட்டார வாரியாக ஏட்டில் வாரா பழமொழிகள், மரபு வழிச் சொற்றொடர்கள் (சாசனந)இ குறிப்புப் பொருள் தரும் சொற்கள் ஆகியவற்றைத் தொகுத்தல்

பார்வை நூல்கள் :

1. ஆறுமுக நாவலர் வி. அச்சகம், தங்கச்சாலைத் தெரு, சென்னை - 1, 1966.
2. இளம் பூரான், தொல்காப்பியம். நச்சினார்க்கினியர் உரை கழக வெளியீடு, திருநெல்வேலி, சென்னை - 1,1969.
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6. டாக்டர்.திரு.மு.கோவிந்தராசன், பயிற்றுப் பயிற்சியும் மொழியாசிரியர்களும், திருமலைக்குமரம் பதிப்பகம். தஞ்சை மாவட்டம்.1979.
7. டாக்டர்.திரு.மு.கோவிந்தராசன், மொழித்திறன்களும்.சிறு சிக்கல்களும், தேன்மொழி பதிப்பகம். சென்னை - 14, 1980.
8. திரு. சரணை ஆறுமுக முதலியார், தமிழ் பயிற்று முறை உரை, நுங்கம்பாக்கம், சென்னை - 34, 1968.
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11. என். துரைக்கண்ணு முதலியார், கல்விக்கலை, அமுதா நிலையம் பிரைவேட் லிமிடெட், தேனாம்பேட்டை.சென்னை - 18, 1981.
12. திரு. பொன்னப்பன், தமிழ்பாடம் சொல்லும் முறை - 1, தமிழ்பாடம் சொல்லும் முறை - 2 , தமிழ்நாட்டுப் பாடநூல் நிறுவனம், சென்னை, 1981.
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## OPTIONAL 2/2

### தமிழ் - தாள் இரண்டு

நோக்கங்கள் :

- அ. தேசியக் கல்விக் குறிக்கோளும் தேசியக் கலைத் திட்டத்தின் நோக்கங்களையும் அறிதல்.
- ஆ. தமிழ்மொழி இயலின் அமைப்புகளை அறிதலோடு, மனித வாழ்க்கையில் பல்வேறு செய்தித் தொடர்பின் பங்குகளை அறிதல்.
- இ. சமூகவியல் பின்னணியில் நாகரிகம், பண்பாட்டை வளர்த்தல்.
- ஈ. மொழியின் பண்பையும் அமைப்பு முறைகளையும் அறியச் செய்தல்.
- உ. உடலியல், உளவியல் அடிப்படைகளில் மொழிக் கற்றல் கூறுகளை அறியச் செய்தல்.
- ஊ. பல்வேறு மொழிநடைக் கூறுகளை அறிதல்.
- எ. இசைத் தமிழ், நாடகத் தமிழ் ஆகியவற்றின் தோற்றங்களையும் நோக்கங்களையும் அறிதல்.
- ஏ. மொழியின் பல்வேறு செயல்பாடுகளை அறிதல்.
- ஐ. பல்வேறு இலக்கியங்களைத் திறனாயும் ஆற்றலை வளர்த்தல்.
- ஓ. படைப்பாற்றலை வளர்த்ததற்கான பல்வேறு வழிமுறைகளை அறிதல்.
- ஔ. தேசியக் கல்விக் கொள்கையில் மொழி ஆசிரியரின் பங்கினை அறிதல்.
- ஐ. தமிழ்மொழி வளத்தில் வாழ்வியல் கூறுகள் பெற்றுள்ள பங்கினை உணரச் செய்தல்.
- ஐ. தமிழ்மொழியின் தனித் தன்மைகளை அறிதலும், அவற்றைப் போற்றி வளர்க்க வேண்டியதன் அவசியத்தையும் உணரச் செய்தல்.
- I. கலைத்திட்டம் - ஆரம்ப, இடை, உயர்நிலைகளில் - தேசியக் கல்வியின் குறிக்கோளுக்கும், பள்ளிக் கலைத் திட்டத்திற்குமுள்ள தொடர்பினைக் காணல் - தேசிய இலக்குகளுக்கும் கல்வியின் நோக்கங்களுக்குமுள்ள தொடர்பினைக் காணல் - கல்வியின் நோக்கங்களும், தேசிய இலக்கங்களும்.
- II. தமிழில் காணலாகும் மொழியின் அமைப்புகள், ஒலியன்கள், ஒலிப்பு முறைகள் ஆகியவற்றின் பயன்கள் - மனித வாழ்க்கையில் செய்தித் தொடர்பின் பங்கு - செய்தித் தொடர்பின் பல்வேறு வகைகள்.
- III.1. சமூகவியல் பின்னணியில் மொழி மற்றும் பண்பாட்டைக் கற்றல் - மொழி வளர்ச்சியில் சூழ்நிலையின் பங்கு - மொழியும் சமூகச் சூழ்நிலையும் - பண்பாட்டில் பின்தங்கிய வகுப்பினர்க்கான ஈடு செய்யும் கல்விமுறை.

2. மொழியும் மொழிக் கற்றலும் - மொழியின் அமைப்பு - மொழித் தோற்றக் கொள்கையும் மொழியின் வளர்ச்சியும் மொழியின் தொன்மை - மொழியின் பண்பும் அமைப்பு முறையும்.
- IV. உளவியல் அடிப்படையில் மொழி மொழியும் அறிதிறன் கூறுகளும் மொழித் தொடர்பான கற்றல் கொள்கைகள் குழந்தை வளர்ச்சியும் மொழிக் கற்றலும் மொழிக் கற்றலின் பல்வேறு கூறுகள் மொழியும் குறியீடுகளும்.
- உடலியற் கூற்று அடிப்படையில் மொழி மூளையின் அமைப்பும் வேலையும் புலன் உணர் உறுப்புக்கள் மற்றும் இயங்கும் உறுப்புக்கள் பேச்சு உணர் உறுப்புக்கள் மற்றும் இயங்கும் உறுப்புக்கள் பேச்சு தொடர்பான உறுப்புக்களை பற்றி விரிவாக ஆய்தல்.
- V. இயல் : தொல்காப்பியம், சிலப்பதிகாரம், பத்துப்பாட்டு, எட்டுத்தொகை, திருக்குறள், போன்ற நூல்களில் உரையாசிரியர்களின் மொழிநடைக் கூறுகளின் வேறுபாடுகளும் அவர்தம் தனிநடை ஆற்றல்களும்.
- VI. 19.20ஆம் நூற்றாண்டுகளின் தற்கால உரைநடையாசிரியர்களும் (அட்டவணையின்படி) அவர்களது படைப்புகளைப் பற்றி திறனாய்வு.
- VII 1. இசை : சங்க இலக்கியம், சிலப்பதிகாரம் மற்றும் தேவாரம் போன்ற நூல்களிலுள்ள பல்வேறு இசை வடிவங்களைப் பற்றி அறிந்து கொள்ளுதல்.
- VII 2. நாடகம் : சங்க காலத்திலிருந்து நாடகத்தில் தோற்றமும் வளர்ச்சியும்.
- VIII தற்கால மாற்றங்களுக்கு ஏற்றவாறு மொழியின் பல்வேறு செயல்பாடுகள் :
1. அறிவியல் மற்றும் தொழில்நுட்பக் கலைச் சொற்களை உருவாக்கும் பொழுது மனத்திற்கு கொள்ளத்தக்க செய்திகள், தமிழிலுள்ள பிற மொழிச்சொற்கள்.
  2. தமிழ் ஆட்சி மொழி, நீதி மன்ற மொழியாய் செயல்படாவிட்டால் நேரும் அவலங்கள், செயல்படுவதால் ஏற்படும் பயன்கள், செயல் முறையில் ஏற்படும் தடைகளும் அவற்றை நீக்கும் வழிமுறைகளும்.
  3. தமிழ் பாட மொழியாக நடத்தும் பொழுது வட மொழியும் மற்ற மேல்நாட்டு மொழிகளின் தாக்கமும் அதன் விளைவுகளும்.
  4. தமிழ் மொழி வளர்ச்சிக்குத் தேவைப்படும் உயிர் ஒலிகள் பற்றிய கருத்துக்களை அறிமுகம் செய்தல்.
  5. மக்கள் தொடர்பு சாதனங்களில் (வானொலி, திரைப்படம், சின்னத்திரை, (வுஏ)இ செய்தித்தாள்கள்) மொழியின் பயன்பாடுகள்.
- IX. எழுத்து, சொல், பொருள், யாப்பு, அணி ஆகியவற்றைப் பற்றிய பரந்துபட்ட இலக்கண அறிவு மற்றும் அவற்றைச் சார்ந்த நூல்களைப் பற்றி ஆய்வு (பள்ளிப் பாடங்களைப் பொருத்தமட்டில்).

X. செய்யுள் நலம் பாரட்டுதற்குத் தேவையான மொழி நடை, அணிநயம், சொற்கவை, இசை வடிவங்கள் பற்றிய செய்முறைப் பயிற்சி.

XI. பயண இலக்கியம் சிறுகதைகள், நாவல்கள், குழந்தை இலக்கியம், நாட்டுப்புற இலக்கியம் ஆகியவற்றைப் படைத்த ஆசிரியர்களைப் பற்றிய திறனாய்வு, கீழ்க்காணும் பட்டியல்களினின்று (அ) பிரிவு அல்லது (ஆ) பிரிவின் நேருள்ளவற்றைத் தேர்ந்தெடுத்துக் கொள்ளுதல் வேண்டும்.

அ - பிரிவு

ஆ - பிரிவு

சிறுகதையாசிரியர்கள் :

- |                     |             |
|---------------------|-------------|
| 1. புதுமைப்பித்தன   | 1. சூடாமணி  |
| 2. கு.ப. இராசகோபாலன | 2. அம்பை    |
| 3. கு. அழகிரிசாம    | 3. ஜோதிரலதா |
| 4. கி. இராஜநாராயணன  | 4. திலகவதி  |

நாவலாசிரியர்கள் :

- |                        |                     |
|------------------------|---------------------|
| 1. டாக்டர் மு. வரதராசன | 1. இந்துமதி         |
| 2. அகிலன               | 2. சிவசங்கரி        |
| 3. ஜெயகாந்தன           | 3. இராஜம் கிருஷ்ணன் |
| 4. கல்கி               | 4. சிவகாமி          |

பயண இலக்கியம் :

- |                         |                |
|-------------------------|----------------|
| 1. ஏ.கே. செட்டியார்     | 1. சோமலே       |
| 2. நெ.து. சுந்தரவடிவேலு | 2. மா.பொ.சி    |
| 3. மணியன                | 3. கோவை கிழார் |

சிறுவர் இலக்கியம் :

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| 1. கவிமணி தேசிக<br>விநாயகம் பிள்ளை | 1. அழ. வள்ளியப்பா                 |
| 2. வாணிதாசன                        | 2. நாமக்கல வெ. இராமலிங்கம் பிள்ளை |

நாட்டுப்புற இலக்கியம் :

- |                        |                  |
|------------------------|------------------|
| 1. கோவை கிழார்         | 1. மு. அருணாசலம் |
| 2. டாக்டர் க. சக்திவேல | 2. நா. வானமாமலை  |



- |                           |                    |
|---------------------------|--------------------|
| 3. டாக்டர் தமிழண்ணல்      | 3. அன்னகாமு        |
| 4. டாக்டர் சண்முகசுந்தரம் | 4. கி.வ. ஐகந்நாதன் |

- XII. இலக்கிய கழங்கள், புள்ளி இதழ்கள், போன்றன எவ்வாறு மாணவர்களின் படைப்பாற்றிலை வெளிப்படுத்துகின்றன மற்றும் கையெழுத்துப் பிரதிகளின் பயன்கள் நடத்தும் முறைகள்.
- XIII. மொழியின் சமூகப் பணிகள் - மொழியும் நயமும் - மொழியும் குடும்பமும் - மொழியும் இயற்பொருள் வாதமும் - மொழியும் நிலைப்புத் தன்மையும், மொழியும் பொருளாதாரமும் - மொழியும் அரசியலும் மொழியும் பகுத்தறிவிற்கும் ஒவ்வாச் சொற்களும் மொழியும் இலக்கியமும் - மொழியும் அறிவியலும் - மொழியும் கல்வியியலும்..
- XIV. நலிவுற்ற பிரிவினர்க்குச் சுயவாய்ப்பு அளித்தல் - உடல் அசைவு, ஊனமுற்றோர்க்கான கல்வி - கலைக் கல்வியின் இன்றியமையான - பொதுக் கல்வியின் அறிவியல் கற்பித்தல்.
- XV. தேசீயக் கல்விக் கொள்கையில் ஆசிரியரின் பங்கு - பெண் கல்வி - சங்க காலத்திலிருந்து தற்காலம் - பெண்கள் சமத்துவத்திற்கான கல்வி - பெண்களின் நிலையில் அடிப்படை மாற்றம் ஏற்பட ஒரு கல்வி - பெண்கள் முன்னேற்றத்தை விரைவுபடுத்த செயல் திட்டங்கள்.
- XVI. கணினி வழி பன்முக ஊடகமுறையைப் (multimedia) பயன்படுத்திக் கற்றல், கேட்டல், படித்தல் எழுதுதல் திறன்களை வளர்த்தல்.

செயல்முறை வேலை :

1. முன்னறிவிப்பில்லா சொற்பொழிவுகள்
2. சொற்போர் - பட்டிமன்றம்
3. கருத்தரங்கம் நடத்துதல்
4. நாடகங்கள் எழுதி நடித்தல்
5. வானொலிப் பேச்சைக் கேட்டுக் குறிப்பெடுத்தல்
6. திறனாய்வுக் கட்டுரைகள் தயாரித்தல்
7. செய்யுள் நலம் பாராட்டல்
8. மலர் தயாரித்தல்
9. கற்பித்தல் பொருள் தயாரித்தல் - தொடர்பான துணைக் கருவிகளைத் தயாரித்தல்
10. பாடத்தொகுப்பு, சிறு நூல் (புக்லெட்) தயாரித்தல்
11. வினாவங்கி தயாரித்தல்

12. குறையறிச் சோதனையும் குறைதீர் பயற்சியும்
13. கலந்துரையாடல்களை நடத்துதல்
14. வட்டார மொழிச் சொற்களைத் தொகுத்தல். பழகு தமிழில் பொது மொழி அமைத்தல் பற்றிப் பயிற்சி அளித்தல்

Note : Students of optional "Tamil" are to be familiarized with the latest - Tamil Nadu Curriculum for "Advanced Tamil" & "Ariviyal Tamil (Scientific Tamil)", presented for Higher Secondary Classes.

## **OPTIONAL 3/1**

### **MATHEMATICS - PAPER-I**

#### **OBJECTIVES**

To enable the student teacher

1. to understand the nature and development of mathematics
2. to understand the aims and objectives of teaching mathematics
3. to acquire competence in teaching mathematics
4. to apply methods of teaching of mathematics
5. to organise the mathematics curriculum
6. to become aware of and cater to individual differences in mathematical aptitude and abilities among his/her students

#### **I. NATURE AND DEVELOPMENT OF MATHEMATICS**

Meaning of Mathematics - Logical Sequence, structure, precision, abstractness, symbolism - Mathematics as a science of measurement and qualification - A brief survey of the development of Mathematics.

#### **II. AIMS AND OBJECTIVES OF MATHEMATICS**

The need and significance of teaching Mathematics - Aims - Practical, social, disciplinary and cultural - Mathematics as a tool of the mind-objectives - G.I.Os and behavioural or specific learning outcomes (S.L.Os) relating to the cognitive, affective and psychomotor domains.

#### **III. PREPARATION FOR MACRO TEACHING**

- i. Micro teaching, Cycle of operation-skills in teaching - set induction, introducing a lesson, explaining, questioning, chalk board work, reinforcement, stimulus variation, closure.

- ii. Herbetian Steps - Format of a typical lesson plan, teachings aids. presentation, application, recapitulation and assignment.
- iii. Preparation of lesson plan.

#### **IV. METHODS OF TEACHING MATHEMATICS**

Inductive, deductive, analytic, synthetic, heuristic, project problem solving and laboratory methods.

#### **V. MATHEMATICS CURRICULUM**

- i. Content - Principles of selection, individual, social and national needs content course of Mathematics of classes IX and X.
- ii. Organisation - logical, psychological, topical, spiral and integrated approaches - correlating with life, nature, other disciplines and different branches in mathematics.
- iii. Individualised techniques - homework, assignments, programmed instruction and computer aided instruction (CAI), Group Methods- Seminar, Symposium, Workshop.

#### **Learning resources and equipment**

Textbook, workbook, library, audio-visual aids, mass media, mathematics club and its activities.

#### **VI. EVALUATION AND STATISTICS**

Different types of tests in Mathematics, achievement, diagnostic, prognostic - criterion and norm referenced evaluation - construction and administration of achievement test - examining the results of tests against objectives - Item analysis. Statistical measures - mean, median, mode, range, average deviation, quartile deviation, standard deviation - rank correlation. Graphical representation of data, Bar and Pie Diagram, Histogram, Frequency Polyon, Frequency Curve, Ogive.

#### **VII. INDIVIDUAL DIFFERENCES IN MATHEMATICS**

- i) Causes for slow learning in mathematics and remedial measures for the backward.
- ii) Identification of the gifted and enrichment programmes for the gifted.

### **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum.

### **PRACTICAL WORK**

1. Construction and administration of an achievement test in a Mathematics unit of Standard IX or X. Analysis and Interpretation of test scores.
2. Preparation of Ten charts and three improvised apparatus.
3. Practising three micro lessons with three different skills.
4. Presenting one demonstration to the peers
5. Making three slides and one film strip.
6. Preparation of two over head transparencies.
7. Preparation of programmed instruction material of 20 linear frames in Mathematics.
8. Preparing a Mathematics Album on the works of great Mathematicians and application of Mathematics in life situations.
9. Evaluating reports of any two Web sites in Mathematis.

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SMSG., Text Books.

The Current Syllabus in Tamil Nadu for Standards I to XII.

The Current Text Books in Tamil Nadu for Mathematics.

## **OPTIONAL 3/2**

### **MATHEMATICS - PAPER-II**

#### **I. CONTRIBUTION OF MATHEMATICIANS**

Contribution of eminent mathematicians to the development of mathematics - Aryabhata, Brahmagupta, Baskara, Ramanjam, Euler, Euclid, Pythagorus, Gauss.

#### **II. THEORIES OF LEARNING MATHEMATICS**

Psychology of learning Mathematics - Formation mathematical concepts. The ideas of Piaget and Bruner - factors influencing the learning of Mathematics - motivation, maturation, perception, special abilities, attitude and aptitude-Divergent thinking in Mathematics.

#### **III. INSTRUCTIONAL METHODS FOR INDIVIDUAL DIFFERENCES :**

Programmed learning - classroom interaction analysis - modification of teacher behaviour with special reference to mathematics teacher.

#### **IV. MODELS OF TEACHING AND MATHEMATICS EDUCATION**

Concept attainment model - advanced organising model - inquiry training model.

## **V. COMPUTER IN MATHEMATICS EDUCATION**

The role of computers in mathematics education at various levels. Relevant computer science topics and techniques.

## **VI. CURRICULUM IN MATHEMATICS**

Current trends in curriculum changes in Mathematics education - a critical analysis of existing teacher education programme in Mathematics - content course of Mathematics of classes IX, X, XI and XII.

## **VII. RESEARCH IN MATHEMATICS EDUCATION**

Meaning, need for research in mathematics education - qualities of a good researcher - problems faced in research in mathematics education.

## **VIII. EVALUATION AND STATISTICS**

Normal Probability Curve, Skewness, Kurtosis.

Note : Students of optional "Mathematics" are to be familiarized with the latest - Tamil Nadu Curriculum for "Business Mathematics", prescribed for Higher Secondary Classes.

### **PRACTICAL WORK :**

1. Construction and administration of an achievement test in Mathematics unit of Standard XI or XII.
2. Practising three micro lessons with three different skills.
3. Practical training in using FIAS, analyzing data using matrix techniques.
4. Preparation of three improvised apparatus.
5. Preparation of a branched programme.
6. Critical analysis of existing Tamil Nadu State Board Mathematics Syllabi for classes IX, X, XI and XII.

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William Clark Trow, Psychology in Teaching and Learning, EURASIA Publishing House Private Limited, 1970.

Text Books prescribed for Standard IX, X, XI, XII, Tamil Nadu Text Book Society, Madras.

## **OPTIONAL 4/1**

### **PHYSICAL SCIENCE- PAPER 1**

#### **OBJECTIVES**

1. To enable the student teachers to understand the nature and scope of Physical Science.
2. To enable the student teachers to know the aims and objective
3. To enable the student teachers to understand the principles of curriculum construction and organization of subject matter.
4. To enable the student teachers to understand the skills in the teaching of Physical Science and to develop the skills in them through classroom teaching.
5. To guide the student teachers in acquiring skills relating to planning their lessons and presenting them effectively.
6. To develop in the student teachers an understanding of the technology of teaching Physical Science and give them practice in the use of audio visual aids.
7. To enable the student teachers to understand the techniques of evaluating science teaching and to construct achievement test to evaluate the progress of pupils.
8. To enable the student teachers to develop a theoretical and practical understanding of the various methods and techniques of teaching Physical Science and the importance of self-learning devices.
9. To enable the student - teachers to understand the principles of curriculum construction and examine critically the syllabi in Physical Science of the Secondary and Higher Secondary Schools and to make them know the curriculum improvement project.



10. To enable the student to know the facilities required for the organization and maintenance of science laboratory.
11. To enable the students to understand the criteria in selecting a good textbook and to evaluate a science textbook.
12. To help the student teachers organize different co-curricular activities in Science.
13. To enable the student teachers to know the special qualities of a good science teachers, acquire those qualities and to evaluate himself or herself.

### **UNIT : I**

Nature and Scope of Physical Science - Nature of Science - (Product and Process) - A body of knowledge - a way of investigation-away of thinking- Areas of Knowledge related to Physics and Chemistry-Inter disciplinary approach.

Impact of Physical Science on modern communities.

### **UNIT : II**

Aims and Objectives of Teaching Physical Science - Bloom's Taxonomy of Educational Objectives - Aims and Objectives of teaching Physical Science at different levels - Primary, Secondary, Higher Secondary. Critical study of the objectives existing in the Tamil Nadu Text Book at different Organizing learning experiencesa for achieving specific behavioural outcomes.

### **UNIT : III**

Curriculum Construction in Physical Science - Principles of curriculum construction - Criteria of selection of content matter - Organization of content matter - Critical evaluation of Tamil Nadu Secondary School Science Curriculum.

Curriculum Improvement Projects in India (NCERT) and Abroad (Chemstudy, PSSC, CBA, Nuffield).

### **UNIT : IV**

Communication skills with reference to Micro-teaching. Verbal and non-verbal communication. Principles and steps in micro teaching - Micro Teaching and relevant skills - Skill of introduction - Skill of explaining - Skill of Stimulus variation - Skill of reinforcement - Skill of questioning - Skill of using blackboard - Skill of demonstration, Achieving Closure - Need for link lessons in Micro Teaching Programme - Macro Teaching.

## **UNIT : V**

Criteria for selection of a method - Level of the class, size of the class, available time and subject matter - Methods of Teaching Physical Science - General Methods of teaching Physical Science - Scientific method induction lecturer method - Lecture cum demonstration method - Individual practical work as a method - Analytic & Synthetic method. Heuristic approach- Project method - Historical and Biographical approaches, Dalton Plan.

Modern methods of Teaching Physical Science - Group discussion, Panel discussion, simulation workshop, seminar, symposium, team teaching, supervised study, Computer Aided Instruction, Programmed Instruction.

## **UNIT :VI**

Educational Technology -Textbooks in Physical Science

Projected Aids - Audio Visual Aids in Physical Science teaching - their importance - uses of Educational broadcasts - Radio and T.V. lessons. CAI, Programmed learning - Use of Internet in teaching Physical Science - e-learning - Teaching Machines, Individualized Instruction - Self learning packages.-

Audio-Video Players - Tapes and CDs - OHP and transparencies slide and Film projectors, Multimedia, Computers, Power Point, Non projected Aids - Charts Models (Static and Working) Flash Cards, Pictures, Chalk, Flannel, Magnetic and Bulletin boards, exhibits.

## **UNIT : VII**

Tests and its types, Diagnostic and Prognostic and achievement tests - Criterion and norm referenced tests - Evaluation - Evaluating outcomes of science teaching - Principles of test construction, Blue Print and question bank, Item Analysis Reliability, Validity-Standardizing a test.

Construction administration and uses of Achievement tests - Interpretation of test results.

Diagnostic testing and Remedial teaching.

Statistical tools - measures of Central tendency - Mean, Median & Mode - Measures of Variability - Mean, Standard and Quartile Deviation ; Correlation co-efficient, Rank order and Product Movement correlation - Graphical representation of Data - Bar and Pie Diagram, Histogram, Frequency Polygon - Cumulative Frequency Curve, Ogive, Percentile Ranks, Normal Probability Curve, Kurtosis, Skewness.

## **UNIT : VIII**

Lesson Planning - Planning for teaching - developing year plans, unit plans, lesson plans - Principles of lesson planning - Lesson plans - their importance - Herbartian steps - their merits and limitations.

Teaching and teaching aids - Evaluation, recapitulation and assignment.

## **UNIT : IX**

Physical Science Laboratory - Structure Design - Organization and maintenance of Science Laboratory - Maintenance of Registers - Storage of Chemicals - Organization of Practical work.

Improvisation of Apparatus.

Accidents and First Aids.

## **UNIT : X**

Co-curricular Activities - Organization of Science clubs - Science exhibitions and fairs - fieldtrips and excursions.

## **UNIT : XI**

Science Teacher - Academic and Professional qualification - Professional growth - Special qualities - Inservice training.

Class room climate, Authoritative, Democratic and Laissez faire pattern, Flander's class room interaction analysis.

## **UNIT : XII**

Qualities of a good science text book use of text books inside and outside the class room. Criteria for evaluation of science textbook. Science Libraries values of school Science Library.

A knowledge of all the concepts in Physics and Chemistry upto X standard.

## **PRACTICAL WORK**

1. Construction and use of achievement test. Analysis and interpretation of test scores.
2. Making 10 charts and 3 improvised apparatus.
3. Practising 3 micro lessons with 3 different skills.

4. Preparation of laboratory instructional cards.
5. Conducting an investigatory project on any Science topic and presenting the report.
6. Participating in at least two seminars (in B.Ed. topics) Presenting two papers.
7. Presenting one demonstration to the peers.
8. Making 3 slides and one filmstrip.
9. Preparation of a programme of 20 frames on Physics or Chemistry topic.
10. Preparing a Science album with internet materials of scientific issues and website reports.

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2. Current Science, IISC, Bangalore.
3. School Science, NCERT, New Delhi.
4. Science Teacher - (Monthly), Editorial and Executive officers, 1201, Sixteenth St., N.W. Washington.
5. Science Today - (Monthly), 'Ganga Criha' 3rd Floor, 6-D, Nungambakkam High Road, Madras - 600 034
6. Science Reporter - (Monthly), Publication and Information Directorate (CSIR), New Delhi.

## **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum

2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum.

WEB-SITES :

HYPERLINK "<http://www.sciedu/nsrc.com>" [www.sciedu/nsrc.com](http://www.sciedu/nsrc.com)

HYPERLINK "<http://www.nerdword.com>" [www.nerdword.com](http://www.nerdword.com)

HYPERLINK "<http://www.2112systems.com>" [www.2112systems.com](http://www.2112systems.com)

HYPERLINK "<http://www.ncert.nic.in>" [www.ncert.nic.in](http://www.ncert.nic.in)

HYPERLINK "<http://www.unesco.org>" [www.unesco.org](http://www.unesco.org)

## **OPTIONAL 4/2**

### **PHYSICAL SCIENCE - PAPER II**

#### **OBJECTIVES**

1. To enable the student teachers to understand the place of Physics and Chemistry in the modern world and to understand the contribution of mankind in the development of science.
2. To enable the student teachers to understand the psychological basis of modern trends in teaching science and the new techniques of teaching science.
3. To acquaint the student teachers with the knowledge and understanding of educational technology in science education.
4. To enable the student teachers to develop lesson plans with activity approach.
5. To enable the student teachers to understand the principles of construction and standardization of diagnostic and aptitude tests in Physical science.
6. To enable the student teachers to evaluate Physics and Chemistry book of different types.
7. To enable the student teachers to acquire knowledge about the organization and maintenance of Physics and Chemistry laboratories for Higher Secondary School Pupils.
8. To enable the student teachers to be aware of the trends of research in science education.
9. To enable the student teachers to understand the problems of science teaching in urban and rural schools and to develop scientific perspective of the problems confronting the world and the role of science in solving them.

10. To enable the students to have a knowledge of all the basic concepts in Physics and Chemistry.

#### **UNIT : I**

The meaning of Science - Different branches of science - Globalization and Science - Discoveries and developments in science.

#### **UNIT : II**

Justification for including Physics and Chemistry separately at the higher secondary level. Modern trends in teaching of science, different taxonomies, Psychological basis of methods in science teaching - Gagne, Bruner, Piaget - Models of teaching Physical Science with one illustration for each type of model.

#### **UNIT : III**

Educational technology in science education - Development of programmed instruction materials - teaching machines - Computer Assisted instruction.

#### **UNIT : IV**

Developing lesson plans using the principles of Piaget, Bruner and Gagne. Activity approach in preparing lesson plans. Power point presentation.

#### **UNIT : V**

Evaluating of Teaching - Construction of Diagnostic Tests - Construction of Aptitude Tests. Norms Testing for scientific attitude and skills objective based testing.

#### **UNIT : VI**

Textbooks - Physics, Chemistry - Evaluation of different types of textbooks - CBSE, SSLC, etc.

#### **UNIT : VII**

Organization and Maintenance of separate Laboratory for Physics and Chemistry - Organization of practical work including preparation of bench solutions of Chemistry, etc., setting up of apparatus like checking the ZRP, tuning forks frequencies, etc.

#### **UNIT : VIII**

Catering the individual differences, Identification and care of the Scientifically talented pupils, Natural Talent Examination, Helping Slow & Gifted learners.

Research in science education - Identifying problems in teaching of science - Techniques of conducting and evaluating research in Science Education.

### **UNIT : IX**

Problems of Science teaching in urban and rural areas - Global problems - Pollution - Diseases - Global warming, over population, malnutrition, superstitions beliefs.

How science teaching can help in solving them. Developing scientific temper among the people in the society.

### **UNIT : X**

A knowledge of all the concepts in Physics / Chemistry upto XII Standard.

### **PRACTICAL WORK**

1. Construction and standardization of diagnostic test in a Physics or Chemistry unit of Standard XI or XII.
2. Practising (3 sessions each of ten minutes) classroom interaction analysis and presenting the report.
3. Preparation of 3 improvised apparatus that could be used for standard XI or XII
4. Construction of aptitude test in science.
5. Preparation of branched programme material consisting of 20 frames, in science.
6. Preparation of a lesson plan for Power Point presentation.
7. Collecting 6 materials on selected topics in Physics or Chemistry that could be used in Classroom.
8. Evaluating reports of 3 websites in science.

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1. Journal of Research in Science Teaching, NARST, Washington DC, U.S.A  
School Science, NCERT, New Delhi.
2. Science Teacher - (Monthly), Editorial and Executive Offices, 1201, Sixteenth St., N.W., Washington.
3. Science Today - (Monthly), 'Ganga Criha' 3rd Floor, 6-D, Nungambakkam High Road, Madras - 600 034.
4. Science Reporter - (Monthly), Publication and Information Directorate (CSIR), New Delhi.

## **WEB- SITES**

HYPERLINK "<http://www.edusite.com>" [www.edusite.com](http://www.edusite.com)

HYPERLINK "<http://www.ejse.com>" [www.ejse.com](http://www.ejse.com)

HYPERLINK "[http://www.ed.gov/databases/ERIC\\_Digests](http://www.ed.gov/databases/ERIC_Digests)" [www.ed.gov/databases/ERIC\\_Digests](http://www.ed.gov/databases/ERIC_Digests)

HYPERLINK "<http://www.slscsp.com>" [www.slscsp.com](http://www.slscsp.com)

## **OPTIONAL 5/1**

### **BIOLOGICAL SCIENCE - PAPER I**

#### **OBJECTIVES :**

- a. To enable the student teachers to understand the basic principles and practices of Science Education relevant to teaching Biological Science in the Secondary and Higher Secondary Classes.
- b. To help the student teachers to learn appropriate teaching techniques.
- c. To enable the students teachers to acquire adequate skills in using proper and suitable methods of teaching Biology.

- d. To enable the student teachers to acquire the knowledge relating to the organization and administration of a Biology laboratory, curricular and co-curricular activities that would promote the teaching of Biology and develop in pupils the scientific attitude and a sense of appreciation and interest in Biology.
- e. To guide the student teachers in acquiring skill in constructing tests.
- f. To develop in the student teachers' ability to construct a curriculum and to evaluate critically the present curriculum.
- g. To develop in the student teachers, skills in preparing and using the appropriate instructional material in Biology.

### **I. PLACE OF BIOLOGY**

Biology in the school curriculum- its claims for inclusion-Relation between Biology. Areas of Knowledge related to Botany & Zoology - Interdisciplinary approaches in the school curriculum.

### **II. GOALS AND OBJECTIVES**

Goals and objectives of teaching Biology with reference to Bloom's taxonomy. Cognitive, Affective and Psychomotor or Domains. Aims of teaching Biology at different levels- Primary, Secondary and Higher Secondary.

### **III. LESSON AND UNIT PLANNING**

Lesson planning-importance of lesson plans-Writing Instructional Objectives-Planning for specific behavioural changes. Preparation and use of unit plan - Teaching and teaching aids evaluation, Recapitulation and Assignments. Critical study of the objectives of the Tamil Nadu Text Book Curriculum at different levels.

### **IV. MICROTEACHING**

Communication skills with reference to Microteaching - Verbal and non-Verbal communication - Microteaching skill of explaining, skill of black-board writing, Skill of stimulus variation, Skill of reinforcement, Skill of questioning; Probing Questioning, Skills of Demonstration, Introduction, Achieving Closure - Cycle of operation, Need for a Link Lesson - Macro Teaching.

### **V. METHODS OF TEACHING BIOLOGY**

Criteria for selection of a method - Level of the class, size of the class, available time and subject matters. Approaches - Inductive, Deductive, Analytic, Synthetic, Heuristic, Dalton Plan.

Instructional technology and its application to the teaching of Biology. Programmed instruction, Teaching machines, personalized instruction, computer assisted instruction, Teaching Machines. Special methods - Lecture, demonstration, laboratory, project, scientific methods, Seminar, symposium, workshop, panel discussion, biographical and historical method, team teaching and assignment method.

## **VI. BIOLOGY LABORATORY**

- (i) Practical work in Biology : Importance of practical work-organising the work of the practical class - laboratory - Accidents and First Aid - safety- school Biology Record- written notes and drawings.
- (ii) Museum - Importance of museum- Preparation of museum materials - Field trip. Maintenance of Aquarium, Vivarium & Terrarium.

## **VIII. TEXT BOOKS**

Qualities of a good Biology text book - Use of text books in and outside the classroom- Values of a school Biology library - Divisions of Library

## **IX. CURRICULUM IN BIOLOGY**

Principles of curriculum development-Selection of content and organization of subject matter-NCERT Curriculum-BSCS and Nuffield Secondary Science Project.

## **X. EDUCATIONAL TECHNOLOGY**

Projected Aids - Audio Visual Aids - Audio Video Players - Tapes and CDs, OHP and transparencies - Slide and Film Projectors, Radio and TV (Broad Cast and Telecast), CCTV, Multimedia Computers, Power Point. Non Projected aids - Charts - Models - (Static and working), Flash cards, Pictures, Chalk, Flannel, Magnetic, and Bulletin Boards - Exhibits, CAI, Internet, e-learning etc.

## **XI. SCIENCE TEACHER**

Academic qualifications- Professional training special qualities required of a science-teacher Inservice training. Class Room Climate; Flanders interaction analysis.

## **XII. EVALUATION AND STATISTICS**

- (i) Test and its types - Diagnostic, Prognostic and Achievement tests, Criterion and Norm referenced tests - Principles of test construction, Blue Print and Question Bank.

- (ii) Evaluation of students' attainment in Biology-Tools of evaluation-The written examination-Evaluation of the practical work in Biology-Marking-interpretation of results.
- (iii) Various types of test items, essays, short answer, completion, matching, two choice, multiple choice. Steps in test construction, table of specifications - scoring, interpretation and follow up.
- (iv) Measures of central tendency : Arithmetic mean, median, mode. Measures of variability : range, quartile deviation, average deviation, and standard deviation, use and interpretation.
- (v) Correlation - meaning and interpretation, co-efficient of correlation - rank difference method.
- (vi) Graphical Representation of Data - Bar & Pie Diagram, Histogram, Frequency Polygon, Cumulative Frequency Curve, Ogive, Percentile Ranks, Normal Probability curve & Kurtoises.

### **PRACTICAL WORK**

1. Making charts, improvised apparatus and models.
2. Practice of a minimum of 2 skills under microteaching (Proper records to be maintained).
3. Preparation of laboratory instruction cards.
4. Planning and conducting any four practical classes in Biology and maintaining a record of practical work.
5. Preparation of a unit test for a unit in Biology.
6. Designing and carrying out of any one simple investigation in Biology.
7. Collecting and preserving biological specimens.
8. Collecting and keeping plants and animals alive for instructional purposes aquarium, terrarium and vivarium.

### **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum.

## REFERENCES

- Buffaloe, Neal, and Throneberry, J.B., Principles of Biology Teaching, Prentice-Hall of India Limited, 2nd Edition, New Delhi, 1972.
- Chauhan, S.S., Innovations in teaching learning process, Vikas publishing House, New Delhi, 1985.
- Garrett, H.E Statistics in Psychology and Education, Vakils, Feffer and Simons Ltd., Bombay, 1979.
- Green, T.L., The Teaching of Biology in Tropical Secondary Schools, Oxford University Press, 1965.
- Heiss E.D., Obown, S. and Hoftman C.W., Modern Science Teaching, Macmillan Company Press, New York, 1961.
- Jean Bremnen, Teaching of Biology, Macmillan, St. Martin's Press, New York.
- John S. Richardson, Science Teaching in Secondary Schools, Prentice Hall, 1962.
- Joseph, J. Schwab, T., Teaching of Science, Harvard University Press, 1964.
- Miller and Blaydes, Methods and Materials for Teaching Biological Science. McGraw Hill, 1962.
- Nair, C.P.S., Teaching Science in our Schools, S. Chand and Co. (Pvt.) Limited 1971.
- Saunders, H.N., The Teaching of General Science in Tropical Secondary School, Oxford University Press, London, 1967.
- Sharma, R.C., Modern Science Teaching, Dhanpati Rai and Sons, 1985.
- Walter A., Thurber and Alfred T. Collette, Teaching Science in Today's Secondary Schools, Prentice Hall, 1964.
- Biology A Text Book for Higher Secondary Schools (Section 1-7)

## OPTIONAL 5/2

### BIOLOGICAL SCIENCE - PAPER II

#### OBJECTIVES

- a. To make the student-teacher understand the basic Principles of Biology.
  - b. To acquaint the student teacher with Biology curriculum at the higher secondary stage.
  - c. To acquaint them with new developments in Biology.
  - d. To enable the student teachers to understand the nature and scope of Biology.
- I. Introduction - History of Biology - The great Biologists - The significant discoveries and inventions.
  - II. New Developments - Biochemistry, Biophysics, Developmental Biology Behaviour and Neurophysiology, Population Genetics and Evolution, Genetic Engineering Ecology and Conservation, the New Medicine and the teaching of Biology, Radio isotopes in Biology teaching.
  - III. Class Room Interaction Analysis - Nature - Objectives - Assumptions - Flanders interaction analysis - Concepts and principles of teacher influence. Teaching behaviour & learning Goals - Implications and Limitations - Reciprocal category system - Equivalent Talk category system.
  - IV. Reflective practice and the Teacher - the first day of school. Three case studies, the complexities of Teaching. Three case studies, The Nature of Reflective practice.
  - V. Models of Teaching Biological Science - Introduction - Definition - Characteristics - Functions - Sources - Elements of a model - Types - With one illustration for each type model of Psychological basis of methods of science teaching, Gagne, Bruner and Piaget.
  - VI. Enrichment and remedial science programmes - Programme for the gifted - Grouping - Science Talent Search programmes.
  - VII. Instructional Resource Centre - Planning - Class room Accessories - Preparation of Teaching aids - Photographic dark room.
  - VIII. Strengthening Science Education - Community resources - Garden - Visual Aids - Excursions - Science Clubs - Nature calendar - Exhibitions, Science Fairs & Field trips.

#### IX. Real Science Projects

Organisms outside the class room - Organisms inside the classroom - The acqa culture project - The seed project - Separating fact from fiction. The Product Test and Rating Project.

#### X. Extension Education - its success oriented programme. Extension Teaching methods, extension motivations and Technology programme, extension programme planning, extension education programme.

Note : Students of optional "Biological Sciences" are to be familiarized with the latest - Tamil Nadu Curriculum for "Bio Chemistry" & "Microbiology", prescribed for Higher Secondary Classes.

### **PRACTICAL WORK**

1. Preparing microscopic slides
2. Section cutting and mounting
3. Use of Camera Lucida.
4. Field Trip - Photo Album, Nature Album.

### **REFERENCES**

Brubacher W John, case W Charles, Reagen G Timothy, Becoming a Reflective Educator, Corwin Press, inc California, 1994.

Chauhan S.S. Innovations in Teaching Learning Process, Vikas Publishing House Pvt. Ltd., 1979.

Cyril Selmes, New Movements in the study and Teaching of Biology, Temple Smith London, 1978.

Das R.C. Science Teaching in Schools, Sterling Publishers Pvt. Ltd., 1992.

Elizaba Zachariah, The Teaching of Biological Sciences in Schools, 1965.

## **OPTIONAL 6/1**

### **HISTORY-PAPER I**

#### **OBJECTIVES**

- a. To enable the teacher trainees to acquire knowledge of the nature of History and its development.



- b. To enable the teacher trainees to understand the long and short term goals of teaching History and to develop skill in the formulation of general instructional objectives and specific learning outcomes.
- c. To enable the teacher trainees to develop effective instructional skills and competency in teaching History.
- d. To enable the teacher trainees to acquire effective competency in the preparation of lesson and unit plans.
- e. To enable the teacher trainees acquaint with the prescribed curriculum in History.
- f. To provide practical experience for teacher trainees in making and using software materials.
- g. To provide experience for teacher trainees in handling the hardware materials in instructional technology, while teaching.
- h. To develop in the teacher trainees competency in constructing and administering diagnostic and achievement tests, competency in evaluation techniques applied to History learning.
- i. To enable the teacher trainees to develop interest in knowing advances in History as a discipline and its implications.

## **I. NATURE AND DEVELOPMENT OF HISTORY**

- 1. Defining history-Nature of history -Kinds of History.
- 2. Logical sequence, Structure and Scope.
- 3. Different conceptions of history -Biographical, Evolutionary, Cyclic, Theistic and Modern concept.
- 4. History of History.

## **II. FEATURES AND DIMENSIONS OF HISTORY**

- 1. Dimensions of History -Time, Place, Continuity and Development.
- 2. Geographical foundations of History.
- 3. Relationship between History and other subjects.

### **III. INSTRUCTIONAL OBJECTIVES AND LESSON**

#### **PLANNING**

1. Bloom's Taxonomy of Instructional objectives - Cognitive, Affective and Conative (Psychomotor) Domains - Psychological principles in teaching and learning - objective based teaching - Unit Plan, Lesson plan and its steps.
2. General and specific aims of teaching history - Values of teaching history.

### **IV. TEACHING SKILLS IN HISTORY**

1. Micro teaching in teacher education programme : Concept, objectives, principles and phases of micro teaching - Developing the skills of Introducing a Lesson, Explaining, Probing Questioning, Stimulus variation, Reinforcement, Use of Teaching Aids, use of Black board, Achieving closure.

### **V. EDUCATIONAL TECHNOLOGY AND HISTORY**

#### **TEACHING**

1. Use of projected and Non-projected Aids in teaching history : Computer Assisted Instruction in history : Multimedia presentation, programmed learning, web learning - Social Science laboratory.
2. Text Book, Library, Museum, Historical Fiction.
3. Mass media.
4. The History teacher -Essential qualities and professional growth.
5. The history classroom -Furniture, Equipment, Improvising, Learning Environment.
6. History club and its activities.

### **VI. METHODS AND APPROACHES IN TEACHING HISTORY**

Principles involved in the selection of methods and approaches in teaching- Teacher dominated methods, Learner dominated methods : Individual and Group Learning (Co-operative Learning) in teaching history.

1. Teacher dominated methods : Lecture, Demonstration, Team Teaching.
2. Learner dominated methods; Personalized system of instruction, Programmed learning, Assignment / Project, Field visit, Exhibition, Seminar, Discussion, Workshop, Dramatization.
3. Dalton Plan, Inductive and Deductive approach.
4. Teaching chronology, Contemporary Affairs and Controversial Issues.

## **VII. ORGANIZATION OF HISTORY CURRICULUM**

1. Content, principles of selection : Individual, Social, National needs.
2. Logical and psychological (Stages of Development), Chronological and Periodical, Concentric and Spiral, Regressive and Progressive.
3. Correlation : Identical, Incidental, Systematic - Fusion with Geography, Political Science, Economics and Sociology.

## **VIII. EVALUATION AND STATISTICS**

1. Importance of evaluation - Concept of Examination, tests & measurement, assessment : Criterion and norm referenced tests - Diagnostic and Prognostic tests - Achievement test : Characteristics, Kinds, Steps, Administration and Interpretation.
2. Collection of test scores and interpretation : Arrangement of scores, Frequency distribution table, Measures of Central Tendency. (Mean, Median, Mode), Measures of Variability (Range, Quartile Deviation, Average/Mean Deviation, Standard Deviation), Rank Correlation (Rank order and product movement), Graph (Histogram, Frequency Polygon, Cumulative Frequency Curve, Ogive), Percentile Ranks, Normal Probability Curve, Kurtosis, Skewness.
3. Enrichment programme for the gifted - Remedial Teaching for the slow learners.

## **PRACTICAL WORK**

The teacher trainees are expected to undertake some of the following activities :

1. Excursion and field trips
2. Dramatization.
3. Writing historical stories.
4. Preparing maps, charts pictures, models etc.
5. Preparing a picture Album.
6. Discussion and debates.
7. Mock parliament and mock trial.
8. Quiz programme.
9. Collection of historical proverbs etc.
10. Maintaining a scrapbook.

### **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum.

### **REFERENCE**

1. Aggarwal J.C., Teaching of History : A Practical Approach New Delhi. Vikas publishing house pvt ltd 1992.
2. Brown C.F., The History Room, London, Historical Association, Pamphlet No86.1948.
3. Burston.W.H. And Green. C.W-Handbook for History Teacher, Methuln and co., Ltd New York, 1967.
4. Garrett, H.E. Statistics in Psychology and Education, Vakils Feffer and Simons Ltd Bombay, 1979.
5. Ghate, V.D., Teaching of History O.U.P 1951
6. Johnson .H Teaching of History In Elementary And Secondary Schools, New-York, Macmillan 1942.
7. Kochhar .S.K Teaching of History, New Delhi, Sterling Publishers Pvt Ltd, 1989
8. NCERT, Teaching History In Secondary School, A Handbook for History Teacher, New Delhi NCERT, 1970.
9. Shaik Ali.B, History : Its Theory and Methods, New Delhi, Macmillan India Pvt Ltd 1978
10. Vajreswari .R A Handbook For History Teachers, New Delhi, Allied Publishers 1973.

## **OPTIONAL 6/2**

### **HISTORY -PAPER II**

#### **OBJECTIVES**

- a. To enable the teacher trainees to understand the contribution of historians and at different times.

- b. To enable the teacher trainees to understand the theories involved in selection of history materials.
- c. To enable the teacher trainees to acquire knowledge on the current trends in history curriculum
- d. To enable the teacher trainees to critically evaluate the text books.
- e. To enable the teacher trainees to understand the various techniques such as A.T.I, Models of Teaching and their implication for History teaching and learning.
- f. To enable the teacher trainees to develop a research attitude in History.

### **I. CONTRIBUTION OF EMINENT HISTORIANS TO THE DEVELOPMENT OF HISTORY**

Greek Historians : Herodotus, Thucydides.

Roman Historians : Cato, Livy, Tacitus, St. Augustine.

Modern Historians : Edward Gibbon, Thomas Carlyle, Toynbee, Karl mark, Leopold Van Ranke, Spengler, Voltaire.

Indian Historians : James Mill, ElphinStone, Maccaulay, K.P.Jayaswal, J.N.Sarkar, S.K.Iyengar. K.M.Pannikar and K.A.N. Sastri.

### **II. NEED FOR HISTORY EDUCATION**

For understanding one's contemporary environment-disciplinary value : understanding the dynamics of history-understanding human nature through history-ability to predict future on the basis of one's understanding of the past.

History - national integration and international understanding.

### **III. TREATMENT OF HISTORY SUBJECT IN SCHOOL CURRICULUM**

Recommendations made by Education Committees and Commissions after 1947.

### **IV. THEORIES INFLUENCING SELECTION OF HISTORY MATERIALS**

- (i) Doctrine of natural tastes and interests.
- (ii) Culture epoch theory.

- (iii) Proceeding from near to the remote.
- (iv) Reconciliation of the psychological development of the child with demands of the subject and time allotted.

#### **V. CURRICULUM IN HISTORY**

- (i) Current trends in curriculum changes in History.
- (ii) A critical analysis of existing teacher education programme in History.
- (iii) Critical analysis of content course of History classes IX, X, XI, and XII.
- (iv) Utilizing current events and contemporary affairs.

#### **VI. INSTRUCTION METHODS FOR INDIVIDUAL DIFFERENCES**

- (i) Aptitude treatment interaction (A.T.I).
- (ii) Programmed learning.
- (iii) Classroom interaction analysis-Modification of teacher -behavior with special reference to history teachers.

#### **VII. MODELS OF TEACHING AND THE TEACHING OF HISTORY**

- (i) Concepts Attainment Model.
- (ii) Advanced Organization Model.
- (iii) Jurisprudence Inquiry Model.

#### **VIII. ACTION RESEARCH IN HISTORY**

Note : Students of optional "History" are to be familiarized with the latest - Tamil Nadu Curriculum for "Ethics & Indian Culture", presented for Higher Secondary Classes.

#### **PRACTICAL WORK**

1. Preparing biographies.
2. Preparing improvised aids for teaching of history.
3. Preparing programmed learning materials.

## **REFERENCE**

Bloom, Benjamin, A Taxonomy of education objectives : Cognitive Domain  
Longmans, Green, 1974.

Dale Edgar, Audio Visual Methods in teaching, Macmillan Drydon Press, New York,  
1955.

Ghose, K.D., Creative Teaching of History, 1951.

Johnson Henry, Teaching of History, NewYork, Macmillan Company, 1940.

Kochar, S.K., Methods & techniques of teaching, Sterling Publishers Delhi, 1967.

Bruce Joyce Models of Teaching, , 1985.

[www.yahoosearch.com](http://www.yahoosearch.com), [www.altavista.com](http://www.altavista.com), [www.google.com](http://www.google.com).

## **OPTIONAL 7/1**

### **GEOGRAPHY - PAPER - I**

#### **OBJECTIVES**

To develop in the student teacher the ability to

- a. understand and appreciate the objective of teaching Geography in the Secondary and Higher Secondary Schools.
- b. acquire adequate knowledge of concepts in Geography.
- c. acquire adequate skills in using proper and suitable instructional techniques in Geography.
- d. understand and appreciate the interdependence of regions and people.
- e. develop in the student teacher the ability to use suitable aids and devices in teaching the various geographical concepts.

#### **I. GEOGRAPHY - ITS DEFINITION :**

Its roles in the development of national integration and inter-national understanding.

Instructional objectives and Lesson Planning

Bloom's Taxonomy of objectives - General and specific Instructional Objectives -  
Cognitive, Affective and Psychomotor Domains.

Importance of Lesson Planning - Lesson Plans, Unit plan and year plans herbartian steps - Format of a typical lesson plan - Selection and organization of concepts. Teaching and Teaching aids, Evaluation Recapitulation and Assignments.

## **II. TEACHING SKILLS :**

Communication skills - Introducing a Lesson, Explaining, Stimulus variation, Reinforcement, Questioning, Achieving closure - Cycle of operation - Need for a link lesson - Macro teaching.

## **III. EDUCATIONAL TECHNOLOGY :**

Use and Principles of - Projected aids - Audio-Visual Aids - Audio-Video Players - Tapes and CDs - OHP and Transparencies, slides and film projectors. Radio and TV; Multi-media, computers, Powerpoint.

Non-projected aids - Charts, Models, (Static and working) flash cards, pictures, chalk, flannel, magnetic and Bulletin Boards; Maps, Globes, Exhibits etc. CAI Programmed Learning (Linear and Branching programmes) Internet etc.,

## **IV. METHODOLOGY AND APPROACHES IN TEACHING :**

Criteria for selection of a method - Level of the class, available time and subject matter - Approaches - Inductive, Deductive. Individual methods, project method, story telling method, lecture method. Group method, method of using current events - observation method - field trips - excursion.

## **SCOPE AND TREATMENT OF THE FOLLOWING IN SCHOOLS**

- a. Mathematical Geography.
- b. Physical basis of Geography, Geomorphology, Climatology and Oceanography
- c. Economic Geography.

## **V. CURRICULUM ORGANIZATION**

Principles, criteria for selection - Organization of content - Geography syllabus, the necessity for a teacher syllabus as distinct from school syllabus.

## **VI. BASIS OF INSTRUCTION**

Special qualities of Geography teacher Flanders class room interaction analysis. The Geography room - Need for a separate Geography room - minimum essential equipment



and classification - Geography text book and the other reading materials, Geography Library, Geography Museum.

## **VII. EVALUATION AND STATISTICS :**

Tools and its types - Diagnostic, prognostic, and Achievement test - Criterion and Norm referenced tests - Principle of test construction - Blue print and Question Bank, Construction and Administration of a test, Item analysis, Reliability and Validity, - Standardizing a test - Scoring and Interpretation of results.

## **VIII. STATISTICAL TOOLS :**

Measure of central tendency - Mean, Standard and Quartile Deviation, Correlation Co-efficient, Rank order - Graphical Representation of Data - Bar and Pie diagrams, Histogram, frequency polygon, Cumulative frequency curve, ogive, percentile ranks, Normal po-probability curve, Kertosis, Skewness.

## **PRACTICAL WORK**

Selecting and carrying out activities such as those suggested in the Secondary and Higher Secondary syllabus.

The students may be asked to maintain records of the activities :

1. Maintaining a record on scales, distance, directions, representation of relief-diagrammatic representation of climate and economic data.
2. Maintaining weather report-Interpretation of climatic data.
3. Collection of current events.
4. Preparation of Software material -models, charts etc.
5. Designing a proforma for self- evaluation and students evaluation.

## **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum.

## **REFERENCES**

Arora, M.L. Teaching of Geography, Prakash Brothers, Ludhiana, 1979.

Garrett, H.E Statistics in Psychology and Education, Vakils, Feffer and Simons Ltd., Bombay, 1979.

Gopill, G.H., Teaching of Geography, Macmillan, 1966

Garnett, Olive, Fundamentals in School Geography, George G., Harrap and company, London, 1967.

Magnee, Teaching of Geography, O.U.P., 1952

Passi, B.K., Becoming a Better Teacher, Sahitaya Madranalaya , Ahmedabad, 1976.

Varma, O.P., and Vedanayagam, E.G., Teaching of Geography, Sterling Publishers Private Limited, New Delhi, 1987.

UNESCO Source Book for Geography Teaching, London, Longman's Green and company, 1982.

WEB SITES :

1. Geo.Teacher
2. Geography Education @National Geography.com
3. Geo.Resource Center
4. Geography Education

## **OPTIONAL 7/2**

### **GEOGRAPHY - PAPER - II**

#### **OBJECTIVES**

To develop in the student teacher the ability to

- a. prepare classroom tests, administer, score and interpret the results.
- b. identify the talented children in Geography.
- c. understand the problems facing India
- d. arrange for Seminars, Symposium, Workshop etc.,
- e. analyse the problems of geography teaching in the rural schools.

#### **I. AIMS AND VALUES OF TEACHING GEOGRAPHY**

Changes in Geography teaching .

## **II. METHODS AND MATERIALS OF TEACHING**

### **GEOGRAPHY**

- i. Use of modern techniques in teaching Geography, Discussion, Seminar, Symposium, Workshop, team teaching, supervised study, Role Play, Educational games, Puzzles, Quiz, etc.,
- ii. Geographic attitude and its importance to the individual and society.
- iii. Individual differences - Definition - Identifying Individual differences in Aptitude, attitude and Interests. Observation techniques - Identification of learning Difficulties - Remedial teaching - Enrichment programmes.

## **III. LEARNING RESOURCES**

Net based resources - Laboratory. Organization, Maintenance, Records, Materials, Improvisation of Apparatus, etc.,

Co-curricular activities - Geography club - field trips, Excursions, Exhibitions, etc.,

## **IV. STATUS OF GEOGRAPHY**

- i. An understanding of the Geographic background of the problems facing India at present - over Population, Pollution - Land, water and air, Malnutrition, spread of diseases show can Geography education help in solving them.
- ii. Special problem of Geography teaching in rural areas - school teacher - preparation and in service training, availability of background experience in students in relating geographic attitude.

## **V. ACTION RESEARCH**

### **Practical Work**

1. Construction and standardization of an achievement test in a geographic unit of standard X or XI or XII.
2. Practicing (2 session each of 10 minutes) Classroom interaction analysis and presenting the report.
3. Preparation of 2 improvised apparatus.
4. Construction of an attitude and aptitude test in Geography.

## **REFERENCES :**

Buch, M.B., Studies in Teaching in Teacher behaviours, Baroda : Center of Advanced Studies in Education , 1975.

Lee Dham, J., and Unwined, Aspects of Educational Technology, London Methuen Annual Publication of all the years from 1967.

Puwn, W.R., & Horold, C., Aspects of Educational Technology, London, Muthuen, (Editors, 1969).

Patel, I.J., and Patel, A., Handbook of Programmed Learning, Center of Advanced Studies in Education, Baroda.

Yadav, M.S., & Govinda , R., Educational Evaluation, Sanitya Madranalya, Ahmedabad, 1977.

Journal of Educational Technology, Center of Educational Technology, University of Sussex, U.K

Murthy, S.K., Educational Technology & Teacher Behaviour, Prakash Brothers, Ludhiana, 1984.

#### **WEB SITES :**

1. Geo Teacher
2. Geography Education @National Geography.com
3. GeoResource Center
4. Geography Education

### **OPTIONAL 8/1**

#### **HOME SCIENCE - PAPER-I**

##### **OBJECTIVES**

1. To help the student teacher of Home Science to understand the need for teaching Home Science in Secondary and Higher Secondary schools.
2. To make them realise that home, school and community are joint laboratories in developing them as worthy citizens.
3. To impart knowledge of the different steps involved in the various methods of teaching.
4. To enable the student teachers to acquire skill in planning a lesson with reference to methods and instructional materials and presenting them effectively.

5. To familiarise the student-teachers with recent trends in evaluation as applied to Home Science and to prepare objective based test items to evaluate the achievement and progress of pupils.
6. To enable the student-teacher to understand the principles of curriculum organisation in secondary and higher secondary schools.
7. To enable the student-teacher to realise the value of Home Science in contemporary life.
8. To familiarise the student-teacher with the organisation and maintenance of the Home Science department.
9. To help the student-teacher to develop an analytical and creative mind and make them effective members of the home, the school, the community and the profession.

#### **UNIT-I :**

Nature and scope of Home Science in the world setting, family setting and educational setting. Aims and objectives of teaching Home Science in relation to the needs of the pupils, society and to the general scheme of education.

#### **UNIT-II :**

Objectives of teaching home science in the vocational stream : Classification of objectives in specific behavioural terms - cognitive domain : knowledge, comprehension, application, analysis. Affective domain : awareness, responding, valuing- Psychomotor Domain : perception, set, response, skills.

#### **UNIT-III :**

Organizing Home Science Lesson Units From Instructional Point Of View-Lesson Plan-Need, Preparation And Format.

#### **UNIT-IV :**

Communication skill- skill based teaching. Principles of microteaching - skill of motivation, explaining, questioning, black board writing, and stimulus variation - cycle of operations - need for a link lesson.

#### **UNIT-V :**

Individual methods of instruction - assignment, supervised study, individual project and home project, programmed instruction and computer assisted instructions.. Group

techniques - Lecture - Project - Discussion - Seminar - dramatization - experimental method - field trips and excursion - exhibition - educational games and puzzles- team teaching.

#### **UNIT-VI :**

Educational Technology : Principles and use of hardware technological aids - TV, Films, Film Strips, Slides, Overhead projector, Opaque projector, LCD projector, Audio Cassettes and Video Cassettes, Radio and Recordings.

Software - Chalk board, bulletin board, charts, exhibits, flannel and magnetic board models, need for improvised aids.

#### **UNIT -VII :**

Evaluation : Evaluation in Home Science - concepts, various types of test items, essay, short answer, completion, matching, two choice, multiple choice, construction of an achievement test.

#### **UNIT-VIII :**

Home science department, organization and maintenance of Home Science Laboratory - Planning an all- purpose room-management of the department - records and registers.

#### **UNIT -IX :**

Text books - Criteria of a good textbook - critical review of home science textbooks used in Secondary and Higher Secondary Schools.

Home Science Library - Magazines, bulletins, reference books, use and storage.

#### **UNIT - X :**

Curriculum in Home Science - Principles of curriculum development - selection and organization of subject matter - a critical study of the home science syllabus in secondary and higher secondary schools - home science in the vocational stream.

#### **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum

## **PRACTICAL WORK :**

- 1) Construction and use of Achievement test.
- 2) Making of charts, improvised aids, models and albums.
- 3) Preparation of two overhead transparencies.
- 4) Conducting a seminar on current issues in Home Science.

## **REFERENCES**

Anupama Shah, Uma Joshi, Arvinda Chandra : Fundamentals of Teaching Home Science, New Delhi, Sterling Publishers Private Limited, 1990.

Binita Rai, : Methods of Teaching Home Science, 1998.

Dale, E., Audio Visual Methods in Teaching, The Dryden Press, New York, 1951.

Das, R.R. and Ray, B., Methods of Teaching Home Science, Sterling Publications P.Ltd., New Delhi 1979.

Devadas, R.P. Methods of Teaching Home Science. Sri Avinashilingam Home Science, College, Coimbatore.

Devadas, R.P. Teaching Home Science in Secondary Schools NCERT, New Delhi, 1950.

Garrett, H.E. Statistics in Psychology and Education, Vakils and Simons Ltd., Bombay, 1979.

Kulandaivel, K. Audio Visual Aids, Sri Ramakrishna Mission Vidyalaya, Coimbatore, 1968.

Spafford, I., Fundamentals of Teaching Home Economics, John Wiley and sons, New York (2nd ed.) 1956.

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Indian Journal of Nutrition, Home Science Association of India, Coimbatore.

Journal of Home Science, Home Science Association of India.

Nutrition, National Institute of Nutrition, Hyderabad.

The Indian Vegetarian Congress Quarterly, The Vegetarian Congress, Madras -18

## **OPTIONAL 8/2**

### **HOME SCIENCE - PAPER-II**

#### **UNIT - I :**

Understanding adolescents - The role of home, community and the teacher - Securing discipline, sharing responsibility - Developing leadership of teachers for effective roles-Group work in practicals

#### **UNIT - II :**

Acquainting teachers with programmes of Nutritious Noon Meal Scheme - Applied Nutrition Programme - Adult Education Programme - World Food Day - ICDS.. Role of international agencies in the Nutritional Programmes.

#### **UNIT - III :**

The Home Science Teacher - Qualification - Duties and responsibilities to school and community, and professional growth.. Problems faced by the Home Science teacher - Lack of Text books, job opportunities.

#### **UNIT - IV :**

Home Science Association of India, Inservice training, self evaluation of the teacher - Need to design a self evaluation proforma.

#### **UNIT - V :**

Critical problems India is facing at present - malnutrition - Over population - communicable diseases. Causes and prevention of the above. Need for the inculcation of values.

#### **UNIT - VI :**

Classroom climate - Teacher dominated pattern - Laissez faire pattern and democratically planned pattern - Significance of the classroom climate - Class room Interaction analysis.

#### **UNIT - VII :**

Student evaluation - Rationale for student evaluation - Teacher pupil attitude, factors affecting criteria for evaluation based on student perception and teacher perception, modification of teacher behaviour and development of students growth.



Note : Students of optional "Home Science" are to be familiarized with the latest - Tamil Nadu Curriculum for "Nutrition and Dietetics", prescribed for Higher Secondary Classes.

### **PRACTICAL WORK**

1. Presenting demonstration lessons to the peers in selecting topics from Home Management, Foods and Nutrition, Textiles and Clothing and Child Development.
2. Undertaking minor projects.

### **REFERENCES**

- Devadas, R.P. Methods of Teaching Home Science, NCERT, 1978
- Devadas, R.P. Teaching Home Science in Secondary Schools NCERT, New Delhi, 1950.
- Evans, Home Economics, Teaching-Schools Council Curriculum Bulletin 4 Methuen Education Ltd., 1971.
- Flek,H., Towards Better Teaching of Home Economics, The Macmillan Co., New York, 1968.
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- Williamson, M.E. and Lyle M.S. Home Making Education in the High School, Appleton Country Crafts, New York, 1954.
- Perspectives in Home Science, The Silver Jubilee Celebration Committee, Home Science Association of India, Coimbatore, 1977.

## **OPTIONAL 9/1**

### **COMMERCE AND ACCOUNTANCY - PAPER-I**

#### **OBJECTIVES**

- a) To understand the nature and scope of teaching commerce and accountancy
- b) To sensitise the student teachers to the value of the teaching commerce and economics.
- c) To develop skill in student teacher to prepare lesson plans, and present it effectively.
- d) To describe techniques for evaluating commerce and accountancy and apply it in classroom.

#### **I. INTRODUCTION**

Historical background of commerce education - its present status - nature and scope of commerce and accountancy - objectives and need for commerce and accountancy in the higher secondary curriculum.

#### **II. AIMS, OBJECTIVES AND VALUES IN TEACHING COMMERCE AND ACCOUNTANCY**

Aims and objectives of teaching commerce and accountancy in the higher secondary education - instructional objective or objective based instruction - values of teaching commerce and accountancy - practical values - cultural values - social values - disciplinary values.

#### **III. LESSON PLANNING**

Framing of syllabus - importance of planning - for the whole year - for the term - unit plan - analysing the plan - principles involved in it.

#### **IV. ORGANISATION**

Content organisation - modern trends - principles of selection - academic and vocational courses - organization of subject matter - logical and psychological organization - topical and unit plans.

#### **V. LEARNING EXPERIENCE**

Types of learning experiences - characteristics of learning experiences for different methods of teaching - motivation - arousing and maintaining interest - problems solving - rationalisation and concretisation.

## **VI. EVALUATION**

Meaning of Evaluation - Difference between evaluation and examination - concept of evaluation - objective based evaluation - tools and techniques in evaluation - item analysis - construction of different types of tests - achievement test, diagnostic test - construction and standardisation of a test - criteria of a good test - statistics - measures of central tendency - mean - median - mode - standard deviation - co-efficient of correlation - rank order correlation.

## **VII. ASSIGNMENT AND REVIEW**

Assignments - types - need - characteristics of a good assignment - techniques involved in it - correction - review - characteristics of a good review - need and importance of reviewing lesson.

## **VIII. COMMERCIAL ISSUES**

Various commercial issues related to teaching of "Commerce and Accountancy" - World Trade Organisation - globalisation - FEMA - devaluation - privatisation - security scam - hawala - inflation - disinvestment - e-commerce - environmental issues - consumer protection.

## **PROJECT WORK**

Arranging work experience for the students by getting permission from concerns.

Preparation of albums containing specimen copies of important documents pertaining to a particular business.

## **REFERENCES**

Bhushan, T.K. Fundamental of Business Organization and Management, Sulthan Chand & Co., 1987, (10th Edition).

Garrett, Statistics in Psychology and Education, Vakils and Ferrer and Simsons Ltd., Bombay, 1979.

Nagarajan, K.L. Vinayakan, N., N.Radhaswamy and S.V.Vasudevan. Principles of Commerce and General Commercial Knowledge, S.Chand and Co., 1987.

Reddy, P.N. and S.S.Gullghan, Principles of Business Organisation & Management, S.Chand & Co., 1987.

Shukla, M.C., Business Organisation and Management, S.Chand & Co., 1987.

Sinha, J.C., and V.N.Mugali, A Text Book of Commerce, 8th Edn., S.Chand & Co., 1986.

## **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum

## **OPTIONAL 9/2**

### **COMMERCE AND ACCOUNTANCY - PAPER-II**

#### **OBJECTIVES**

- a) To enable the student teacher acquire knowledge of the principles on which the teaching of Commerce and Accountancy is based and appreciate the adjectives of it.
- b) To develop in the student teacher to understand the various aspects of content analysis.
- c) To enable the student teacher to apply effective instructional design in teaching Commerce and Accountancy to Higher Secondary students.
- d) To develop skills to effectively use technology to teach Commerce and Accountancy.
- e) To make the student teacher aware of the use of various instructional materials and aids in teaching Commerce and Accountancy.
- f) To develop skills to organise events for the commerce club activities.

#### **I. INTRODUCTION**

Introduction of Commerce Evaluation - Basics of a business transaction - Book Keeping and Accountancy of transactions - Consumer education.

#### **II. CURRICULUM DEVELOPMENT**

Principles involved in the development of Commerce and Accountancy curriculum - Vocational and Academic curriculum - Selection and gradation of materials for the school and college level - Its organisation - Their relation to objectives of teaching the subject.

#### **III. METHODS OF TEACHING COMMERCE AND ACCOUNTANCY**

Inductive method - Deductive method - Descriptive method - Objective method - Lecture method - Demonstration method - Analytic method - Synthetic method. Projects, Seminars, Work shops, Case study, Survey, Market study, Student motivated techniques, Micro teaching, Team teaching, Panel discussions.

#### **IV. USE OF TECHNOLOGY**

Use of computer and internet in learning commerce - Programmed Computer aided instruction modules - Interactive video / tele lectures - Commercial and Educational broadcasting - Accounting software packages - E-commerce - Meaning - Concept of structure world.

#### **V. CLASSROOM MANAGEMENT**

Classroom management when teaching Commerce and Accountancy - Systematic approach in teaching - Student activity and teacher's role - classroom in action analysis - recapitulation, assignments and review.

#### **VI. RESOURCE FOR TEACHING COMMERCE**

Text books - Libraries - Journals and Periodicals - News papers - reference materials surveys - original documents and books - Community resources - meaning, significance - developing a link between school and community -

arranging field trips, Guest lectures - Excursions, Workshops - activities.

#### **VII. INSTRUCTIONAL AIDS**

Visual aids black board, books, charts, pictures, photos, overhead projector - original documents. Audio-aids : Radio - tapes - record players

Audio-visual : Television - video cassettes - multi-media - computer, internet, etc.

#### **VIII. THE TEACHER OF COMMERCE**

Characteristics of a good commerce teacher - growth of a teacher - preservice and inservice programmes - responsibilities of a commerce teacher - social and environmental - problems faced in teaching - research.

#### **IX. COMMERCE DEPARTMENTS**

Work experience - Guest Lectures - Commerce clubs - development of commerce club - activities to develop commercial interest and attitudes.

#### **PRACTICAL WORK**

- a) Visit to Banks, shops, supermarkets, life insurance office to study the commercial activities and accounting procedures.
- b) Organising various activities for commerce clubs.

## **REFERENCES**

- Batlibai, J.R. Double Entry Book Keeping, The Standard Accountancy Publications Private Limited, 1984.
- Bhushan, T.K. Fundamentals of Business Organisation and Management, 1987.
- Gupta, K.G. and C.P.Bhaumik, Book Keeping and Accounting, S.J.Publications, Meerut, 1986.
- Gupta,R.L. and Radha Swamy, Advanced Accounts Vol.I to VI. S.Chand & Co.. 1987.
- Shukla, M.C. and T.S.Grewal, Advanced Accounts, Sulthan Chand & Co., 1986.
- Sinha, J.C. and V.N.Mugali, A Text Book of Commerce, S.Chand & Co., 1986.

## **OPTIONAL 10/1**

### **OPTIONAL : ECONOMICS - PAPER - I**

#### **OBJECTIVES**

1. To help the student teachers acquire knowledge of the nature, scope and development of Economics.
2. To sensitise student teachers the value of the discipline of Economics.
3. To create among student teachers awareness of Economic Problems and their impact on political and civic life.
4. To acquaint the student teachers with the objectives of teaching Economics in Higher Secondary Schools and help them to plan the learning activities according to the stated objectives.
5. To enable the student teachers understand the long and short term goals of teaching Economics and develop the skill in the formulation of general instructional objectives and specific learning outcomes (specific objectives).
6. To develop effective instructional skill in the student teachers for effective delivery of the subject matter.
7. To guide the student teachers in acquiring skills relating to planning lesson and presenting them effectively.
8. To help the student teachers understand the principles of curriculum construction and examine critically the Economics curriculum in the light of the principles of curriculum construction.

9. To familiarize the student teachers with the various methods and techniques that can be employed for the teaching of Economics.
10. To develop the ability of the student teachers prepare and use effectively the A.V. aids and mass media.
11. To enable the student teachers understand the evaluation techniques and prepare objective based and type of test items to assess the achievement of the students.
12. To enable the student teachers interpret the scores and arrive at the conclusion.
13. To encourage the student teachers prepare hard and software wherever and whenever necessary after understanding the theoretical value of them.
14. To encourage the student teachers understand the various methods of evaluating the classroom teaching.

### **I. NATURE AND SCOPE OF ECONOMICS :**

Economics, Political Science and civics as social sciences and the interrelationship between them - Place of these in Higher Secondary Schools - General and Specific aims of teaching Economics at the Higher Secondary level.

### **II. METHODS OF TEACHING :**

Method of organising experiences in teaching -Lecture - Demonstration - Discussion - Problem - Enquiry approach - Project - Supervised Study - Socialised recitation - workshop - Laboratory. Activity based teaching. Use of source materials - Case studies -Their applicability to the teaching of Economics at the Higher Secondary level.

### **III. INSTRUCTION AIDS :**

Visual Aids : Charts - Maps - Graphs - Diagrams - Pictures and Photographs - Film & Film strips - Over head Projector - Chalk board - Bulletin board - Flannel board - Magnetic boards - exhibits - Preparation of Models and improvised aids and use of them in the teaching of Economics. Audio Aids : Radio-Tapes- Record Players. AudioVisual Aids : Television -Video Cassette - C.A.I. - and other Mass media. Use of these in the teaching of Economics.

### **IV. LESSON AND UNIT PLANNING :**

Lesson Planning - Importance of lesson plans - Writing instructional objectives - Planning for specific behavioural changes. Essential parts of the lesson plan. Preparation and use of Unit Plan.

## **V. TEACHER PREPARATION AND TEACHER OF ECONOMICS :**

Characteristics good Economic teacher - Scholarship - Professional growth - in-service education - Micro teaching and development of relevant teaching skills - skill of explanation - skill of black board writing - skill of stimulus variation - skill of reinforcement - skill of questioning.

## **VI. CURRICULUM DESIGN :**

The principles of curriculum construction as applicable to Economics -The selection of content and its organisation -Content materials in the syllabus -Their relation to objectives of teaching the subject. Critical Study of the Curriculum in Economics at the Tamil Nadu Higher Secondary School Level.

## **VII. RESOURCES FOR TEACHING ECONOMICS :**

Contemporary issues -Community resources -Excursions - Field trips - Library - Use in the teaching of economics. (Units IV to VII will be dealt with special reference to the Tamil Nadu Higher Secondary Syllabus).

## **VIII. EVALUATION AND STATISTICS :**

Evaluation - Nature and scope -Characteristics of a good test in Economics - Reliability - Validity - Objectivity -Item analysis -Different types of objective tests - Blue print of a question paper - Discriminating index and difficulty value - Remedial measures - Interpretation of test scores - Measures of central tendency - Mean - Median - Mode - Measures of variability - standard deviation - Quartile deviation - Percentile and percentile ranks - Co-efficient of correlation - Rank order correlation - Normal probability curve and its applications in educational evaluation.

## **IX. PRACTICAL WORK :**

1. Preparation of unit plans in Economics.
2. Visits to different types of banks, super market, warehouse and industries.
3. Collection of yearbooks, newspapers, magazines and clipping of articles related to Economics.
4. Evaluation of a text book in Economics.
5. Preparation of charts and albums relating to Economics.



## **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum

## **REFERENCES**

- Gupta, S.P. (1987). Statistical Methods, Sultan Chand and Sons, Publishers, New Delhi.
- Garrett, Henry E. and Woodworth, R.S. (1981). Statistics in Psychology and Education. Bombay : Vakils, Feffer and Simons Ltd.,
- Guildford, J.P. and Fruchter, Benjamin. (1973). Fundamental Statistics in Psychology and Education (5th Ed.). New Delhi : McGrah-Hill Kogakusha Ltd.,
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- Paul, R.R. (1984). History of Economic Thought, Kalyani Publishers, Ludhiana.
- Rai, B.C. (1987). Methods of Teaching Economics, Prakashan Kendra, Lucknow.
- Ruddar Datt and K.P.M. Sundaram. (1986). Indian Economy, Sultan Chand and Company Private Limited, New Delhi.
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## **OPTIONAL 10/2**

### **OPTIONAL : ECONOMICS - PAPER - II**

#### **OBJECTIVES**

1. To enable the student teachers to understand the nature and scope of Economics.
2. To make the student teachers understand the Economical problems facing India.
3. To enable the student teachers develop interest in adopting modern method techniques of teaching.

4. To develop in student teachers competence in the preparation of programmed learning materials, (Economics textbooks and workbooks).
5. To develop the ability of the student teachers prepare and use effectively the A.V. aids and mass media.
6. To enable the student teachers understand the evaluation techniques and prepare objective based and type of test items to assess the achievement of the students.
7. To enable the student teachers understand the various techniques such as ATI, Models of Teaching and their implications to Economics teaching and learning.
8. To encourage the student teachers prepare hard and software wherever and whenever necessary after understanding the theoretical value of them.
9. To encourage the student teachers to understand the various methods of evaluating the classroom teaching.
10. To help the student teachers to recognize the special problems in teaching Economics in rural schools.
11. To encourage the student teachers know the latest developments in subject Economics.

### **INTRODUCTION :**

Aims, values and scope of Teaching Economics - Changes in Economics teaching. The aims of Economics -The relative value of Economics.

### **METHODS AND MATERIALS OF TEACHING THESE SUBJECTS :**

Use of modern techniques in teaching Economics - Discussion - Seminar - Symposium - Workshop - Team Teaching - Supervised Study and Tutorial System. Scientific Attitudes and its importance to the individual and society. Catering to the Individual differences - Aptitude Treatment Training - Programmed learning techniques - Linear and branching - Instructional model and multimedia - Self-learning packages - Identification and care of the talented -Helping the slow learners in Economics.

### **EDUCATIONAL TECHNOLOGY :**

Clubs - Field trips - Guest lectures - Exhibition -Computer assisted instruction - Use of Audio and Videotapes in teaching Economics.

## **EVALUATION IN ECONOMICS :**

Construction and Standardisation of an achievement test in Economics - Blue print - Norms - Reliability and Validity - Item analysis - Graphic representation of data - Bar and Pie diagram - Histogram - Frequency polygon - Cumulative frequency - Graphic and Ogive curve. Objective based testing - Evaluation of teachers - rating by supervisors or colleges - Evaluation by pupils - Self evaluation - Comparing performance with lesson plan - Class room Climate - Teacher dominated pattern - Democratic pattern - Laissez faire pattern - Interaction Analysis (F.I.A.S.).

## **ORGANISATION AND MAINTENANCE :**

Structure and design for schools - Equipping the departmental libraries and museums. An understanding of the background of the problems facing India at present - Poverty - Overpopulation - Un-employment - Diseases - Malnutrition - Inflation. How can Economics Education help in solving them?

An understanding of the Recent Economic and Political Developments - Liberalisation and Globalisation - E-Commerce - its impact on internal and external marketing - its implications for Education. Relationship between Political Problems and Economic Problems.

Special problems of Economics Teaching in rural schools - Teacher preparation and in-service education - Availability of Aids, lack of background experience in students - Inculcating Economic attitudes.

## **PRACTICAL WORK**

The following activities are suggested

1. Maps of India can be drawn showing the following things a. Birth rate b. Mortality c. Migration d. Industries.
2. Survey to find out the problems of the rural community a). Poverty b). Malnutrition c). Illiteracy d). Status of Women e). Unemployment f). Diseases
3. Construction and standardisation of an achievement test in the subjects
4. Guest lectures on Liberalisation and Globalisation, Marketing and other subjects of local and topical interest.

## **REFERENCES :**

Gupta, S.P. (1987). Statistical Methods, Sultan Chand and Sons, Publishers, New Delhi.

Garrett, Henry E. and Woodworth, R.S. (1981). Statistics in Psychology and Education. Bombay : Vakils, Feffer and Simons Ltd.,

Guildford, J.P. and Fruchter, Benjamin. (1973). Fundamental Statistics in Psychology and Education (5th Ed.). New Delhi : McGraw-Hill Kogakusha Ltd.,

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Tyagi, B.P. (1987). Public Finance, Jai Prakash Nath Publications. Meerut (U.P.).

## **OPTIONAL 11/1**

### **COMPUTER EDUCATION - PAPER I**

#### **OBJECTIVES**

- To enable the student teachers acquire knowledge on historical evolution of computers and its hardware components.
- To acquaint the student teachers with the objectives of teaching computer science in secondary and higher secondary schools and help them to plan learning activities according to those objectives.
- To help the student teachers in acquiring skills relating to planning lessons and presenting them effectively.
- To familiarise the student teachers with the various methods that can be employed for the teaching of computer science.
- To enable the student teachers understand the principles of curriculum construction.
- To guide the student teachers in acquiring skill in constructing tests.
- To enable the student teachers appreciate and acquire knowledge on Windows 98.

## **UNIT I : INTRODUCTION :**

What computers are - the basic hardware components of a microcomputer - main units of a computer - brief history of development of computers - types of computers - hardware aspects - use of computers in school.

## **UNIT II : OBJECTIVES OF TEACHING OF COMPUTER SCIENCE**

Aims and objectives - based on Blooms Taxonomy of Educational objectives - Computer science teaching at different levels - primary, secondary, and higher secondary levels.

## **UNIT III : MICROTEACHING**

Teaching skills - microteaching cycle - teaching components planning a micro lesson - teaching of relevant skills : Skill of explaining, stimulus variation, reinforcement questioning, blackboard writing.

## **UNIT IV : LESSON AND UNIT PLANNING**

LESSON PLANNING : Importance of lesson plans, writing instructional objectives and planning for specific behavioral changes.

UNIT PLANNING : Preparation and use of unit plan.

## **UNIT V : INSTRUCTIONAL METHODS**

Individualized instruction-Concept - Self learning - programmed learning - computer-assisted learning - Computer Managed Learning

Lecture - demonstration - problem solving - project method - scientific method - analytic and synthetic methods. Inductive - deductive approaches of teaching computer science.

## **UNIT VI : CURRICULUM IN COMPUTER SCIENCE**

Principles of curriculum development - criteria of selection of content and principles of organizing the selected content.

## **UNIT VII : EVALUATION IN COMPUTER SCIENCE**

The concept of evaluation - evaluation for achievement, diagnosis and prediction - various kinds of test - principles of construction and administration of an achievement test - characteristic of a good test - Blue print - On-line examination.

## **UNIT VIII : MS-WINDOWS**

Introduction - Start, Leave, Operate MS Windows - Window Elements - Control Menu - Program Manager- Menus - To run program from Program Manager - File manager - Working with Files - Disk Menu - View Menu - Options Menu - Window Menu - Control Panel - Print Manager - Clip Board Viewer - Paint Brush - Write - Terminal - Note Pad - Calender - Calculator - Clock.

## **UNIT-IX : MS-WORD**

Introduction - Entering Text - Selecting and Inserting text - Making a Paragraph, Getting Help - Moving and Copying - Searching and Replacing - Formatting Character and Paragraph - Tables and Foot Notes - Tables of Contents and Index - Sorting, Formatting sections and Documents.

## **UNIT-X : MS\_EXCEL**

The Excel environment - Entering and Changing information and formula - functions - Copying, Moving and Deleting information - Names and Arrays - Saving Worksheet - Loading and Printing - Number formatting - Working with rows and columns - Display - Calculation - Protecting the work - Charts.

### **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum

### **REFERENCES**

- Chauhan, S.S., (1985), Innovations in Teaching Learning Process, Vikas Publishing House, New Delhi.
- Greg Perry, (1998), Teach Yourself Windows in 24 Hours, Techmedia Publications, New Delhi.
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- Michael Meadhra and Faithe Wepmen (1998), Learn Windows 98 - in a Weekend, Galgotia Publishers, New Delhi.
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Rajaraman, V., (1996) Fundamentals of Computers, Prentice Hall of India Pvt. Ltd., New Delhi.

Rojer Hunt and John Shelley (1995) Computers and Common sense Prentice Hall of India Pvt. Ltd., New Delhi.

Siddigi, N.N and Siddigi, M.N (1988) Teaching of Science Today and Tomorrow, Doaba House, New Delhi.

Stanley Pogrow (1983), Education in the Computer Age, Sage Publications, India.

Taxali R.K., (1998), PC Software for Windows made Simple, Tata Mc Graw Hill India Ltd., New Delhi.

Xavier, C., (1996) Introduction to Computers and BASIC Programming, New Age International Pvt. Ltd.

## **OPTIONAL 11/2**

### **COMPUTER EDUCATION PAPER II**

#### **OBJECTIVES**

- To enable the student teachers develop interest and appreciate various pedagogical principles in teaching of computer science.
- To develop in the student teachers skills in preparing and using Computer Assisted Instruction programmes.
- To enable the student teachers skill in developing programs in C languages.
- To enable the student teachers acquire the knowledge relating to the organization and administration of computer laboratory.
- To enable the student teachers understand the need for and methods of evaluating the class room teaching behavior.
- To help the student teachers acquire knowledge on computer software and the growing capability of computer technology.
- To enable the student teachers acquire knowledge on latest trends in Information Technology.

## **UNIT I : MODERN TECHNIQUES IN THE TEACHING OF COMPUTER SCIENCE**

Seminar - symposium - group discussion - panel discussion - workshop techniques.

## **UNIT II : EVALUATION OF TEACHERS**

Rating by supervisor or colleagues - evaluation by pupils - self-evaluation - classroom interaction analysis.

## **UNIT III : COMPUTER SCIENCE TEACHER**

Academic and professional qualification - special qualities required for a computer science teacher- in service training.

## **UNIT IV : PLANNING AND MAINTENANCE OF A COMPUTER LABORATORY**

Need for planning the computer laboratory - special features of computer lab - essential infrastructure - laboratory management - organization of practical for pupils - maintenance of records - discipline in the laboratory.

## **UNIT V : COMPUTER EDUCATION**

COMPUTER SOFTWARE : Categories of software different procedures for acquiring software advantages - the ethical and practical issues involved in the software piracy.

COMPUTER TECHNOLOGY : The growing capability of computer technology - use of robots - artificial intelligence - office automation.

## **UNIT VI :**

Review of units in computer science. Need and importance of reviewing computer science lesson, characteristics of good review - different techniques of reviewing a lesson.

## **UNIT VII : WRITING (CAI) INSTRUCTIONAL PROGRAMMES**

1. A systematic plan for developing CAI programmes.
2. Designing a CAI lesson : Specification of objectives - front-End analysis - outcome specifications of lesson design - Lesson development - lesson validation.
3. Common CAI frames : Introduction and instructions - menu page - teaching frames - criterion (test) frames - feedback (remedial) frames - reinforcement frames - graphics frames.



## **UNIT VIII : AUDIO-VISUAL EDUCATION**

1. Need and importance of audio-visual aids in teaching computer science and their classification.
2. Use of graphic materials : Pictures charts - diagrams - graphs and tables - projective aids.

## **UNIT IX : FUNDAMENTALS OF C**

Elements of C Language : Character Set - C Constant - C variables, operators, control structures - loop structures - arrays and structures - functions - library functions - developing simple C programs.

## **UNIT X : LATEST TRENDS IN INFORMATION TECHNOLOGY**

Multimedia - Desk Top Publishing - Internet and its uses - E-commerce and Electronic Data Interchange (EC & EDI).

## **REFERENCES**

- Brian W.Kernighan and Dennis, M.Ritchie, The C-Programming language, Prentice Hall of India, P.Ltd., New Delhi, 1986.
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## **OPTIONAL 12/1**

### **POLITICAL SCIENCE - PAPER-I**

#### **OBJECTIVES**

At the end of the course the student teacher will

- a) Have an understanding of the nature, scope and limitations of political science and certain important political concepts
- b) Have an elementary knowledge about the Indian political system and certain contemporary problems that the political system faces.
- c) Have an appreciation of the role of ideologies in India and in Tamil Nadu.
- d) Be familiar with the application of pedagogical methods and appreciate the role of political socialisation in the formation of opinions in politics.
- e) Have an appreciation of the strengths and weaknesses of the Indian political system.
- f) Have a knowledge of the methods of evaluation appropriate in the teaching of political science.

#### **1. POLITICAL SCIENCE**

Nature and Scope - State, Sovereignty, Government and its branches, Law, Citizenship : Rights and Duties, Election and participation in a Democracy - Party System.

#### **2. INDIAN POLITICAL SYSTEM**

Indian Federal System, Fundamental Rights and Duties, Procedure for Amendment Directive Principles of State Policy, - Union Government, President, Prime Minister and his Cabinet, Parliament : Lok Sabha : - Composition and Functions - Rajya Sabha : Composition and Function, Judiciary : Supreme Court : Appointments, Removal and its Jurisdiction - Judicial Review.

### **3. IDEOLOGIES**

Origins of Ideologies - Differences between ideologies and utopias - Nature of ideologies - ideologies as grounded in history, as ready - made blueprints for action - Typical ideologies : Capitalism, Communism and Socialism - Hindu Nationalism, Dravidian ideology- liberalisation and globalisation - Terrorism, Environmentalism and Human Rights.

Ideologies and Education : Ideologies as bases for educational policies - access to education - financing of education - equalisation of educational opportunities - organisation of education and choice of the content of the curriculum.

Civil Society : Concept of the Civil Society - Role of the Civil Society - Role of the Citizen in Civil Society - Types of relationship between the state and the civil society : Cooperation, competition, conflict - Illustrations for each - Increasing role of the civil society in the contemporary era.

### **4. POLITICAL SOCIALISATION/ POLITICAL ATTITUDES**

Concept of Political Socialisation : the gradients in political socialisation : Cognition, participation and integration vis-à-vis the political system in which an individual is embedded - Levels of Cognition, levels and modes of participation -Role of the Family, Schools, Political Parties, Press and Modes of Integration.

Role of the teacher in the formation of political attitudes - The role of the teacher vis-à-vis formation of dysfunctional political attitudes like rebellion and revolution and civil disobedience - Peace settlement.

### **5. CIVIL SOCIETY AND CITIZENSHIP EDUCATION**

Difference between political socialisation and citizenship education - Forms of citizenship education : Cursory, technical and constructivist - Casual, well planned, and grooming for engagement - a comparison of curricula of citizenship education in India with typical countries like the U.K. and the U.S.A.

#### **LEARNING FROM CYBER RESOURCES :**

1. Identification and cataloguing of three websites relating to the prescribed school curriculum
2. A comparative evaluation of any two webpages bearing on the same unit in the school curriculum

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## OPTIONAL 12/2

### POLITICAL SCIENCE-II

(In Paper II the focus will be on methods appropriate for teaching the specific syllabus prescribed for +2 in Political Science. Every student teacher of political science must be encouraged to prepare a scrap book out of daily reports in the newspapers pertaining to the various units in the syllabus and also prepare teaching notes indicating how he/she would incorporate each)

### OBJECTIVES

At the end of the course the student teacher will be able to transact in an effective way the curriculum in political science prescribed for the +2 stage. More specifically, he/she will have mastered a variety of pedagogical methods, be able to select the appropriate method for each topic and apply the same. He/she will also be thorough with the content of the syllabus prescribed.

### GENERAL METHODS OF CURRICULUM TRANSACTION :

#### A. Teacher-Centred Methods

**Lecture-Discussion** : Preparation : Organisation : Linear, cumulative, concentric-Delivery : Skills : Motivation/Set Induction, Description, Explanation, Interpretation, Questioning, Probing Questions, Summarising and Closure.

**Black Board Work** : Different Uses of the Black Board : Providing an Advance Summary, Explaining through Diagrams, Depositing/ Ticking Points Covered; Noting down points emerging from students responses in discussion-Budgeting the Black Board space for various uses.

**Tutoring** : Difference from Lecture Discussion : Focus on an individual student-Skills for Tutoring : appreciation of individual differences, diagnosis of difficulties, academic guidance, interpersonal interaction skills

**Mentoring** : Difference from tutoring : developing students with special aptitude for the subject-Skills for mentoring : identifying individual aptitude profile, developing a tailor-made enrichment program-monitoring.

#### B. Student-Centred Methods

Seminar-skills to be developed through seminars : reading, writing and presentation-Steps in organizing a seminar : choice of theme, choice of participants, orienting the

participants to relevant references and experiences, choosing a rapporteur-staging-steering-summarising and consolidating- and giving feedback

**Symposium** : Difference from seminar : convergent structure : different students preparing documents from different perspectives focusing on a common, central theme-organization of a symposium : choice of theme, identifying definite perspectives-assigning the perspectives to different students- choosing a rapporteur -staging-steering-giving feedback.

**Workshop** : Difference from seminar and symposium : aim at a solution document-Steps in organizing a workshop : choice of the area, definition of the problem, specification of the features of the outcome, breaking down the problem into subproblem-assigning sub-problems to groups-staging : plenary, group work, plenary session for consolidation

**Role Play and Simulation** : Meant for teaching attitudes and social skills-Steps in Role Play/Simulation : choice of theme, identification of roles involved, briefing, giving guidelines for scripts-staging-recording-debriefing-evaluating.

**Debates** : Debate as a bipolar adversarial discussion-choice of themes- defining the academic scope and limits of the theme-lining up speakers-choosing a team leader-specifying in advance the criteria for judging the outcome, including or excluding audience reaction-staging-assessing individual and team performance.

### **C. Subject-Centred Methods**

**Assignments-purpose** : enrich the students' knowledge and academic skills through independent work-relating concepts to real life experiences through observation and/or study of newspapers and magazines-types : group assignments and individual assignments-Steps : choosing topics, distributing the topics among students, giving guidelines, tutoring and monitoring, evaluation

**Field Visits** : Purpose : enrich students' knowledge through observation of the structures and processes as they obtain in real life-Steps in field visit : choosing the field, defining the focus, orienting the students, preparing an observation and/or interview schedule-Choosing the time of the visit-visiting the field-monitoring the field work.

**Case Studies** : Purpose : in-depth understanding of a particular phenomenon in all its dimensions-choice of the unit : an individual, a group, an institution, or a state - Stages : choosing the case subject/unit, identifying the broad correlates to be reckoned with-preparing a comprehensive schedule for observation and interview-making the study-preparing the report

**Portfolio :** Purpose : to motivate and guide students to collect and structure material in their areas of individual interest over a period of time e.g., on elections, assembly proceedings on a particular subject, coverage of education in the proceedings of parliament etc., - Choice of theme : the teacher's role in helping each student to identify and select a theme of intrinsic interest, collect material, work out a structure and organize

#### **D. Media-Centred Methods**

**The role of media in the political process :** newspapers, radio, television : national and cable networks-the need to make use of media in political education.

**Modes of Media Use :** Direct use in the classroom-criteria for selection : relevance, balance and impartiality;

**For Assignments :** Guidelines for choice and use

**Content Analysis :** Definition-purpose : objectivity and validity of inferences-Steps : defining content categories-identifying frequency of occurrence-relationship among categories-analyzing the documents in terms of external criteria like source, political affiliation-discounting bias and estimating truth value.

#### **E. Evaluation**

Definition-difference between evaluation, measurement and testing - Dimensions of evaluation : knowledge, attitude and skills-tools of evaluation : tests, attitude scales, rating scales, observation.

**Tests :** standardized and teacher-made tests-stages in the development of a test : preparing the blue print, coining questions and assembling a test.

**Attitude Scales -** definition of attitude-examples for Attitude Scales : Attitude to Self-Financing Colleges, Attitude to Secularism, Attitude to Caste (The treatment will be confined to using and not constructing attitude scales)

Scoring and interpretation of tests and scales

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