SYLLABUS
EDUCATION

Note:
There are Three Papers for each of the subjects. Paper-I on Teaching and Research aptitude, Paper -II and Paper-III based on the syllabus of concerned subjects. Details are furnished below:

PAPER -I
Subject: General Paper on Teaching & Research Aptitude

The test is intended to assess the teaching/research aptitude of the candidate. They are supposed to possess and exhibit cognitive abilities like comprehension, analysis, evaluation, understanding the structure of arguments, evaluating and distinguishing deductive and inductive reasoning, weighing the evidence with special reference to analogical arguments and inductive generalization, evaluating, classifying and definition, avoiding logical inconsistency arising out of failure to see logical relevance due to ambiguity and vagueness in language. The candidates are also supposed to have a general acquaintance with the nature of a concept, meaning and criteria of truth, and the source of knowledge.

There will be 60 questions, out of which the candidates can attempt any 50. In the event of the candidate attempting more than 50 questions, the first 50 questions attempted by the candidate will only be evaluated.

1. The Test will be conducted in objective mode from SET 2012 onwards. The Test will consist of three papers. All the three papers will consists of only objective type questions and will be held on the day of Test in two separate sessions as under:

<table>
<thead>
<tr>
<th>Session</th>
<th>Paper</th>
<th>Number of Questions</th>
<th>Marks</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>I</td>
<td>60 out of which 50 questions are to be attempted</td>
<td>50% x 2 = 100</td>
<td>1¼ Hours</td>
</tr>
<tr>
<td>First</td>
<td>II</td>
<td>50 questions all of which are compulsory</td>
<td>50% x 2 = 100</td>
<td>1¼ Hours</td>
</tr>
<tr>
<td>Second</td>
<td>III</td>
<td>75 questions all of which are compulsory</td>
<td>75% x 2 = 150</td>
<td>2½ Hours</td>
</tr>
</tbody>
</table>

2. The candidates are required to obtain minimum marks separately in Paper-II and Paper-III as given below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Paper-I</th>
<th>Paper-II</th>
<th>Paper-III</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>40 (40%)</td>
<td>40 (40%)</td>
<td>75 (50%)</td>
</tr>
<tr>
<td>OBC</td>
<td>35 (35%)</td>
<td>35 (35%)</td>
<td>67.5 (45%) rounded off to 68</td>
</tr>
<tr>
<td>PH/VH/SC/ST</td>
<td>35 (35%)</td>
<td>35 (35%)</td>
<td>60 (40%)</td>
</tr>
</tbody>
</table>

Only such candidates who obtain the minimum required marks in each Paper, separately, as mentioned above, will be considered for final preparation of result.

However, the final qualifying criteria for eligibility for Lectureship shall be decided by Steering Committee before declaring of result.

3. The syllabus of Paper-I, Paper-II and Paper-III will remain the same.
1. **Philosophical Foundation of Education**

   Relationship of Education and Philosophy
   Western Schools of Philosophy:
   - Idealism, realism, naturalism, Pragmatism, Existentialism, Marxism with special reference to the concepts of knowledge, reality and values, their educational implications for aims, contents and methods of education.
   - Indian Schools of Philosophy (Sankhya, Vedanta, Buddhism, Jainism, Islamic traditions) with special reference to the concept of knowledge, reality and values and their educational implications
   - Contributions of Vivekananda, Tagore, Gandhi and Aurobindo to educational thinking
   - National values as enshrined in the Indian Constitution and their educational implications
   - Modern concept of Philosophy: Analysis - Logical analysis
   - Logical empiricism and Positive relativism - (Morris L. Prigge)

2. **Sociological Foundations of Education**

   Relationship of Sociology and Education
   - Meaning and nature of Educational sociology and Sociology of education
   - Education as a social sub-system-specific characteristics
   - Education and the home
   - Education and the community with special reference to Indian society
   - Education and modernization
   - Education and politics
   - Education and religion
   - Education and Culture
   - Education and democracy
   - Socialization of the child
   - Meaning and nature of social change
   - Education as related to social stratification and social mobility
   - Education as related to social equity and equality of educational opportunity

3. **Psychological Foundations of Education**

   Relationship of Education and Psychology
   - Process of growth and Development
   - Physical, social, emotional and intellectual development
   - Development of concept formation, logical reasoning, problem solving and creative thinking; language development
   - Individual differences-determinants; role of heredity and environment; implications of individual differences for organising educational programmes
   - Intelligence - its theories and measurement
   - Learning and Motivation
   - Theories of learning - Thorndike is connectionism; Pavlov's classical and Skinner's operant conditioning; Learning by insight; Hull's reinforcement
   - Theory and Tolman's theory of learning; Lewin's Field theory
   - Gagne's hierarchy of learning
   - Factors influencing learning
   - Learning and motivation
   - Transfer of learning and its theories
   - Psychology and education of exceptional children - creative, gifted, backward, learning disables and mentally retarded
   - Personality - type and trait theories - measurement of personality
   - Mental health and hygiene - process of adjustment, conflicts and defence mechanism, mental hygiene and mental health
   - Sex education
   - Guidance

4. **Methodology of Educational Research**

   Nature and scope of Educational Research
   - Meaning and Nature
   - Need and Purpose
   - Scientific Inquiry and Theory Development - some emerging trends in research
   - Fundamental - Applied and Action Research

Constraints on social change in India (caste, ethnicity, class, language, religions regionalism)
- Education of the socially and economically disadvantaged sections of the society with special reference to scheduled castes and scheduled tribes, women and rural population
Formulation of Research Problem
Criteria and sources for identifying the problem
Delineating and operationalizing variables
Developing assumptions and hypothesis in various types of research
Collection of Data
Concept of population and sample
Various methods of sampling
Characteristics of a good sample
Tools and Techniques
Characteristics of a good research tool
Types of research tools and techniques and their uses
Questionnaire - Interviews-observations
Tests and scales, projective and sociometric technique
Major Approaches to Research
Descriptive Research
Ex-post facto Research
Laboratory Experiment
Field Experiment
Field Studies
Historical Research
Analysis of data
Descriptive and Inferential Statistics. The null hypothesis, test of significance, types of error, one-tailed and two-tailed tests
The t-test
The F-test (one-way and ANOVA)
Non-parametric tests (Chi-square test)
Biserial, point-biserial, tetrachoric and phi-coefficient of correlation
Partial and multiple correlations

Unit - I
Western Schools of Philosophy :
Idealism, Realism, Naturalism, Pragmatism, Existentialism;
with special reference to the concepts of knowledge, reality and values; their educational implications for aims, contents and methods of education
Indian schools of philosophy (Vedanta, Buddhism, Jainism, Islamic traditions) with special reference to the concepts of knowledge, reality and values and their educational implications
Contributions of Indian Thinkers, like Vivekananda, Tagore, Gandhi and Aurobindo to educational thinking

Unit - II
Meaning and nature, Education and Social change, constraints on social change (caste, ethnicity, class, language, religion, population and regionalism)
Education as related to social equity and equality of educational opportunities. Education of socially and economically disadvantaged section of society with reference to scheduled castes and schedule tribes, women and rural populations

Unit - III
Process of Growth and Development
Physical, social, emotional and intellectual
Development of concept formation, logical reasoning, problem solving and thinking language development
Individual differences–determinates–role of heredity and environment. Implications of individual differences for organising educational programmes

Unit - IV
Intelligence - its Theories and Measurement
Learning and Motivation :
- Theories of learning : Thorndike's conditions, Pavlov's classical and Skinner's operant conditioning; learning by insight Hull's reinforcement theory and Tolman's theory of learning
- Gagne's hierarchy of learning
- Factors influencing learning
- Learning and motivation
- Transfer of learning and its theories

Unit - V
Personality - type and trait theories - measurement of personality
Mental health and hygiene
Process of adjustment, conflicts and defence mechanism, mental hygiene

Unit - VI
Concept and principles of guidance and counselling, types of guidance and counseling
Tools and Techniques of Guidance - records, scales and tests, techniques, interview
Organising Guidance services of different levels of education, occupational information, kinds of services, like information, testing, counselling and follow-up

Unit - VII
Sample: Concept of population and sample, various methods of sampling
Hypotheses: Concept, difference with assumptions, source, various type hypothesis
Tools: Questionnaire, observation and interview as tools of data collection and scales

Unit - VIII
Descriptive Research, Ex-post, facto Research, Survey Research, Historical Research
Experimental Research: Designs of experimental research characteristics Internal and external validity in experimental research
Qualitative Research: Phenomenological research, Ethnomethodical and Naturalistic inquiry

Unit - IX
Universalisation of elementary education in India
Vocationalization of education in USA and India
Educational administration in USA, UK (Britain and Ireland) and India

Distance education and continuing education in Australia, UK and India

Unit - X
Construction and Development of curriculum
- Different models
- Administrative
- Grass root
- Demonstration
- System analysis
Curriculum Evaluation
- Formative
- Summative
- Interpretation of evaluation results

PAPER - III
(Elective/Optional)

Elective - I
Development of Modern Concept of Educational Administration from 1900 to present-day
Taylorism
Administration as a bureaucracy
Human Relations Approach to Administration
Meeting the Psychological needs of employees, systems approach specific trends in Educational Administration such as
(a) Decision making, (b) Organizational Compliance, (c) Organizational Development, (d) PERT, (e) Modern Trends in Educational Management.

Leadership in Educational Administration:
Meaning and Nature of Leadership
Theories of leadership
Styles of leadership
Measurements of leadership

Education Planning:
Meaning and Nature
Approaches to Educational Planning
Perspective Planning
Institutional Planning
Educational Supervision:
Meaning and Nature
Supervision as service activity
Supervision as a process
Supervision as functions
Supervision as educational leadership
Modern supervision
Functions of supervision
Planning the supervisory programme
Organizing supervisory programme
Implementing supervisory programme

Elective - II
Educational Measurement and Evaluation concept, scope, need and relevance
Tools of measurement and evaluation subjective and objective tools, essay test, objective test, scales, questionnaires, schedules, inventories, performance tests
Characteristics of a good measuring instrument:
Validity
Reliability
Norms
Usability etc.
Test standardization:
Norm-referenced and criterion-referenced test, scaling standard scores T-scores and C-scores
Steps in the standardization of a test
Measurement of achievement, aptitudes, intelligence, attitudes, interest and skills
Interpretation of test-scores and methods of feedback to students
New trends:
Grading, semester, continuous internal assessment, question bank, uses of computer in evaluation, qualitative analysis

Elective - III
Meaning and scope of Educational Technology
- education technology as systems approach to education
- systems approach in educational technology and its characteristics
- components of educational technology, software, hardware

Multi-media approach in Educational technology
Modelies of Teaching - difference between teaching and instruction, conditioning and training
Stages of teaching-pre-active, interactive and post-active
Teaching at different levels-memory, understanding and reflective
Modification of teaching behaviour: Microteaching, Flander's Interaction Analysis simulation
Programmed Instruction (origin, types, linear and branching, development of programmed instruction material-linear/braching model, teaching machines, computer assisted instruction
Models of Teaching: Concept, different families of teaching models
Designing Instructional System
- formulation of instruction objectives
- task analysis
- designing of instructional strategies, such as lecture, team teaching, discussion, panel discussion, seminars and tutorials.
Communication Process: Concept of communication, Principles, Modes and Barriers of communication, Classroom communication (interaction verbal and non-verbal)
Distance Education: Concept, Different contemporary system, viz., Correspondence, Distance and open : Student support Services: Evaluation strategies in Distance Education; Counseling Methods in Distance Education.
Development of Evaluation Tools - Norm referenced and criterion-referenced tests.

Elective - IV
Concept and nature of special education
- objectives
- types
- historical perspective
- integrated education
Education of Mentally Retarded
- characteristics of the retarded
- educable mentally retarded
- teaching strategies
- enrichment programmes
- remedial programmes
- etiology and prevention
- mental hygiene as remediation

Education of the visually impaired:
- characteristics
- degree of impairment
- etiology and prevention
- educational programmes

Education of the hearing impaired:
- characteristics
- degree of impairment
- etiology and prevention
- educational programmes

Education of the Orthopaedically Handicapped:
- types of handicap
- characteristics
- educational programmes

Education of the Gifted and Creative Children:
- characteristics
- creativity and identification process
- educational programmes

Learning Disabled Children:
- characteristics
- identification
- educational programmes

Education of Juvenile Delinquents:
- characteristics
- problems of alcoholism, drug addiction
- anti-social and character disorder
- educational programmes for Rehabilitation

Elective - V
Teacher Education: Historical perspective Recommendations of various commissions on teacher education; Kothari Commission
National Policy on Education
aims objectives of teacher education at -

Syllabus/Education

- elementary level
- secondary level
- college level
Teaching as a Profession:
- Professional organizations for various levels of teachers and their role; performance appraisal of teachers
- Faculty improvement programmes for teacher education
Types of teacher education programmes and agencies:
- In-service teacher education
- Preservice teacher education
Distance education and teacher education
Orientation and Refresher courses

Current Problems:
- Teacher education and practicing schools
- Teacher education and other institutions
- Preparing teachers for special schools
- Implementation of curricula of teacher education

Area of Research:
- Teaching effectiveness
- Criteria of admission
- Modification of teacher behavior
- School effectiveness