BHARATHIAR UNIVERSITY: COIMBATORE -641 046

DEGREE OF BACHELOR OF EDUCATION (B.Ed) (NON SEMESTER PATTERN)

REGULATIONS AND SYLLABUS (REGULAR)

(Effect from the Academic year 2013-2014 Batch and onwards)

1. ELIGIBILITY FOR ADMISSION INTO THE COURSE

- (i) The candidates should have passed the UG* degree examination in the 10+2+3 stream, with the same main subject in Part III, for which he is seeking admission in the B.Ed., course.
 - * With the minimum mark required in the UG degree for admission to B.Ed., course community / Category wise.

| Community / Category | Minimum Required in UG Degree |
|-------------------------|-------------------------------|
| OC | 50% |
| BC | 45% |
| MBC | 43% |
| SC / ST | 40% |
| Physically Handicapped | 40% |

(ii) Candidates who have taken more than one main subject in part III (Double or Triple major) of the U.G degree have to choose only one of the main subjects and apply for that optional in B.Ed.,

(iii)

| OPTIONAL SUBJECT | CODE | ELIGIBILITY |
|-----------------------|------|---|
| Tamil Education | 01 | B.A or B.Lit Tamil |
| English Education | 02 | B.A. English |
| Mathematics Education | 03 | B.Sc. Mathematics and Applied |
| | | Mathematics |
| Science Education | | B.Sc.Physics /Biophysics/Applied |
| | | Physics/Geophysics, Electronics, |
| (Physical science & | | B.Sc. chemistry and |
| | 04 | Biochemistry. |
| D' 1 ' 10' | 0.4 | D.C. D DI . DI . |
| Biological Science) | 04 a | B.Sc. Botany , Plant Biology and |
| | | Plant Biotechnology, Zoology, |
| | | Animal Sciences and Animal |
| | | Biotechnology, Micro Biology, |
| | | Biotechnology and |
| | | Environmental Sciences. |

| Social Science Education | 05 | History, History and Tourism Management, Social science |
|----------------------------|----|--|
| | | Geography and Applied Geography. |
| Computer Science Education | 06 | B.Sc. Computer Science, Computer Technology, Information Technology and BCA. |
| Economics Education | 07 | B.A. Economics and MA Economics. |
| Commerce Education | 08 | B.Com. and M.Com. |

- (iv) a) A P.G degree with minimum pass is required for admission.
- b) In the case of candidates belonging to SC and ST communities, a pass in the relevant UG degree course is enough.
- c) In the case of handicapped (both physical and Visual) candidates, a minimum pass in the degree is required.
- (v) Candidates with P.G qualification alone will be considered for optionals: Economics, Commerce and Computer Science .

2. ELIGIBILITY FOR ADMISSION TO EXAMINATION

A candidate shall be admitted to the B.Ed., degree examination only if he/she has undergone the prescribed course of the study satisfactorily in the University Department of Education having put in the prescribed percentage of attendance.

The minimum attendance prescribed is 75 % of working days for affiliated Colleges of Education.

3. DURATION OF THE COURSE

The duration of the course shall be for one academic year, consisting of 200 working days (170 teaching days and 30 supervised practice teaching days) excluding University examination days per year providing for a minimum 1000 hours of course work at 5 hours a day for affiliated colleges.

4. COURSE OF STUDY

The course of study shall consist of the following subjects:

a. Core subjects [compulsory]

- 1. Challenges in Indian Education
- 2. Psychology in Education
- 3. Evaluation, Research, Educational Technology and Innovation in Education
- 4. Curriculum and Instruction
- 5. Teacher and School

b. Optional subjects [Any two courses based on Specialization]

- 1. Tamil Education
- 2. English Education
- 3. Mathematics Education
- 4. Physical Science Education
- 5 Biological Science Education
- 6. Social Science Education
- 7. Computer Science Education
- 8. Economics Education
- 9. Commerce Education
- (i) Candidates must choose two Optional Subjects.
- (ii) Candidates with Tamil / English Literature in their graduate course or post-graduate course may choose Tamil Education / English Education as Two optional.
- (iii) Other B.A / B.Sc graduates may choose 1st Optional subject relating to their major subject and the other optional from the subject studied at ancillary level or a language (English Education / Tamil Education)
- (iv) Post-graduates may choose either General Tamil or General English as one Optional II subject and the other related to their course of study at M.A., / M.Sc., level or any other subject as in part (III) or Major subject at UG level as Optional I.

(c) Electives

- 1. Environmental Education
- 2. Physical Education
- 3. Inclusive Education

Candidates must choose one of the elective subjects cited above depending upon the subjects offered in affiliated colleges.

(d) Teaching Competence

Teaching competence consists of observation of lessons and teaching sessions.

There shall be an observation of at least three micro-skill teaching sessions in the University Department of Education and 10 macro teaching sessions in each optional subject in the schools (Practical teaching) AND

There shall be intensive teaching practice of 3 micro skill lessons and 20 macro teaching lessons for each optional subject.

(e) Other Practical Work

Practical shall include Practicals related to (a) Optional subjects (b) Projects and experiments: (c) Behavioural assessment – Psychology practicals (c) Camp or community work and (d) Physical Education and Health Education

5. MEDIUM OF INSTRUCTION

The medium of instruction of the course may be English.

6. SCHEME OF EXAMINATION

The scheme of examination for **<u>REGULAR</u>** candidates shall be as follows.

| Paper | Subject | Durati | Inter | Extern | Total | Total |
|---------|-----------------------------------|--------|-------|--------|-------|-------|
| | _ | on of | nal | al Mks | Max | Mini |
| | | Exam | Mks | Max | Marks | mum |
| | | | Max | | | Pass |
| | | | | | | Marks |
| Core-1 | 1. Challenges in Indian Education | 3 hrs | 25 | 75 | 100 | 50 |
| Core 2 | 2. Psychology in Education | 3 hrs | 25 | 75 | 100 | 50 |
| | 3. Evaluation, Research, | | | | | |
| Core 3 | Educational Technology and | 3 hrs | 25 | 75 | 100 | 50 |
| | Innovation in Education | | | | | |
| Core-4 | Curriculum and Instruction | 3 hrs | 25 | 75 | 100 | 50 |
| Core-5 | Teacher and School | 3 hrs | 25 | 75 | 100 | 50 |
| Paper-6 | Optional Subject I | 3 hrs | 25 | 75 | 100 | 50 |
| Paper-7 | Optional Subject II | 3 hrs | 25 | 75 | 100 | 50 |
| Paper-8 | Elective subject | 3 hrs | 25 | 75 | 100 | 50 |
| Total | | • | 200 | 600 | 800 | 400 |

Passing Miniumum is 50% in internal and External

Distribution of marks for Practical

(i) Teaching Competency

| Si. | Subject/Practical | Internal | | External | | Total | |
|------|----------------------------------|----------|-----|----------|-----|-------|-----|
| No. | Subject/Fractical | Max | Min | Max | Min | Max | Min |
| 1 | Teaching Competency: Optional I | | 25 | 50 | 25 | 100 | 50 |
| 2 | Teaching Competency: Optional II | 50 | 25 | 50 | 25 | 100 | 50 |
| Tota | Total | | 50 | 100 | 50 | 200 | 100 |

(ii) Other Practical

| Si. | Subject/Due etical | Inte | Internal | | External | | Total | |
|-----|---|------|----------|-----|----------|-----|-------|--|
| No. | Subject/Practical | Max | Min | Max | Min | Max | Min | |
| 1 | Preparation and use of instructional aids Optional I | | 10 | 20 | 10 | 40 | 20 | |
| 2 | Preparation and use of instructional aids Optional II | 20 | 10 | 20 | 10 | 40 | 20 | |
| 3 | Test and Measurement Optional I | 20 | 10 | 20 | 10 | 40 | 20 | |
| 4 | Test and Measurement Optional II | 20 | 10 | 20 | 10 | 40 | 20 | |
| 5 | CAI and PLM Package | 10 | 5 | 10 | 5 | 20 | 10 | |

| | Development | | | | | | |
|----|---------------------------------|-----|-----|-----|-----|-----|-----|
| | Optional I | | | | | | |
| | CAI and PLM Package | | | | 5 | | |
| 6 | Development | 10 | 5 | 10 | | 20 | 10 |
| | Optional II | | | | | | |
| 7 | Instructional Materials | 10 | 5 | 10 | 5 | 20 | 10 |
| , | Optional I | 10 | 3 | 10 | | 20 | 10 |
| 8 | Instructional Materials | 10 | 5 | 10 | 5 | 20 | 10 |
| 0 | Optional II | 10 | 3 | 10 | | | 10 |
| 9 | Psychology Practicals 10 | | 5 | 10 | 5 | 20 | 10 |
| 10 | Language Lab Practical | 10 | 5 | 10 | 5 | 20 | 10 |
| 11 | Audio- Visual Aids | 10 | 5 | 10 | 5 | 20 | 10 |
| 12 | Action Research/ Project | | 5 | 10 | 5 | 20 | 10 |
| 12 | Works/Case Study | 10 | 5 | 10 | 5 | 20 | 10 |
| 13 | Physical Education and Health | | 5 | 10 | _ | 20 | 10 |
| 13 | Education | 10 | 5 | 10 | 5 | 20 | 10 |
| 14 | Comp/Community Comvice | 10 | 5 | 10 | 5 | 20 | 10 |
| 14 | Camp/ Community Service | 10 | | | | | |
| 15 | Socially Useful Productive Work | 10 | | 10 | 5 | 20 | 10 |
| 13 | (SUPW) | 10 | 5 | 10 | 3 | | 10 |
| | Participation in | | | | | | 10 |
| 16 | Seminars/Workshops/ | 10 | 5 | 10 | 5 | 20 | 10 |
| | Symposia/Conferences | | | | | | |
| | Total | 200 | 100 | 200 | 100 | 400 | 200 |

Practicals

| Practical | In | iternal | Exte | rnal | Total | |
|---------------------|-----|---------|------|------|-------|-----|
| Teaching Competency | 100 | 50 | 100 | 50 | 200 | 100 |
| Other Practical | 200 | 100 | 200 | 100 | 400 | 200 |
| Grand Total | 300 | 150 | 300 | 150 | 600 | 300 |

7. PRACTICAL EXAMINATION BY THE BOARD OF SUPERVISING EXAMINERS

The board of supervising examiners (Internal & External) appointed by the university will examine the teaching competency of a significant section of the candidates or all the candidates and the practical work of all the candidates. The supervising examiners shall report to the university the marks awarded to each candidate in two divisions of practical examination.

8. PASSING MINIMUM

- (I) A candidate shall be declared to have passed in the B.Ed., Degree examination only if he/ she has passed both the written and practical examination and passes in the written examination shall be permitted to appear again for the same and viceversa.
- (II) Every candidate should register for all the papers in the written examination and practical examination in the first attempt. 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.

- (iii) A candidate shall be declared to have passed the written examination if he/ she obtains not less than 50% in each paper in External Examination and aggregate of 50% in both internal and external examination.
- (iv) A candidate shall be declared to have passed the practical examination if he/she obtains not less than 50% of marks in teaching competency in each of two optional subjects and not less than 50% marks allotted to other practical work.

9. CLASSIFICATION OF SUCCESSFUL CANDIDATES

All successful candidates shall be classified separately for written examination and practical examination. In each case, candidates who pass the examination and obtain not less than 60% of total marks will be placed in the <u>first class</u>, those who have obtained 50% to 59% of marks in the aggregate will be placed in <u>second class</u>.

10. PRACTICE TEACHING

Teaching competency programme for each student shall be undertaken at Government recognized schools including Matriculation Schools. Practice Teaching shall include Observation and Teaching. Practice is to be given at micro and macro levels. Micro teaching and Demonstration classes shall be conducted at the respective colleges of Education for 10 working days. Each student has to prepare 6 micro lessons (3 for each optional). Macro teaching and observation classes shall be at the schools under a qualified trained teacher (Guide teacher) for 30 working days.

For the purpose of teaching practice, each student shall work as an apprentice under a selected teacher and under the general supervision of the Principal and the lecturers of the college concerned.

He/She shall also maintain separate records for micro teaching lessons, macro teaching lessons and observations of lessons. The micro teaching record shall include 6 skills (3 for each optional). The macro teaching record shall contain 30 macro lesson plans (15 for each optional). The observation record shall contain observations of 10 lessons (5 for each optional). Marks for teaching practice shall be based on practice in micro teaching, lesson plan writing, observation of lessons and macro teaching competency

However, students offering English/Tamil as the equivalent to two optional subjects will be required to maintain a record each for two different standards (e.g VIII & IX) relating to the paper on the teaching of English/ Tamil as the case may be. The records shall contain plans of at least 15 lessons, for each standard in the teaching of English or Tamil as the case may be. Marks for teaching practice shall be based on the reports of lessons in the optional subjects and on the records maintained. A separate record shall be maintained for each standard for recording the 10 lessons observed(5 th each standard). This applies to all postgraduate teachers who opt for the same subject as 2 optionals.

Each teaching practice lessons shall be reported separately to the Principal by the lecturers or the teachers authorized for the purpose and the reports and the record shall be made available to the supervising examiners who will be appointed by the university. The final report of each student with the records shall be made available to the supervising examiners whose decision on the marks to be awarded shall be final.

11. OTHER PRACTICAL WORK

1. Preparation and use of Instructional aids

Students shall prepare instructional aids in both the optional subjects. They may take five specific units from his school / higher secondary school syllabus and prepare teaching aids with reference to concept/ ideas in the units Aids of different types(Charts, models, film strips, tapes, slides, transparencies) should be included.

2. Test and Measurement

The construction of tests must be made in both the subjects in the case of students offering two different subjects as optional, In the case of students offering a subject as two optionals the construction of tests should be made in teaching high school subjects and higher secondary school subjects. In both the cases interpretation of results should also be made and recorded. It is suggested that preparation and administration for the achievement test be completed during the intensive teaching practice.

3. CAI and PLM Package Development

All student teachers have to be exposed to computer. Students have to select an individual topic in each optional subject & prepare PLM for those topics. The student teacher should prepare CAI material in CD format for each optional.

4. Instructional Material:

Each student has to select one unit in each optional and prepare the instruction material.

5. Psychology Practical

The primary objective of psychology practicals is to expose the student teachers to the procedures of conducting various experiments in psychology directed towards the study of behavioral changes of the pupils. Each student teacher is expected to do at least 10 experiments covering all focal areas of Educational Psychology and all types of psychological tests. For list of experiments refer to the practicals in core paper: Educational Psychology.

6. Language Lab Practical

The student-teachers should be evaluated on the language skills based on language software practiced by the student-teachers.

7. Audio-Visual Aids

Student teachers should know about the audio- visual aids that can be used in the classroom teaching learning process. Detailed instruction on the use of audio-visual aids in teaching is given by the optional teachers. In terms of record writing, a minimum of ten audio- visual aids must be described with illustration and pictures.

8. Action Research/Project Work/Case Study.

The purpose of the project work is to give work experience in the respective method subject of the student teachers. Every student teacher is expected to have discussion with the faculty to choose individual tope for project work to be undertaken by him/her

Case study is considered as a diagnostic technique. During the teaching programme, each student teacher should conduct case study about an indifferent child who has notable problems either in learning or in their adjustment to the environment. The information for the case study should be collected in such a way that it will suggest an intervention programme for the pupil to overcome his/ her problems. A perfect record should be maintained for this purpose.

9. Physical Education and Health Education

This record should contain descriptions of at least five minor games and three major games. Description of each game should include the theory, rules and the ground layout of the game. The student has to observe two games classes and record them. The pictures, diagrams, cutouts, etc., depicting the health education activities should be given in the record. Preparation of an album on health and physical education is a must.

10. Camp/Community service

Each teacher trainee must participate in a camp for seven/ten days during the academic year to share in community life. The camp activities may include NSS Programme /Guiding/First aid/ Citizenship camp. The camp may be held outside the college preferably in a rural setting.

11. Socially Useful Productive Work

Some productive work that is useful to society, like basket making, book binding, making covers, files and pads. wood work, making of soap and soap powder, food preservation, shall be made and recorded.

12. Participation in Seminars/ Workshop and Symposia

The assessment under this head shall include evaluation of leadership role played as well as participation made in follow up discussions, initiative, contribution of ideas, critical thinking and receptivity. The seminars, workshops and symposia will relate to the core, optional and elective subjects.

CORE PAPER – I CHALLENGES IN INDIAN EDUCATION

Objectives:

On successful completion of the course the student-teachers should have:

- 1. understood the history of Indian education in different periods of time.
- 2. learnt the role of teachers and various systems in education.
- 3. realized the problems of school education, higher education, women education and teacher education in India.
- 4. gained the knowledge of school health programmes, nutritional requirement, population education, physical education and environmental education.
- 5. appreciated the divergent philosophies behind education and their differential implications.

UNIT I: History of Indian Education

- 1.1 Gurukula system of education, Buddhist and Jain system of education, Education by Christian Missionaries
- 1.2 The progress of education in Free India with special emphasis on vocationalisation community and Social service Socially Useful Productive Work (SUPW)
- 1.3 Directive Principles Article 45 Responsibilities of State and Central Governments on Education
- 1.4 India's Secular Policy Religious and Modern Education
- 1.5 Regional Educational Development in India Imbalances and Variations in different environment

UNIT II: Role of Teachers and System of Education

- 2.1 Inculcation of Socialism, Secularism and Democracy through Indian Education
- 2.2 Teacher's role towards: (a) Pupils' development, (b) Community development, (c) National integration and reconstruction, (d) International understanding, and (e) Elimination of Social tensions and conflicts
- 2.3 Educational Influences of Home, School, Community and Mass Media
- 2.4 Formal and Non-formal systems of education
- 2.5 Continuing Education and the concepts of Open University

UNIT III: Current problems in Indian Education

- 3.1 Primary Education: Education for all, Wastage and Stagnation
- 3.2 Secondary Education: Co-education, Examination reforms, New evaluation procedures, Inspection and Supervision
- 3.3 Higher Secondary Education: Curricular needs and Vocational needs of Rural India, Social Impact
- 3.4 Women's Education: Status of Women in Higher Education
- 3.5 Teacher Education: Training teachers for all levels of education Pre-service and Inservice facilities, Code of conduct for teachers

UNIT IV: Philosophical Foundation of Education

- 4.1: Idealism, Realism, Naturalism and Pragmatism Aim, curriculum and teacher's role
- 4.2: Educational philosophies of Swami Vivekananda, Mahatma Gandhi, Tagore
- 4.3: Curriculum Construction: Principles flexibility and sensitivity to the need and differences of pupils; Curriculum and national goals improvement of teachers in curriculum planning and implementation

- 4.4: Promotion of scientific outlook and attitude among students
- 4.5: Institutional planning: Human relationships and application of modern management techniques in educational institutions.

UNIT V: Health and Nutrition Education

- 5.1 School Health Programme, Common ailments of children, Communicable diseases Preventive measures, First Aid, Sex-education
- 5.2 Nutritional deficiencies, Preservation of nutrients, Balanced diet, Healthy Food Habit
- 5.3 Population Education: (a) Impact of population growth on Social, Economic and Educational development; (b) Family welfare policies of Government- Small family norms; and (c) Correlating school subjects with population problems
- 5.4 Physical Education: Importance of physical education and role of teachers
- 5.5 Environmental Education: Types of environment, Teacher's role

SESSIONAL WORK

Analyse writings on analysis of education-development interface and make presentations Group discussions, debates and dialogue on the themes

Presentations on National educational policies

Preparation of reports on the state and centrally sponsored schemes of education

REFERENCE

- 1. Taneja, V.R. (1998). Educational Thoughts and Practice. Delhi: University Publications.
- 2. Agrawal, J.C. & Agrawal S.P. (1992). Role of UNESCO in Educational, Vikas Publishing

House, Delhi.

- 3 Anand (1993). The Teachers Education in Emerging Indian Society. New Delhi: NCERT.
 - 4 Saraswathi, T.S. (1999). Culture, Socialization and Human Development. New Delhi: Sage Publications.
 - 5 Sharma, R.N. and Sharma, R.K. (2004). Problems of Education in India. New Delhi: Atlantic Publishers.
 - 6 Mishra, B.K. and Mohanty, R.K. (2003). Trends and Issues in Indian Education. Meerut: Surya Publication.
 - 7 Ghanta, R. and Dash, B.N. (2005). Foundations of Education. Hyderabad: Neelkamal Publications.
 - 8 Prof. Ramesh Chandra(2007), NewDelhi: kalpaz Publication
 - 9 Pandy, V.C. (2007) Future Challengers of learning: Isha Books: NewDelhi
 - 10 Ram, S. (2008) Current issue in Teacher Education, Kalan Paper Packs.
 - 11 Hemchand, T.K. (2008) Problems of Teacher Education, : NewDelh.i Crescent Publisher Corporation.

CORE PAPER – II PSYCHOLOGY IN EDUCATION

Objectives:

- 1. To enable the trainees to understand the basic concepts of education and psychology as the science of behavior
- 2. To enable the trainees to know the concept of growth, development and adolescents needs and special needs.
- 3. To enable the trainees to understand the general nature of learning and the learning process.
- 4. To help them to acquire competence in their teaching using motivation.
- 5. To help them to acquire knowledge of higher level mental process thinking, reasoning and problem solving
- 6. To enable them to gain knowledge about personality and adjustment
- 7. To enable them to gain a knowledge about intelligence, and Multiple intelligence.
- 8. To enable them to gain knowledge about creativity, mental health and mental hygiene.
- 9. To enable them to gain the knowledge about counseling and guidance.
- 10. To help them apply these knowledge in classroom teaching- learning process effectively.

UNIT I : INTRODUCTION TO EDUCATIONAL PSYCHOLOGY AND CONCEPT OF GROWTH AND DEVELOPMENT

- 1.1 Definition, meaning, nature and focal areas of educational psychology Psychological aspects of teaching Bases of effective Teaching.
- 1.2 Methods of educational psychology introspection method, Observation Method, Experimental method, Differential method, Psychoanalysis method, and Case study method.
- 1.3 Concepts, principles, stages and characteristics of human growth and development-concept of maturity
- 1.4 Factors influencing growth and development Piaget, stage of cognitive development.
- 1.5 Characteristics of adolescence and their special problems- influence of group behavior

UNIT II: LEARNING AND MEMORY

- 2.1Nature and importance of learning Types of learning
- 2.1. Theories of learning Trial and Error learning Thorndike Classical Conditioning Pavlov Operant conditioning Skinner's
- 2.2.Difference between S- R theory and Insight theory
- 2.3. Meaning and nature of memory types of memory factors/ stages of memory
- 2.4. Meaning and nature of forgetting- forgetting curve measures to promote memory

UNIT III: ATTENTION AND MOTIVATION

- 3.1Sensation, perception and concept formation.
- 3.2Attention Meaning, Nature, Distraction and Span of attention Classroom conditions for attention.
- 3.3Motivation Types of motivation Motivation cycle
- 3.4. Maslow's need hierarch theory
- 3.5.Role of reward and Punishment Achievement motivation.

UNIT IV: PERSONALITY, INTELLIGENCE AND CREATIVITY

- 4.1 Meaning and nature of personality Theories of personality (type and trait)
- 4.2 Assessment of personality Subjective, Objective, Projective ways of Assessment.

- 4.3 Factors influencing personality Integrated personality Teachers role in Developing personality.
- 4.4 Intelligence Multiple intelligence assessment of intelligence
- 4.5 Definition, nature and meaning of creativity assessment of creativity.

UNIT V: MENTAL HEALTH AND MENTAL HYGIENE

- 5.1 Definition of mental health Importance of mental health
- 5.2 Conflicts and frustration Adjustment Defense mechanism
- 5.3 Meaning of Mental Hygiene The objective of Mental Hygiene The scope of mental Hygiene
- 5.4 Meaning of Guidance Need for Guidance The purpose of Guidance Educational and Vocational Guidance.
- 5.5 Meaning of counseling Goals of counseling- Types of counseling Directive, Non-Directive and Eclectic counseling.

SESSIONAL WORK

Any one experiment on learning – division of attention, memory, transfer of learning Case study of a learner with behaviour problem/talented child/a ld child/a slow learner/a Disadvantaged child

Study of intelligence of at least 5 school children and relating it with achievement and other Background factors

Practicals

| SI.No | Focal Area | Title of the experiment |
|-------|--------------|--|
| 1 | | Transfer of Training (Mirror – Drawing) |
| 2 | Learning | Maze Learning (systematic –nonsystematic) |
| 3 | | Span of Attention |
| 4 | Attention | Distraction of attention (using cancellation sheet) |
| 5 | | Power of recall for Meaningful and Meaning les stimuli |
| | Memory | |
| 6 | | Span of memory – Auditory stimuli |
| 7 | Habit | Habit Interference |
| 8 | Interest | Kuder Preference Record |
| 9 | Aptitude | Differential Aptitude Test |
| 10 | Attitude | Teacher Attitude Scale |
| 11 | Thinking | Sentence construction |
| 12 | Intelligence | A Battery performance Test of Intelligence By – Bhatia |

List of Reference Books

- 1. Kuppuswamy B. (1967) Advanced Educational Psychology, New Delhi: Sterling Publishers Private limited,
- 2. Santhanam. S. (1985) Teacher and learners, Madras 1985: Asian Book Company
- 3. Kuppuswamy. B. (2-Ed) (1989) A Text book of Child Behaviour and Development, New Delhi: Vikas Publishing House Ltd.
- 4. Boaz, G.D (1962), General Psychology, Boaz Institute of Psychological Services.
- 5. Chaube S. P (1983) Educational Psychology, Agra: Lakshmi narain Agarwal,
- 6. Hilgard, E.F., Earnest Richard C, Attkinson and Rital.,(5-Ed) Introduction to Psychology,
- 7. Slavin, R.E. (3-Ed) (1986) Educational Psychology, Englewood cliffs, N.J: Prentice Hall.

- 8. Stipeck, D.J., (1988) Motivation to Learn: From Theory to Practice, Englewood Cliffs, N.J., Prentice-Hall..
- 9. Weiner.B. (1980) Human Motivation, New York: Holt, Rinehart & Winston.
- 10. Woodworth, R.S and Marquis, D.G., Psychology (5-Ed) (1998). NewYork: Henry Holt.
- 11. Charles fox, (2007), Educational Psychology, NewDelhi: Sonali Publication.
- 12. Yogendra K. Sharma, (2007) Textbook of Educational Psychology, NewDelhi: Kanisshka Publisher Distributor.
- 13. Vijaya kumari kausik & Sharma, S.R.(2005) Social Psychology and Education. NewDelhi: Anmol Publication Pvt. Ltd.

CORE PAPER III EVALUATION, RESEARCH, EDUCATIONAL TECHNOLOGY AND INNOVATION IN EDUCATION

Objectives

- 1. To enable student teachers understand the basic concepts of testing and evaluation.
- 2. To help them understand the taxonomy of educational objectives and write various types of test items.
- 3. To help them understand the basic statistical concepts and their applications in testing and evaluation.
- 4. To help them understand the basic concepts of research as applied to education
- 5. to enable them have the knowledge in different types of research applicable to education.
- 6. To understand the concept of educational Technology.
- 7. To appreciate the growing trends in the system of educational communication
- 8. to become aware of the techniques of improving teacher behaviour.
- 9. To understand the innovative practices in education.

UNIT I TAXONOMY OF EDUCTIONAL OBJECTIVES & EVALUATION

- 1.1 The purpose and place of Evaluation in education Cognitive domain, Affective Domain and Psychomotor domain.
- 1.2 Purpose and place of Evaluation- Types of Evaluation- Formal, informal, oral written, formative and summative.]
- 1.3 Tools of Evaluation observation, Interviews, Rating Scales, Questionnaires & testing.
- 1.4 Different types of Testing –Diagnostic, Prognostic Achievement and Psychological tests; Norm reference and Criterion reference tests. Types of test items.
- 1.5 Characteristics of a good test item Objectivity, Reliability, Validity and Feasibility Steps in test construction Preparation of Blue Pint, writing and editing pre testing item analysis Difficulty level and Discriminating Power administration scoring-interpretation.

UNIT II: STATISTICAL CONCEPT

- 2.1 Tabulation- Frequency table, measures of central Tendency Arithmetic Mean, Median, Mode, Quartiles and Percentiles.
- 2.2 Measures of Variability –Range, Quartile Deviation and Standard deviation.
- 2.3 The normal distribution and its properties- Concept of skewness and kurtosis.
- 2.4 Correlation-definition, meaning and uses, computing the coefficient of correlation by Rank difference method.
- 2.5 graphical representation of data- Bar diagram –Histogram, frequency polygon & cumulative frequency curve.

UINT III: RESEARCH AND TYPES OF RESEARCH

- 3.1 Need and Scope for Research in Education Selection and statement of the problem-review of related literature.
- 3.2 Types of Research Basic, Applied research, Action research-definition and scope steps in action research.
- 3.3 Hypothesis and its place in research outline of a research Design Research proposal.
- 3.4 Research methods Survey, case study Experimental and Historical.
- 3.1 Research Report.

UNIT IV: EDUCATIONAL TECHNOLOGY AND COMMUNICATION

- 4.1 Definition, need scope and role of Educational Technology.
- 4.2 Principle process, methods and role of communication in classroom teaching and learning. Mass communication media and its application criteria for selection of appropriate media.
- 4.3 Teacher Behaviour interaction analysis meaning and scope Tools and methods of interaction analysis. Flanders's system of interaction analysis
- 4.4 Modern Communication technology in education: Meaning, scope and choice Projected and non-projected media
- 4.5 Models of teaching- Definition, fundamental elements glascer's basic teaching model and concept attainment model.

UNIT V: INNOVATIONS IN EDUATION

- 5.1: Innovative practices in Education Nature, meaning and scope.
- 5.2: Micro teaching –Descriptive analysis of skills and practice in classroom programmed learning techniques.
- 5.3: Audio video technology language laboratory- teaching machine, CAI and CAL interactive Video teleconferencing.
- 5.4: Distance Education: Education through satellite- open universities, Floating Universities.
- 5.5: Community schools and polytechniques school complex programs and Navodaya Schools.

SESSIONAL WORK

Planning of an achievement test

Planning of other assessment tools

School visits followed by presentation on evaluation practices in schools

Data processing and interpretation of any achievement test of school students

Presentation of papers on issues and concerns / trends in assessment and evaluation

Presentation of papers on examination and evaluation policies

Reference

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Core Paper - IV Curriculum and Instruction

Objective

- > To realise the need and significance of Curriculum
- > To learn Curriculum Development and in Education Instruction
- > To recognise the Instructional Methods
- > To achieve the various Techniques for Transaction of Curriculum
- > To enhance the Planning and Management of instruction
- > To develop various tools and Techniques for evaluation
- > To acquire and use the skills of teaching.

Unit – I: Curriculum Development

- 1-1: Concept and Nature of Curriculum-Different Types of Curriculum
- **1-2:** Stages of Curriculum Process: Learning Experience, Selection of Content, Principle of Organisation and Integration of content and Learning Experience
- 1-3: Curriculum Planning: Basic Consideration in Curriculum Planning
- **1-4:** Factor influence Curriculum Planning: Society, Economics, Instruction, Teacher, Environmental
- **1-5:** Curriculum Effectiveness and Efficiency: Concept Based Curriculum, Developing an Efficiency, Curriculum Assessing Curriculum Effectiveness, Research Programme and Educational Effectiveness- Evaluation

Unit – II: Curriculum Transaction

- 2-1: Significance of Curriculum Transaction
- 2-2: Strategies of Curriculum Transaction
- 2-3: Instruction and Learning: Basic Concept
- 2-4: Steps in Instructional Planning, Instructional Strategies
- 2-5: Instructional Objectives: Three Domains: Cognitive, Affective, psychometer
- System approach: Meaning and Concept: Input process Output. System approach: Model of a System

Unit – III: <u>Instructional Methods</u>

- **3-1:** Teacher Controlled Instruction: Meaning, Concept and Nature
- **3-2:** Various Methods (Lecturer and Demonstration) Strength and Weakness of each method Role of Teaching in (TCI)
- 3.3: Learner Controlled Instruction (LCI): Meaning, Scope and Nature,
- **3-4**: Self Learning Methods, Self Instructional Materiel in Programmed Learning, Computer Assisted Learning and Killer's Plan Assessment of LCI and Role of Teacher in LCI

3-5: Group Controlled Instruction: Concept, Definition, various methods (small group interaction, Co-operative Learning approach, Role play, Field trips, Tutorial, Project) – Organisation GCI and Role of teacher in GCI

Unit IV: Teaching Competencies

- 4-1: Concept and Nature, Various competencies required by a teacher
- 4-2: Core teaching skill: Explaining, Questioning, Reinforcement, Stimulation variation
- 4-3: Special Skills: Subject based, Grade based
- **4-4:** Teaching Strategies: Demonstration, Programmed Instruction, Interaction analysis and Simulation
- **4-5:** Development of Skills: Micro Teaching

Unit - V: Instructional Media

- **5-1:** Significance of Instructional Media Classification of Instructional Media; Individualized Instructional Media; PLM.CAI,
- 5-2: Electronic Media Non Electronic Media
- 5-3: Use of Mass Media: News Paper, Radio-TV
- **5-4:** Electronic Dictionary, Electronic Library, E-Journal, Online Tutor, Author Ware Tools
- **5-5:** Open Educational Resources

SESSIONAL WORK

Planning and preparation of an ICT integrated presentation for secondary level Identification and use of an internet resource for learning at the secondary level Critical analysis of an existing learning resource

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- 4. Chritian Jyothi, A. (1999), Managing Class Room: An Instructional Perspective: The Indian Publication.
- 5. McNell, John D & Wiles John (1990), The Essential of Teaching: Descision, Plan and Methods, New York: Macmillon Co.
- 6. Romizowaski, A.J.(1988), The Selection Guide and of instructional media
- 7. Promila Sharma (2009) Curriculum Development, NewDelhi: A.P.H. Publishing Corporation.
- 8. Srivastsa, D.S.Saritan Kumari. (2007), Curriculum Instructional, NewDelhi: Isha books.

Core Paper - V Teacher and School

Objectives:

To Enable the Student - Teacher:

- ➤ Understand the Term School as a Society, Inspection, Supervision and Management
- ➤ Acquire the Skill of School Administration, Head's role, Teacher's role and Role of Community.
- ➤ Recognize the Educational Structure in India Provision of Central Government, State Government and Levels of Education
- Enrich the Professional in Education
- Aware the School Programme; Co-curricular Activities, General Programme, Maintenance of Record and Extra Curricular Activities.

Unit – I School

- **1-1:** Concept of School as a Society; Objectives of School as an Agency and Society as an Agency
- 1-2: School Administration: Meaning, Nature and Scope
- 1-3: Schools: Community School, Neighborhood Schools and Activities of School Campus
- **1-4:** Supervision and Inspection: Aims, Principles of Inspection and Supervision in Schools
- 1-5: Educational Management: Concept; Class Room Management and School Management

<u>Unit – II</u> <u>School Administration</u>

- **2-1 :** Human : HeadMaster, Personality, Concept of Leadership, Role of HM., Descision Making Skills, Educational Manager and Co-ordinator
- **2-2:** Teacher: Role, Professional Efficiency, Ethical Character of Teacher, Code of Conduct of Teacher and Councellor
- 2-3: Community: Parent Teacher Association, VEC and NGO
- **2-4: D**iscipline: School Discipline, Enrollment, Retention, Stagnation, Dropout and Organization Climate
- **2-5:** Management Process: Different Managements, Directing, Group Descision Making Techniques, Brain Storming and Nominal Group Technique

Unit – III Educational Structure in India

- **3-1:** Indian Constitution and School Education: Status of Indian School and Structure of Indian Schools
- 3-2: Levels of Education: Primary, Secondary, Higher Secondary & University
- 3-3: Different Categories of Schools: Central, State & District
- **3-4:** Central Government: Central Advisory Board of Education Central Board of Secondary Education, Kendra Vidyalaya National Council of Educational Research and Training (NCERT), NCTE & NUEPA
- **3-5:** State: SCERT, DTERT, S.S.A, Directorate of Elementary Education, Directorate of School Education and Directorate of Collegiate Education District: DIET, CEO, DEO, & DEEO

Unit –IV Developing Professionalism in Education

- 4-1: Teacher Training: Pre- Service: DTED and B.Ed, Inservice Programme: Short Term Programme and Long Term Programme
- **4-2:** Research Development in Education: Action Research; Importance of Action Research and Enhancement of Quality Education

- **4-3:** Teacher's **Pr**ofessional **O**rganization: Subject Association, Literary Club, General Association and Alumni
- **4-4: Pr**ofessional **D**evelopment Course: Research Programme in Education, Recent Trend in Research, M.Phil.., & Ph.D.
- **4-5:** Innovation in Education: Preparing Teaching Learning Materiel, Diagnosis the Problem of the Student in Learning and Using Innovative Methods

Unit – V School Programmes

- **5-1:** School Activities: Framing School Calendar, Preparing Time Table and School Assembly
- **5-2:** Co-curricular Activities: Concept of Co-curricular Activities and Need of Co-curricular Activities
- 5-3: General Programmes: Conducting Seminar, Quiz and Competition Examination
- **5-4: M**aintance of **R**ecords: Types of School Records. How to Maintain Records and School Dairy,

Maintaining Library and Laboratory, Preparing School Budget and Maintain the School Budget

5-5: Extra Curricular Activities: Excursion, Campus Cleaning, Function and Annual Day Celebration

SESSIONAL ACTIVITIES

Analysis of school curriculum for integrating environmental concerns

Conduct surveys of various educational contexts (eg. Schools of different kinds) to identify Various forms of inequality.

Individual or group projects to visualize feasible school-based strategies for contributing to 'peace' and 'environmental conservation'

Practice of various approaches to classroom management in simulated group work

Through small group work find out the various school systems in India and their relevance of the varied school systems

Review the school time-table planning and its effectiveness towards attaining academic expectations laid by National Curriculum Framework

Preparation of a plan of action to be implemented during the next three years for improving a functioning of school

Project work on analyzing good and weak points of school management in private, Government, large sized and small sized classroom

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- 1. Mathur, S.S. (1990), Educational Administration and Management, Ambala cantt. The Indian Publication,
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- 13.Buch, T (et al) (1980) Approaches to School Management, Harper & Row Publishers, London

OPTIONAL: CONTENT-BASED METHODOLOGY COURSES (Any Two)

A Major goal of teacher education is to develop the skill and competencies of teaching subject- specific content in the classroom. There are some general skills and some skills pertaining to specific subject areas. The content- based methodology courses aim at development of teaching skills in a particular subject in a systematic manner. These courses also provide ideas on unit planning, lesson planning content organization, and use of audiovisual aids and appropriate evaluation devices. The Students have to choose any two courses according to their subjects of specialization. The subjects being offered are science, Mathematics, Social Science, English, Tamil, Computer Science, Economics and Commerce. The course structure for different subject specific pedagogy courses could suitably be developed under a combination of the following themes .

Nature of the subject

Nature of learning the subject

Curriculum reforms in the subject

Planning for organising learning in the subject

Strategies for learning various kinds of subject matter contents

Assessment of learning in the subject

Learning resources and their organisation

Contextual Issues in Learning the Subject Matter Content

Research and Development in Teaching and Learning the Subject

Professional Development of the Teacher of the Subject

tpUg;gg;ghlk; -1: nghJj;jkpo; fw;gpj;jy;

Nehf;fq;fs;:

- 1. jha; nkhopapd; ,d;wpaikahikiaAk;> jha; nkhop fw;wypd; Nehf;fq;fisAk; mwpjy;.
- 2. jha; nkhopapd; gy;NtW gzpfisAk; mwpjy;
- 3. jha;nkhopapd; gy;NtW gapw;WKiwfis mwpar; nra;jy;.
- 4. nra;As; ciueilg;ghlq;fisf; fw;gpj;jypd; NtWghLfis mwpjy;.
- 5. ,yf;fz gapw;wypy; cs;s jpwd;fis tsh;j;jy;
- 6. ,yf;fz tpjpfs; tiuaiwfisf; fw;gpf;f tpisahl;L Kiwfisg; gad; gLj;j gapw;rpaspj;jy;.
- 7. qy;NtW tifahd fl;Liug; ghlq;fis mwpar; nra;jy;
- 8. nkhopngah;g;G- nkhopahf;fk; Mfpatw;wpd; mbg;giltpjpfis mwpe;J nfhs;sr; nra;jy;
- 9. Nfl;Lzh;jy; jpwidAk;> nghUszh;jy; jpwidAk; tsh;j;jy;
- 10. gbf;Fk; gof;fq;fis tsh;j;jy;
- 11. tpdhf; NfI;lypy; gy;NtW jpwd;fistsh;j;jy;
- 12. xU rpwe; i nkhopq; ghl Mrphpah; fSf; fhd qz; Gfis tsh; j; jy;
- 13. ghlj;jpl;lk; mikj;jypy; etPd njhopy; El;g rhjdq;fspd; gad;ghLfis mwpjy;
- 14. ghlj;jpo;lk; mikj;jypy; cs;s NfhlghLfis mwpar;nra;jy;

myF:1 fy;tp Vw;ghl;by; jha; nkhop ngWk; ,lk;> jha; nkhopapidg; gapw;Wk; Kiw.

- 1.1Nehf;fq;fs;> gad;fs;- vz;zj;ij ntspapLq;fUtp> jpUj;jkhf Ngr gbf;fvOj> tho;f;if Efh;Tfs; fw;gidahw;wiy tsh;j;jy;- moFzuhw;wiy tsh;j;jy;- r%fg; gz;ghl;L kugpidawpAk; fUtp nkhopahFk;.
- 1.2 fy;tpapd; ,d;wpaikahik- r%ff; flikfis Nkw;nfhs;Sjy;- tho;f;if elj;jf; Njitahd jpwd; fisg; ngWjy;.
- 1.3 gpwnkhopfisf; fw;gjw;Fj; jha; nkhopNa mbg;gil khepy nkhopapypUe;J jha; nkhopNtWgLk; NghJ Vw;gLk; rpf;fy;fs;.
- 1.4 jha; nkhopapidg;gapw;W Kiw: gz;Nlhh; fz;l Kiw- jw;fhyKiw- tpisahl;L Kiw> nray; jpl;lKiw- jdpg;gapw;rp Kiw- Nkw;ghh;it gbg;G Kiw- tphpTiu Kiw- ,k; Kiwiag; gy;NtW epiyapy; (eLepiy> cah;epiy, Nky; epiy) gad;gLj;Jq;fhy; vw;gLk; epiw Fiwfs;.

myF: 2 nkhopj;jpwd;fisf; fw;gpj;jy;:

- 2.1 Nfl;ly; jpwd;-tiuaiwaw;w Nfl;lypd; topfw;wy;- Nfl;ly; gof;fj;jpid tsh;j;jy;- nghUs; khwhJ RUf;fp vOjypd; fPo; gapw;rp ngWjy; -gj;jpfisAk; nghpa gj;jpfisAk; RUf;Fjy;- gy;NtW Nehf;fq;fis epiwNtw;wg;ghh;j;jy;- nra;jpfis mwpjy;- eak; ghuhl;ly; Nghd;witfSf;fhf tpsk;guk;- Nfl;lYf;Fk; gapw;wYf;FKs;s NtWghLfs;.
- 2.2 NgRjy jpwd; : mOj;jkhfg; NgRjy;- ,yf;fz tOtpd;wp NgRjy;- kuG nkhopfs;-go nkhopfs;- njhlf;f epiy Ngr;rhw;wy;- nrhw;Nghh;- fye;Jiuahly;- tpdhbtpdh ,tw;iwj; njlf;fepiy> eL epiy> cah; epiy tFg;GfSf;F nghUj;jkhf mikj;Jf; nfhs;Sjy;.
- 2.3 tha;nkhopg;gapw;rp: ,jd; ,d;wpaikahik- Nehf;fq;fs;- gad;fs;> cr;rhpg;gpy; Vw;gLk; rpf;fy;fs;- kdg;ghlk; nra;jypd; ,d;wpikahik- jpUe;jpa Ngr;rpy; nghUe;jpa ey;ypay;Gfs;> jpUe;jpa Ngr;rid tsh;f;f JizahFk; ,yf;fpaq;fs;- ehlfq;fs;> tha;nkhopg; gapw;rpapidg; gy;NtW epiyfspy; mspg;gjw;fhd Kiwfs;> Mh;tj;ijj;J}z;Lk; jiyg;Gfisg; gw;wp ciuahly;-rpWth; ghly;fs;- Ml;lg;ghly;fs;> fij nrhy;Yjy;- fye;Jiuahly;_ nrhw;Nghh;- nrhw;nghopTfs; kd;wj;jpy; Ngrjy;
- 2.4 gbj;jy; jpwd;: gbf;ff; fw;gpj;jypd; Nehf;fq;fs;- gbf;ff;fw;gpf;Fk; Kiwfs;> vOj;JKiwg;gbg;G- nrhy; Kiwg;gbg;G- nrhw;nwhlh; Kiwg;gbg;G- ,tw;wpd; epiwFiwfs;-nrhw;fsQ;rpag; ngUf;fk;- gbg;gpy; Mh;tk; J}z;ly;- tha;tpl;L gbj;jy;- Kiwfs; ed;ik jPikfs;-E}y;fisg; gad;gLj;Jjy;- E}yfg; gbg;G> jpd> khj> thu ,jo;fs; gbf;Fk; gapw;rp Nghd;wit> Mo;e;j gbg;G> mfd;w gbg;G Nehf;fq;fs; epiwFiwfs;- KjpNahhf;Fg; gbf;ff; fw;gpj;jy;
- 2.5 vOJjy; jpwd -; ifnaOj;Jk; vOj;Jg; gpioapd;ikAk;> vOJtjw;Fg; gapw;rp mspj;jy;- rpy Kjw;gapw;rpfs;- vOJ fUtpfisg; gbf;Fk; Kiw- ey;y ifnaOj;jpd; ey;ypay;Gfs;> njspT. msT. moF> ,iIntsp> vOj;Jg; gapw;rp Kiwfs;> thpnahw;wpaOJjy;- ghh;j;J vOjy;- nrhy;tij vOJjy;.

myF:3 jkpo;g; ghlk; fw;gpf;Fk; Kiwfs;:

- 31. nra;As; ciueilg;ghlq;fs;: gapw;wypd; Nehf;fq;fSf;fpilNa mike;Js;s NtWghLfs;-gy;NtW tifahd ciueilfisAk; nra;Al;fisAk; fw;gpj;jypy; Nkw;nfhs;Sk; toKiwfs;- nra;As; eyk; ghuhl;br; RitAzuhw;wiy tsh;j;jy;.
- 3.2 ,yf;fzk;> fl;Liu fw;gpj;jy;> njhy;fhg;gpaj;jpYk;> ed;DpypYk; \$wg;ngWk; gz;ilNahh; fw;gpf;Fk; Kiwfs;- ciuahrphpah;fs; fhl;Lk; Kiwfs;> jw;fhyf; nfhs;if- tpjptUKiw> tpjp tpsf;f Kiw> ciueil> fl;Liu Mfpa ghlq;fSld; ,izj;Jf; fw;gpj;jy;> jiyg;Gfisj; Njh;e;njLj;jy;. tpisahl;L Kiwapy; ,yf;fzk; fw;qpj;jy;.
- 3.4 fl;Liu vOJtjpd; tsh;r;rpepiyfs;- tiffs;- nrhw;nwhluhf;fg; gapw;rpfs;- tho;f;if tuyhw;Wf; fl;Liu ghlf;fl;Liu- tUzidf; fl;Liu rpe;jidf;fl;Liu tpthjf;fl;Liu tuyhw;Wf;fl;Liu>fijf;fl;Liu>Ma;Tf;fl;Liu ciuahly; fl;Liu(fPoepiy Ny;epiy tFq;Gf;FhpaJ

myF:4 ghlf;Fwpg;G> ghlE}y;> Eyfk;> nkhoahrphpahpd; gz;Gfs;:

- 4.1 ghlf;Fwpg;G jahhpj;jypd; ,d;wpaikahik- ghlf; Fwpg;gpd; ed;ikfs;> jPikfs;> Mrphpah; kdj;jpw; nfhs;sj;jf;f ghlf;Fwpg;gpw;Fk; Mrphpahpd; Fwpg;gpw;Fhpa NtWghLfs;.
- 4.2. tpdhf;Nfl;ly;- tpdhf; Nfl;lypd; ,d;wpaikahik- tpdTjypd; Nehf;fq;fs;> gad;fs;> tpdhf;fs; tpdTjypd; jpwik- tpdhf;fs; tpdTk; Kiwfs;- tiffs;> fw;gpf;Fk; tpdhf;fs; tPl;L Ntiy tpdhf;fs;> Njh;T tpdhf;fs; Nghd;wit. Rpwe;j tpdhf;fspd; rpwg;gpay;Gfs;> ey;y Njh;tpd gz;Gfs;.
- 4.3 rpwe;j ghlE}y;fisj; jahhpf;Fk; nghOJ kdjpy; nfhs;sj;jf;f nra;jpfs;- ey;y ghlE}ypy; mike;jpUf;f Ntz;ba ed;ikfs;- Mo;e;j gbg;gpw;fhd ghlE}y;fspd; jd;ikfs;
- 4.4 Jizg;ghIE}y;fspd; jd;ikfs;
- 4.5 gs;sp E}yfk;> tFg;G E}yfk;> fUtpE}yfk;.

myF:5 nkhopf;fw;gpj;jypy; fy;tpj;njhopy; El;gk;> Nky; epiytFg;Gfspy; mspf;fg;gLk; gapw;rpfs;.

- 5.1 Jizf; fUtpfis gad; gLj;Jjy;- nlrplh];Nfhg;- thrpf;Fk; fUtp- thndhyp- glehlhg;gjpT-xypg;gjpTehlh- nkhopg;gapw;wha;Tf; \$lk;- fw;gpf;Fk; nghwpfs;- jpl;lkpl;Lf;fw;wy;- ,it nkhopg;ghlk; fw;gpj;jYf;F vt;thW JizGhpfpwJ. nkhopf;fw;gpj;jypd; El;gf;\$Wfs; njhiyf;fhl;rpapd; ,d;wpaikahik fzzp topf;fw;wy;
- 5.2 Nky;epiy tFg;Gfspy; mspf;fg;gLk; gapw;rpfs;:
- nra;jpfisj; njhFj;jy;> nra;jpfis tifg;gLj;Jjy;> nra;jpfis tphpT gLj;jy;> eak glTk; jpwd;glTk; ciuj;jy;> nrhy;yhl;rpj;jpwd;> fhy tiuaiwia tpQ;rhJ vOJk; gapw;rp> jdf;nfd eilaikj;Jf; nfhs;sy;
- 5.3 fbjk;> fbjq;fspd; tiffs;> fbjk; vOJk; Kiw> vOjypd; Nehf;fk;> RUf;fp vOJjy; tpthpj;J vOJjy;
- 5.4 nkhopgapw;rp- nrhw;nwhlh; mikg;Gk;> gj;jpaikj;jYk;> nrhw;nwhlh; khw;wq;fs; gj;jpfSf;Fr; rpW jiyg;Gfs; jUjy;> jiyg;Gfs; ,Ljy;- epWj;jw;FwpaPLfs;
- 5.5 nkhopngah;g;G- jha;nkhopapdpd;W gpwnkhopapy; nkhopngah;g;G> gpwnkhopfspdpd;W jha; njhopapy; nkhopngah;g;G> nkhopngah;;g;gpy; vOk; rpf;fy;fs; ngah;g;gpd; tiffs;.

E}y;fs;:

- 1. jkpo; gapw;W Kiw- e. Rg;G nul;bah;-1957
- 2. ehw;wkpo; fw;gpf;Fk; Kiwfs; 1 & 11- tp.fzgjp- 1989
- 3. jkpo; ltifg;ghlq;fSk;> fw;gpj;jyK;- TP.FZGJP-1989
- 4. jkpo; fw;qpj;jy;- kh.R..jpUkiy- 1998
- 5. jkpo; fw;gpj;jy;- mZFKiwfSk;> nray; KiwfSk;- ,uh. Re;jpuNrfh:-2001.

OPTIONAL PAPERS

OPTIONAL I – ENGLISH EDUCATION

Objectives:

To enable the trainees to

- > Understand and appreciate the importance of English
- Learn the different methods, techniques and strategies of ELT
- > Develop the habit of examining syllabus and teaching materials critically
- Learn to frame general and specific objective before planning the lessons.
- > Prepare and use appropriate teaching aids to make teaching more effective.

UNIT I BASIS, METHODS AND APPROACHES TO ELT

- 1.1 The scene of ELT in India at present
- 1.2 The study of the skills to be attained at the end of secondary school and higher secondary school courses as outlined in the syllabuses.
- 1.3 Factors affecting ELT in India- Teacher –student relationship –Motivation- Student attitude Mother tongue interference- Mixed ability classes.
- 1.4 Grammar Translation method Structural-oral-situational method Communicative approach
- 1.5 Direct method Bilingual method Humanistic approach

UNIT II LESSON PLAN WRITING

- 2.1 Motivation Content learning experience evaluation
- 2.2 Asking questions –teaching aids recapitulation
- 2.3 Prose-poetry –
- 2.4 Grammar- non-detailed text
- 2.5 Composition need for a carefully graded course in writing- controlled, guided and free composition –role of questioning, group discussion and pair work in a composition class correction of composition note books –reformulation.

UNIT III READING, REFERENCE AND STUDY SKILLS

- 3.1 Abilities of a skilled reader Silent reading intensive and extensive reading
- 3.2 Intensive and extensive reading reading comprehension Questions types
- 3.3 Expansion of vocabulary through intensive reading teaching of passive vocabulary through extensive reading
- 3.4 Uses of dictionaries uses of Encyclopedia Skimming and Scanning
- 3.5 Note making, summarizing, précis writing SQ3Rs

UNIT IV TEACHING, LISTENING AND DEVELOPING ORAL FLUENCY

- 4.1 Using prescribed text books for reading loud reading
- 4.2 Using pictures and objects Short speeches and lectures
- 4.3 Role play and dramatization Group work and pair work, debates, Story telling, narrating events Dictation.
- 4.4 Phonetics Sounds of English Vowels Consonants
- 4.5 Diphthongs- Features of connected speech difficulties of connected speech- Devising exercises like minimal pairs to improve the pronunciation of learners.

UNIT V WRITING SKILLS AND TESTING

- 5.1 Writing skills Mechanical skills Grammatical skills
- 5.2 Discourse skills judgment skills
- 5.3 characteristics of a good test Backwash effects Testing of grammar
- 5.4 Testing of Vocabulary- Testing of Writing skills –
- 5.5 Testing reading comprehension Testing listening skills.

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OPTIONAL PAPERS OPTIONAL: MATHEMATICS EDUCATION

To enable the teacher trainees

- 1. To acquire knowledge of the nature of mathematics and its development.
- 2. To know and understand long term and short term goals of teaching mathematics.
- 3. To develop skill in the formulation of general instruction objectives (GIO) and specific learning outcomes(SLO)
- 4. To understand and practice the different methods and techniques of teaching and develop competency in teaching.
- 5. To develop ability to prepare and use develop competency in teaching.
- 6. To develop the competency to construct and administer diagnostic and achievement tests, to develop competence in evaluation techniques applied to mathematics.
- 7. To understand the principles of curriculum construction with emphasis on content and organization
- 8. To acquire knowledge of the recent trends in mathematics.
- 9. To acquire elementary knowledge of computers,
- 10. To understand the need for research in mathematics education.

<u>UNIT I: NATURE, SCOPE, DEVELOPMENT AND GOALS OF TEACHING MATHEMATICS.</u>

- 1.1 Nature of mathematics Precision, logical structure Abstractness, symbolism.
- 1.2 Mathematics and its relationship with other disciplines.
- 1.3 History of mathematics contribution of some Indian mathematicians.
- 1.4 Aims-practical, social disciplinary and cultural.
- 1.5 Objectives GIO's and SIO's related to cognitive, affective and psychomotor domains.

UNIT II: METHODS OF TEACHING AND LEARNING MATHEMATICS.

- 2.1 Lecture, demonstration, heuristic and project. Inductive, deductive, Analytic Synthetic and problem solving method.
- 2.2 Importance of teaching aids Projected and non-projected aids –improvised aids (paper folding and paper cutting) its specific uses in teaching mathematics.
- 2.3 Lesson plan need, components, uses of lesson plan and unit plan.
- 2.4 Cooperative learning, individualized instruction- programmed learning and computer assisted instruction, Dalton plan.
- 2.5 seminar, group discussion, team –teaching and guided discovery

UNIT III: CURRICULUM AND RESOURCES

- 3.1 Curriculum Principles of selection, organization logical and psychological, spiral and topical.
- 3.2 Text books, reference books and workbooks –importance and qualities
- 3.3 Mathematics teacher- Qualification special qualities required to a mathematics teacher
- 3.4 Library, Mathematics club and its activities.
- 3.5 Analysis of content prescribed for mathematics in standard VIII of Tamil Nadu Text book committee.

UNIT IV COMPUTER EDUCATION

- 4.1 History of computers Block diagram of digital computer
- 4.2 Computer languages (low-level, high level, assembly, machine)
- 4.3 Elementary ideas of flow charts and BASIC Programming.
- 4.4 The use of application software packages Ms office work, excel and foxpro, Access, Power point.
- 4.5 The uses of multimedia and internet and their applications in learning mathematics

UNIT V: EVALUATION AND RCENT TRENDS IN MATHEMATHICS

- 5.1 Construction and importance of achievement and diagnostic tests.
- 5.2 Diagnosis and remediation of student difficulties in learning mathematics.
- 5.3 Individual difference in mathematical ability factors contributing ways of meeting their needs.
- 5.4 Contributions of Piaget, gagne and Bruner to the teaching of mathematics.
- 5.5 Recent trends in mathematics education.

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OPTIONAL PAPERS OPTIONAL : PHYSICAL SCIENCE EDUCATION

Objectives

- 1. To acquaint the student teachers with the objectives of teaching physical science in secondary and higher secondary schools and help them to plan learning activities according to these objectives.
- 2. To give practice to the student teachers in the use of hard and software relating to technology of teaching.
- 3. To guide the student teachers in acquiring specific skills relating to the teaching of physical science, planning the lessons and presenting them effectively.
- 4. To help the student teachers to understand the principles of curriculum construction and examine critically the syllabi in physical science of the secondary and higher secondary classes.
- 5. To help the student teaches to understand the evaluation techniques and prepare objectives based items to assess the achievement and progress of pupils.
- 6. To acquaint them with the knowledge of development of intelligence through science and steps put forward by Piaget.
- 7. To guide the student teachers in maintaining the science laboratory effectively and the method of purchasing equipments and chemicals to the physical science laboratory.
- 8. To develop teaching and organizational skills in physical science.
- 9. To expose the impact of physical science in modern world.

UNIT I: INTRODUCTION

- 1.1 Nature and scope of physical science : a body of knowledge and method of enquiry physics and chemistry as process and product- Interdisciplinary app
- 1.2 Physical science and environment values of physical science in relation to environment.
- 1.3 Aims and objectives of teaching physical science- cognitive, affective and psychomotor Domains-
- 1.4 Specifications and Instructional objectives and behavioural objectives
- 1.5 Objectives –knowledge –attitude good habits and skills.

UNIT II METHOTOLOGY AND LESSON PLAN WRITING

- 2.1 Textbook method Lecture method lecture cum demonstration –Individual practical work- project method specific methods.
- 2.2 Heuristic methods- Historical and biographical method. Modern methods of teaching physical science,
- 2.3 Illustrated lectures by students guided by the teacher Discussion method Seminar symposium –workshop assignment method.
- 2.4 Supervised study team teaching- teaching for creativity.
- 2.5 A course in physical science- principles of lesson planning- Importance of lesson planning- planning for specific behavioral change- herbatian steps –preparation and analysis of some lesson plans.

UNIT III AUDIO-VISUAL AND ENRICHMENT OF MATERIALS

- 3.1 Importance of Audio Visual aids Principles of Selection and uses- hardware and software audio aids, Visual aids their uses in education.
- 3.2 Importance of self-learning devices programmed learning-
- 3.3 Principles & styles role of computer in teaching physical science.
- 3.4 Content enrichment in laws of motion & sources of energy, radioactivity and artificial nuclear Transformation
- 3.5 Acid, Base, Salts, concept of oxidation and reduction Atomic structure.

UNIT IV: CURRICULUM DEVELOPMENT AND LABORATORY

- 4.1 Definition principles of curriculum development organization psychological, spiral, Concentric and Unitary methods.
- 4.2 curricular models PSSC and chem..Study- curriculum for IX, X, XI and XII standard content portion.
- 4.3 Physical Science Laboratory selection of physical facilities and planning and equipping organization and maintenance of laboratory –
- 4.4 Storage and chemicals Records to be maintained –
- 4.5 Improvisation of apparatus accidents and first aid.

UNIT V: ACHIEVEMENT TEST, PROFESSIONAL TEACHING AND PERSONALITY OF PHYSICAL SCIENCE TEACHER

- 5.1 Achievement test in physical science- Essay and objective tests construction and uses of tests –
- 5.2 Hall marks of a good test different forms of tests Multiple choice Matching, completion, grouping, true or False. Tests involving figures.
- 5.3 Academic qualification- professional teaching- clarity of thought and expressions interest in the subject love for pupils Sincerity and open mindedness.
- 5.4 Desire to learn and participation in In-service course role models of a good science student. management of science class

5.5 Personality and dress attention to individual differences- encouragement to pupils giving importance to problems raise by students. Self evaluation of teaching- maintenance of records – Evaluation of teachers by pupils by informal talk and questionnaire.

Practicals

- 1. Preparation of instructional materials for at least one unit in physical science
- 2. Demonstration of at least few important experiments in the classroom.
- 3. Drawing up of a list of experiments in physical science for a particular grade.
- 4. Preparing a programmed instructional material for any new unit.
- 5. Building a picture file, a science news album.
- 6. Biography of important scientists, collection of charts

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OPTIONAL PAPERS

OPTIONAL: BIOLOGICAL SCIENCE EDUCATION

Objectives

- 1. To develop necessary competence in teaching the subject in trms of methods skills and techniques.
- 2. To enable the student teachers to understand the basic principles of the biological science education at secondary and higher secondary level.
- 3. To gain knowledge in acquainting and administering a biology laboratory, curricular and co-curricular activities
- 4. To acquire skills in making aids, preparing instructional materials and using audio visual aids

UNIT I: INTRODUCTION

- 1.1 Present status of biological science as a subset study in high schools and secondary schools scope of the study.
- 1.2 Various branches of biology and the interrelationship with other subjects.
- 1.3 Changing trends in biology Education-traditional setting science and society Axis Science for all science and development International commission on education further outlook learning societies humans, Environment and sustainable society
- 1.4 Aims and objectives of teaching biology at primary, Secondary and higher secondary levels.
- 1.5 Values of teaching biology problems in teaching biology the discoveries in biology till date

UNIT II CURRICULAR AND CO-CURRICULAR ACTIVITIES

- 2.1 General and specific Instructional objectives and their taxonomy advantages behavioural terms- knowledge, comprehensive, skills, scientific Interest and appreciation
- 2.2 Lesson plan- definition, need, advantages criterial for a good lesson plan Herbartian steps preparation of lesson plan- unit plan definition –model unit plan –advantages.
- 2.3 Curriculum –definition –Principles in the construction of biology curriculum selection and arrangement of topics at various levels B.S.C.S and nffield scienc projects N.C. E.R.T Curriculum defects of the present biology curriculum.
- 2.4 Need and importance of co-curricular activities in biology biology club- organization various activities biology study circles- scientific hobbies- need and importance of –list of hobbies in biology- biology exhibition organizations advantages.
- 2.5 Biological science Talent Research Objectives –abilities and skills to be tested method of selection.

UNIT III:TECHNOLOGY OF TEACHING AND ALLIED ACTIVITIES

- 3.1 Problem solving approach –definition various steps involved –selection of problems and solving scientific attitude- fostering ways and means to develop scientific attitude.
- 3.2 Laboratory method –definition –planning Laboratory to high, higher secondary school-conducting practical work and its importance physical facilities- Chemical stains and veagents preservative technique-prepartion of permanent and temporary mounts advantages of laboratory method.
- 3.3 Laboratory assistant and duties Maintenance of registers care and maintenance of apparatus safty rule –Laboratory accidents –prevention and first aids.
- 3.4 Internet –meaning –flow of information –characteristics of internet uses of internet in teaching and learning biology some internet services (ERNET, Soft net GIAS, NICNET)
- 3.5 Project method definition different steps- criteria for a good poject –purpose-different types of project selection of project at primary secondary and higher secondary level merits and demerits.

Unit IV Audio-Visual Materials And Teaching Aids

- 4.1 Importance of audio-visual materials in teaching biology –OHP, Epidiascope, Film strip projects, Micro projector, 16 mm Film and Loop projector- 35 mm projector, Flims and Film strips
- T.V C.C.T.V Teleconferencing, computers, compact disc-importance in teaching biology.

Charts –still pictures – Flat pictures – photographs- Flash cards –text books –chalk boards- roller board- flannel board – bulletin board – magnetic board loop and hook board – peg board –the importance in teaching biology. Models –Mock Ups – Dummy – Real objects specimen – Diorama-sand table- puppets.

Improvisation in biology – Characteristics of improvised materials – material useful for activities – tools needed for making apparatus – merits and demerits.

Insect box – herbarium –micro slides- aquarium, terrarium, vivarium- organizations – educational values.- Magnifying aids – microscopes-hand lens- light microscope - uses in biology

UNIT V: GUIDANCE AND COUNSELLING IN BIOLOGY

- 5.1 Diagnosis of student difficulties in learning biology
- 5.2 Guidance and counseling purpose of student counseling need of counseling situations of counseling needed.
- 5.3 Suitable remedial measures the role of biology teacher Head Master public in providing guidance and counseling in biology activities

- 5.4 Identification- slow and gifted learners counseling needed for slow learners- Guidance at the primary stage Secondary stage
- 5.5 Vocational, Educational guidance and its importance in biological science

Practical

- 1. Design and carry out simple investigator projects in Biology.
- 2. preparation of improvise Biology model.
- 3. preparation of Charts, Micro slides, herbarium, stuffed animal invertebarate,
- 4. Preparation of food items (any three): preparation of janatha fridge.

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OPTIONAL PAPERS OPTIONAL: SOCIAL SCIENCE EDUCATION

Objectives

- 1. The student teacher develops an understanding of all topics that he has to teach in social sciences
- 2. Aims and values, instructional objectives and methods of teaching such topics.
- 3. The procedures for developing school curriculum.
- 4. Curriculum activities pertinent to the teaching of social science.

5. Modern techniques of teacher-preparation for effective teaching and for evaluation.

UNIT I: NATURE AND STRUCTURE OF SOCIAL SCIENCES

- 1.1 History meaning definition, nature, and characteristics of social sciences.
- 1.2 Different conception of History-Biographic and evaluating. Conception: Social sciences as evaluation philosophical economic and social and as evaluation of civilization. Social

sciences as a record of the past –relevance to present and future. –scope of social sciences-dimensions of History-continuity development time, place, idea.

- 1.3 Social sciences as a Science and Art.- Correlation with other subjects.- Teaching and learning of Social sciences year plan, unit plan and lesson plan –need
- 1.4 Formulation of performance –objectives –books and ideas makers views cognitive affective and psychomotor levels.
- 1.5 Values-practical, cultural, ethical, disciplinary values of teaching history

UNIT II: INSTRTIONAL STRATEGIES

- 2.1 Traditional methods lecturer, oral, recitation, review, drill, storytelling-inductive and deductive story telling.
- 2.2 Modern methods laboratory methods, demonstration, role play and dramatization, historical method.
- 2.3 Project method and problem solving approach- discussion and socialized methods: small group, panel buss session, seminars, workshops, and symposia.
- 2.4 Field trip and excursions team teaching, group learning and individual learning.
- 2.5 Social science teacher-characteristics and tools preparation-year plan-Unit plan and lesson plan.

UNIT III: CURRICULUM DESIGNING

- 3.1 Selection –organization and radiation of subject content principles to be followed the linear, or spiral and the concentric types of curriculum, logical psychological organization Need for choice of materials in the syllabi Curriculum revision.
- 3.2 Curriculum improvement enriched curriculum-assessment of different school curricula. Homogeneous grouping Dalton play improvised study. Theories influencing selection of materials doctrine of natural taste and interest- cultural epoch theory –proceeding form near to remote etc.,
- 3.3 Curriculum improvement enriched curriculum –assessment of different school curricula. Homogeneous grouping Dalton play improvised study- Theories influencing selection of materials doctrine of natural taste and interest cultural epoch theory proceeding from near to remote.
- 3.4 Equipment /resources: Collateral reading books, Social science club and its activities-social science textbook –preparation qualities.
- 3.5 Teachers guide social sciences room with globe, maps, models etc., social science guest lectures by eminent social scientists.

UNIT IV: LEARNING STRATEGY

- 4.1 Assignments –oral, written and drawing forms-workbooks –preparation of models and specimens.
- 4.2 Visits to related fields-temples-museums, Art galleries, Exhibitions. Collection of specimens-stamps coins.
- 4.3 Reading of books, historical novels, magazines, news papers and learning from other media.- self learning material and using instructional materials

- 4.4 Radio, Record player and the cassette recorder. Slide projector, film strips projector, the OHP and sound film projector.
- 4.5 TV VCR. Use of computer in social science education Need for improvised aids.

UNIT V CONTENT, RECENT TRENDS AND EVALUATION

- 5-1:The subject content prescribed for classes VIII, IX, X, XI and XII by the T.N Text book society.
- 5-2:Recent trends in social sciences-education-evaluation of social sciences education —civic, political, social economical, geographical, historical points of view.-
- 5-3: Diagnostic and remedial teaching.
- 5.4 Achievement test type test –objective type test –merits and demerits.
- 5.5 Characteristics of good achievement test –Blue print criterion referenced test and norms reference test-interpretation of test scores, mean S.D., Correlation among scores.

Practical work

- 1. Prepartion of instructional material for any one unit in one of the subjects of social sciences.
- 2. Dramatization of certain important events given in any one of the subjects of social studies.
- 3. Evaluation of a text book in any one of the subject of social sciences.
- 4. Preparation of self-learning materials, C/I and Units for one unit, scoring tabulation and interpretation.
- 5. Preparation of one and each in the following categories —maps —charts —slide and models.
- 6. Bulletin boards –Building up a picture album –Improvised aids Excursions and visits to place of sociological importance.
- 7. Participation on social studies club activities.

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OPTIONAL PAPERS OPTIONAL I: COMMERCE EDUCATION

Objectives

- 1. To acquire the knowledge of commerce as a subject at the secondary and Higher secondary levels and relation with other subjects.
- 2. To understand the cognitive aspects of teaching commerce and accountancy.
- 3. To practice the trainees to prepare the lesson plan.
- 4. To understand the nature and types of accounting functions.
- 5. To develop competency in evaluation techniques applicable to commerce.
- 6. To understand the principles of curriculum construction and organization of the subject matter at different levels of school education.
- 7. To know the various in-service programmes needed by a commerce and accountancy teacher.
- 8. To identify the slow and gifted learners in commerce and accountancy subjects.
- 9. To organize co-curricular activities in commerce and accountancy.
- 10. To develop competency in evaluation techniques applicable to commerce.

UNIT I: INTRODUCTION TO TEACHING OF COMMERCE

- 1.1 Nature and scope of the subject commerce and accountancy its definition purpose of commerce education- importance and meaning of commerce education.
- 1.2 Correlation of commerce and Accountancy with other subjects Viz., Economics, Mathematics, Business Administration, and commercial Geography.
- 1.3 Need for accountancy education- importance fulfilling the present day needs.
- 1.4 Aims and objectives of teaching commerce and accountancy values of the study commerce- practical, social and vocational history of vocational education- commerce education, its importance to present day educational system.
- 1.5 Aims and objectives and values of teaching commerce and accountancy, subject base for the development of the objectives through learning experience instructional objectives general, specific with reference to individual lessons.

UNIT II PLANNING FOR SUCCESSFUL TEACHING

- 2.1: Need for preparation and planning the lessons in advance and advantage –importance- of planning for successful teaching activity approach to lesson planning steps in the preparation of lesson plans.
- 2.2: Preparation of year plan and unit plan model lesson plans.
- 2.3: Motivation categories of learners identification of slow and gifted learners in learning of accountancy and commerce the characteristics of slow and gifted learners reasons for their variation in commerce and accountancy subjects.
- 2.4: Catering to the needs of different individual –planning differently through arranging for extra coaching classes and assigning simple problems. analysis of the effects of differential treatment.
- 2.5: A study content of commerce and accountancy for plus 2 standard.

<u>UNIT III ACCOUNTING AND ITS PRINCIPLES – COMMERCE AND ACCOUNTANCY</u> TEACHERS.

- 3.1 Types of Accounts –classification –concepts and convention preparation of books of original entry Final A/C Depreciation a/c Accounts of non trading concern- accounts of partnership, admission, retirement, death, amalgamation, absorption and piece meal distribution.
- 3.2 Issue of shares, forfeiture and re-issue of shares preparation of company final accounts identify the difficulties in teaching the accountancy subjects n plus 1 and plus 2 students remedial steps.
- 3.3 The commerce and accountancy teacher their academic and professional qualification-the need and importance of attending in-service programmes –the important duties.
- 3.4 Responsibilities of a commerce and accountancy teacher preparation of teacher's diary, time table
- 3.5 Proper maintenance of registers and records –qualities of a good commerce teacher.

UNIT IV: CURRICULUM AND ENRICHMENT ACTIVITIES IN COMMERCE

- 4.1 Principles of curriculum construction principles to be observed in selection of subject matter arrangement and order of topics Psychological and sectional arrangement-concentric pattern.
- 4.2 Latest trends in the curriculum construction in the developed countries a critical analysis of the commerce and accountancy syllabus at higher secondary level in Tamil Nadu.
- 4.3 Organizing commerce clubs –utilizing commerce club for planning model banks forming and organizing co-operative stores, debates and discussions
- 4.4 Planning for special visits to commercial markets, banks, life insurance corporation of India etc.,
- 4.5 Procedure for taking part in stock exchange primary and secondary market visit to stock exchange market Excursions as a source of learning.

UNIT V: EVALUATION

- 5-1: Tools of evaluation observation, oral testing, mental written tests testing and evaluation.
- 5-2: Merits and demerits different item types as applied to commerce and accountancy scoring of such items.
- 5-3 :Tests for different purpose achievement, diagnosis and prognosis
- 5-4 : Diagnosis and prediction test construction, administration and interpretation
- 5-5: Co-efficient of correlation Rank order correlation- Normal probability curve and its applications in educational evaluation.

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OPTIONAL PAPERS OPTIONAL – I : COMPUTER SCIENCE EDUCATION

Objectives

- 1. To help student teachers understand computer, its parts, its kinds and uses in schools
- 2. To enable them attain knowledge about the functioning of computers, developing computer programmes in BASIC AND C
- 3. To help them acquire skills of teaching and evaluation as applied to computer science at the higher secondary level.
- 4. To enable the student teachers understand the principles of curriculum construction.
- 5. to familiarize the student teachers with the various methods that can be employed for the teaching of computer science.
- 6. To help the student teachers in acquiring skills relating to planning lessons and presenting them effectively.

UNIT I: INTRODUCTION

- 1.1 What computers are: The various uses of computes in general The main parts of the computer and their role.
- 1.2 Brief History of the development of computers. Different kinds of computers use of computers in schools.
- 1.3 The Aims and Objectives of teaching Computer Science in Schools –
- 1.4 Computer Science teaching at different levels, primary, Secondary and Higher Secondary levels.
- 1.5 The place of Computer Science in Higher Secondary Curriculum. Correlation with other school subjects computer Literacy and Awareness Programmes.

<u>UNIT II FUNCTIONING OF COMPUTER, OPERATING SYSTEMS AND APPLICATION.</u>

- 2.1 Binary, octal and Hexa system of numbers. Computer Arithmetic pitfalls in computing.
- 2.2 Additional peripherals and their use Hardware- Software Importance Types and Utilities. Logic Gates Introduction Utilities.
- 2.3 Operating systems function and Types DOS and its applications.
- 2.4 Windows Introduction Importance of mouse
- 2.5 Use of interpreters and Compliers Basic concepts in Visual Basic

<u>UNIT III COMPUTER SOFTWARES (DOS BASED SOFTWARES AND WINDOW BASED)</u>

- 3.1 Word star Introduction creating a document menus Lotus 1-2-3 introductionmenus.
- 3.2 Worksheets preparation use dbase- introduction Utilities Creation of Reports creation of labels.
- 3.3 MS Office introduction and Utilities MS word Introduction Entering Text Creating documents
- 3.4 MS Excel 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.
- 3.5 Power Point slide preparation applications in Teaching and Learning Net work its advantages and types.

UNIT IV: MICROTEACHING, LESSON AND UNIT PLANNING

- 4.1 Teaching Skills Micro teaching Cycle Teaching components planning a micro lesson
- 4.2 Teaching relevant Skills- Skill of Explaining, Stimulus Variation, Reinforcement, Questioning, Black board writing.
- 4.3 Lesson Planning: Importance of Lesson Planning
- 4.4 Writing Instructional Objectives and Planning for specific behavioral changes- steps and preparation of Model Lesson Plan.
- 4.5 Curriculum need and importance Review of units in Computer science- need and importance of reviewing computer Science lessons Characteristics of good review Different techniques of reviewing a lesson.

UNIT V: EVALUATION IN COMPUTER SCIENCE

- 5.1 The concept of evaluation, Evaluation for achievement, diagnosis and prediction
- 5.2 Characteristics of good test Blue Print online examinations
- 5.3 Various kinds of test, Principles of construction and administration of an achievement test.
- 5.4 Diagnosis and prediction test construction, administration and interpretation
- 5.5 Co-efficient of correlation Rank order correlation- Normal probability curve and its applications in educational evaluation.

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- 8. Joe karaynak and Joe Habraken. (1997) Internet 6 in –1 Prentice –Hall of India Pvt. Ltd.
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OPTIONAL PAPERS OPTIONAL I – ECONOMICS EDUCATION

Objectives

- 1. To help the student teachers acquire knowledge of the nature, scope and development of Economics.
- 2. To sensitize 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 teaches 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 encourage the student teachers prepare hard and soft ware wherever and whenever necessary after understanding the theoretical value of them.
- 13. To encourage the student teaches understand the various methods of evaluating the classroom teaching.

UNIT I: NATURE, SCOPE OF ECONOMICS AND METHODS OF TEACHING

- 1.1 Economics , political Science and civics as social sciences and the interrelationship between them- Place of these in higher Secondary Schools
- 1.2 General and specific aims of teaching Economics at the Higher Secondary level.
- 1.3 Principles of micro teaching- teaching of relevant set induction: Black Board Writing, Explaining, Questioning, illustrations with examples, Reinforcement, Stimulus Variations Need for link lessons in micro teaching.
- 1.4 Method of organizing experiences in teaching Lecture Demonstration Discussion o Problem – Enquiry approach – Project – Supervised Study –Socialized – recitation – workshop – Laboratory.

1.5 Activity based teaching – use of source materials – case studies – Their applicability to the teaching of Economics at the Higher Secondary level.

UNIT II: LESSON, UNIT PLANNING AND INSTRUCTIONAL AIDS

- 2.1 Lesson Planning importance of lesson plans Writing Instructional objectives Planning for specific behavioral changes. Essential parts of the lesson plan preparation and use of Unit plan.
- 2.2 Visual Aids: Charts Maps Graphs Diagrams Pictures and Photographs Film & Film strips Over head projector –
- 2.3 Chalk board Bulletin board Flannel board Magnetic boards exhibits preparation of Models and improvised aids and their use in teaching of economics.
- 2.4 Audio Aids: Radio Tapes Record players
- 2.5 Audio Visual aids: Television video Cassette CAI Mass media. Use of these in the teaching of Economics.

<u>UNIT III: CURRICULUM DESIGN AND MODERN METHODS OF TEACHING ECONOMICS</u>

- 3.1 The principles of curriculum construction as applicable to Economics The selection of content and its organization Content materials in the syllabus their relation to objectives of teaching the subject.
- 3.2 Critical Study of the Curriculum in Economics at the Tamil Nadu Higher Secondary School Level,
- 3.3 Uses of modern techniques in Teaching Economics Discussion seminar Workshop supervised study.
- 3.4 Scientific attitudes and its importance to the individual and society Catering to the individual difference.
- 3.5 Instructional model and multimedia Self learning Packages.

UNIT IV: RESOURCES FOR TEACHING ECONOMICS AND EDUCATIONAL TECHNOLOGY.

- 4.1 Club Guest lecturers Exhibition, Museums, field trips excursion- community resources use in the teaching economics.
- 4.2 Educational Technology: Introduction objectives, Future Trends: Emerging Technologies in education.
- 4.3 Audio Video Technology Interactive Broadcasting Tele text and Video text Audio conferencing.
- 4.4 Video Computer Technology Computer Videodisc Internet and Intranet and Intranet- Electronic -mail (E-mail)
- 4.5 Computer conferencing Tele –communication and Networks Telephone and Fax Teleconferencing V SAT (Very Small Aperture Terminals) EDUSAT.

UNIT V: EVALUATION AND STATISTICS

- 5.1: Evaluation Nature and scope characteristics of a good test in Economics- Reliability –Validity- objectivity Item analysis.
- 5.2: Different types of objective tests Blue print of a question paper Discriminating index and difficulty value.
- 5.3: Remedial measures Interpretation of test scores Measures of central tendency Mean Median Mode Measures of Variability.
- 5.4: Standard deviation- quartile deviation- Percentile and percentile ranks. Co-efficient of correlation
- 5.5: Rank order correlation Normal probability curve and its applications in educational evaluation.

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 Web Pages bearing on the same unit in the school curriculum.

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ELECTIVE - I ENVIRONMENTAL EDUCATION

Objectives:

On successful completion of the course the student-teachers should have:

- 1. Understood the concept and evolutionary development of environmental education.
- 2. Developed the ability to identify the environmental problems caused by pollution and destruction of natural resources.
- 3. Learnt the environmental Acts, Policies and Legislations.
- 4. Learnt the environmental programmes conducted worldwide through various modes and agencies.

5. Gained the knowledge to frame the environmental education curriculum along with method of teaching and learning through technology.

UNIT I: Concept of Environmental Education

- 1.1 Meaning need and scope of environmental education
- 1.2 Evolution of environmental education
- 1.3 Development of environmental education
- 1.4 Stock Holm conference, Tbilisi conference and Earth Summit
- 1.5 Instructional objectives of environmental education

UNIT II: Environmental Problems

- 2.1 Acid rain and Ozone depletion
- 2.2 Effects of Urbanization and Industrialization
- 2.3 Impact of Deforestation
- 2.4 Pollution: Kinds, Causes and Prevention
- 2.5 Global warming and Kyoto Conference

UNIT III: Environmental Policies

- 3.1 The Water Act 1974, 1977
- 3.2 The Air Act 1981
- 3.3 Wild Life Act 1972 and Forest Conservation Act 1980
- 3.4 Environment Act 1986
- 3.5 Environmental Legislations in India and Environment Management

UNIT IV: Environmental Programmes

- 4.1 Conservation Education Movements: Chico Movement, Social Forestry Scheme and Role of UNESCO
- 4.2 National and International Movements: Silent Valley Project, Ganga cleaning and Del Lake study
- 4.3 Educative and Preventive measures adopted by Government, NGOs and other voluntary organizations
- 4.4 Narmada Controversy
- 4.5 Environmental awareness World Environment Day and Water Day

UNIT V: Curriculum Development and Environmental Education

- 5.1 Curriculum Development: Inter-disciplinary, Multi-disciplinary, Formal and Non-formal approach
- 5.2 Learner initiated activities: value oriented, problem centered, community oriented activities
- 5.3 Teaching-learning strategies and evaluation techniques in environmental education
- 5.4 Planning environmental education in schools, colleges and universities
- 5.5 Role of electronic media, mass media and computers in environmental education.

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ELECTIVE PAPER – II PHYSICAL EDUCATION

Objectives

- 1. To understand the importance of physical education in schools.
- 2. To enable students organize physical education activities.
- 3. To help them understand the concept of physical fitness.
- 4. To appreciate the concept of health education.
- 5. To understand environmental education related to physical education.

UNIT I: INTRODUCTION TO PHYSICAL EDUCATION

- 1.1 Definition Meaning Aim and Objectives of Physical Education
- 1.2 Physical Education as a integral part of General Education.
- 1.3 Principles of Physical Education.
- 1.4 Modern Olympics Asian Games.
- 1.5 Role of National Organizations Viz. SAI, NSNIS,LOA, SDATN, AGF, AND LLINPE in promoting physical education and Sports in India.

UNIT 2: METHODS, ORGANIZATION & ADMINISTRATION

- 2.1 Lesson Plan Parts and preparation of General Lesson.
- 2.2 Methods of teaching physical activities.
- 2.3 Organization of Intramural and Extramural Competitions
- 2.4 Organization of play Festival Tournaments and Athletic meet.
- 2. 5 Basic knowledge of physical activities and games:
 - i) Calisthenics.- ii) Indigenous activities a. Padmasana, b. Pujangasana
 c. Salabasana, d. Dhanurasana, e. Sarvankasana, f. Halasana, g.
 Vakkirasana, h. Arthmachendasa, i. Savasana
 - ii) Minor Games
 - iii) Major Games: Basic skills and rules of the following games:
 - a. Indigenous games: Kabaddi (or) Kho-Kho.
 - b. Ball games: Volley Ball (or) Ball Badminton.

UNIT: III PHYSICAL FITNESS

- 3.1 Meaning of physical well being physical fitness and its importance Relationship of physical well being with physical fitness.
- 3.2 Meaning and importance of components of fitness: Strength, Flexibility, Muscular endurance and Cardio –Vascular endurance.
- 3.3 Assessment of physical fitness AAFPERD Health Related Physical Fitness Test. iii) Cooper's Run and Walk Test (12 Minutes Men & 8 Minutes Women)
- 3.4 Development of Components of physical fitness
 - i) Stretching exercise, ii) isotonic exercises and iii) Aerobic exercises
- 3.2 Adapted physical education programme for the disabled.

UNIT IV HEALTH EDUCTION AND NUTRITION

- 4.1 Meaning and importance of Health Importance of Health education aim and objectives of Health Education.
- 4.2 Factors influencing Health Desirable, Health habits Hygiene School health programme.
- 4.3 Communicable disease Typhoid, cholera, malaria, chicken pox, T.B Agencies of transmission signs and symptoms measures to control them.
- 4.4 Food and Nutrition constituents of good nutritive food fat, protein, carbohydrate, minerals, vitamins. –role of nutrients and sources. Body mass index.
- 4.5 Balanced Diet, under nutrition, malnutrition- caloric requirements for different age and sex. Ergogenic aids in sports.

UNIT V: FIRST AID AND PHYSIOTHERAPY

- 5.1 First Aid meaning need and importance of first aid common sports injuries and their first aid treatment (sprain, stain, contusion, fracture, dislocation and skin injuries)
- 5.2 Bandages Types of Bandages and kind of dressing
- 5.3 Common ailments among school children and their treatment chilblain Prickly Heat warts impetigo Erysipelas and Whitlow)
- 5.4 Physiotherapy Definition –importance of physiotherapy principles of physiotherapy.
- 5.5 Electrotherapy Hydrotherapy Thermo therapy Posture Postural deformities therapeutic exercises.

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ELECTIVE PAPER – III INCLUSIVE EDUCATION

Objectives

The student teacher is expected to acquire a basic knowledge on identification and characteristics of various disabilities such as

- 1. Blindness and Low Vision
- 2. Hearing Impairment
- 3. Mental Retardation and Mental Illness
- 4. Locomotor, Neurological and Leprosy Cured
- 5. Neuro-developmental Disorders
- 6. Multiple Disabilities, Deaf blindness

Course Content

Unit 1: Blindness and Low Vision .

- 1.1 Definition and Identification
- 1.2 Incidence and Prevalence
- 1.3 Characteristics
- 1.4 Causes and Prevention
- 1.5 Intervention and Educational Programmes

Unit 2: Hearing Impairment.

- 2.1 Definition and Identification
- 2.2 Incidence and Prevalence
- 2.3 Causes and Prevention
- 2.4 Types of Hearing Loss and Characteristics
- 2.5 Modes of Linguistic Communication and Educational Programmes

Unit 3: Mental Retardation

- 3.1 Definition and Identification of Mental Retardation and Mental Illness
- 3.2 Incidence and Prevalence, Causes and Prevention
- 3.3 Characteristics Mild, Moderate, Severe, Profound
- 3.4 Types and Classification of Mental Retardation and Mental Illness
- 3.5 Intervention and Educational Programmes

Unit 4: Assisitive Technology and Adoptive Technology for differently abled

- 4.1. Concept and Definition of Assisitive Technology
- 4.2. Concept and Definition of Adoptive Technology
- 4.3. Low , Medium and Advance Assistive technology
- 4.4. Assisitve and Adoptive Technology for Hearing impaired
- 4.5. Assistive and Adoptive Technology for Visually Impaired

Unit 5: Learning Disabilities

- 5.1 Concept and Definition of Learning Disabilities. .
- 5.2 Identification of learning disablities
- 5.3 Causes and Prevention
- 5.4 Characteristics
- 5.5 Intervention and Educational Programme

Reference books

- 1. Poremba, C. The adolescent and young adult with learning disabilities what are his needs? What are the needs of those abilities of children and youth. Tuisa The Association for Children with Learning Disabilities, 1967 pp. 142-148.
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QUESTION PATTERN FOR REGULAR B.ED 75 marks

Answer ALL the questions

PART-A

1-10 One word questions 1x10=10

PART-B

Five questions are to be answered out of Eight questions -5 X3=15

PART-C

TEN questions EITHER/ OR type . Each question carries 10 marks. =5x10=50Marks

1. a OR b-

5x10=50 Marks

- 2. a OR b
- 3. a OR b
- 4. a OR b
- 5. a OR b