

SYLLABUS

General Paper on Teaching & Research Aptitude

Note :

There are two Papers for each of the subject. Paper - I on Teaching and Research aptitude, Paper - II 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, classification 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 50 questions for Paper- I. There is a prescribed syllabus for Paper-I.

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

Session	Paper	Number of Questions	Marks	Duration
First	I	50 questions	$50 \times 2 = 100$	1 Hour
Second	II	100 questions	$100 \times 2 = 200$	2 Hours

2. Candidates who appear in two Papers and secure at least 40% aggregate marks for candidates belonging to General category and atleast 35% aggregate marks for candidates belonging to reserved categories will be declared qualifies for Eligibility for Assistant Professor by following the reservation policy of the State Government.
3. The Syllabus of Paper-1 and paper - II will remain the same.

**SLET Commission, Assam
(N.E. Region)**

**Subject : General Paper on Teaching & Research
Aptitude**

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PAPER-I

The main objective is to assess the teaching and research capabilities of the candidates. The test aims at assessing the teaching and research aptitude as well. Candidates are expected to possess and exhibit cognitive abilities, which include comprehension, analysis, evaluation, understanding the structure of arguments, deductive and inductive reasoning. The candidates are also expected to have a general awareness about teaching and learning processes in higher education system. Further, they should be aware of interaction between people, environment, natural resources and their impact on the quality of life.

The details of syllabi are as follows:

Unit – 1: Teaching Aptitude

- Teaching: Concept, Objectives, Levels of teaching (Memory, Understanding and Reflective), Characteristics and basic requirements.
- Learner's characteristics: Characteristics of adolescent and adult learners (Academic, Social, Emotional and Cognitive), Individual differences.
- Factors affecting teaching related to: Teacher, Learner, Support material, Instructional facilities, Learning environment and Institution.
- Methods of teaching in Institutions of higher learning: Teacher centred vs. Learner centred methods; Off-line vs. on-line methods (Swayam, Swayamprabha, MOOCs etc).

- Teaching Support System: Traditional, Modern and ICT based.
- Evaluation Systems: Elements and Types of evaluation, Evaluation in Choice Based Credit System in Higher Education, Computer based testing, Innovations in evaluation systems.

Unit - 2 : Research Aptitude

- Research: Meaning, Types and Characteristics, Positivism and Post-positivistic approach to research.
- Methods of Research: Experimental, Descriptive, Historical, Qualitative and Quantitative methods.
- Steps of Research
- Thesis and Article writing: Format and styles of referencing.
- Application of ICT in research.
- Research ethics.

Unit - 3 : Comprehension

- A passage of text be given. Questions be asked from the passage to be answered.

Unit - 4 : Communication

- Communication: Meaning, types and Characteristics of communication.
- Effective communication: Verbal and Non-verbal, Inter-Cultural and group communications, Classroom communication.
- Barriers to effective communication.
- Mass-Media and Society.

Unit - 5 : Mathematical Reasoning and Aptitude

- Types of reasoning.
- Number series, Letter series, Codes and Relationships.
- Mathematical Aptitude (Fraction, Time & Distance, Ratio, Proportion and Percentage, Profit and Loss, Interest and Discounting, Averages etc.).

Unit - 6 : Logical Reasoning

- Understanding the structure of arguments: argument forms, structure of categorical propositions, Mood and Figure, Formal and Informal fallacies, Uses of language, Connotations and denotations of terms, Classical square of opposition.
- Evaluating and distinguishing deductive and inductive reasoning.
- Analogies.
- Venn diagram: Simple and multiple use for establishing validity of arguments.
- Indian Logic: Means of knowledge.
- Pramanas : Pratyaksha (Perception), Anumana (Inference), Upamana (Comparison), Shabda (Verbal testimony), Arthapatti (Implication) and Anupalabddhi (Non-apprehension).
- Structure and kinds of Anumana (inference), Vyapti (invariable relation), Hetvabhasas (fallacies of inference).

Unit - 7 : Data Interpretation

- Sources, acquisition and classification of Data.
- Quantitative and Qualitative Data.
- Graphical representation (Bar-chart, Histograms, pie-chart, Table-Chart and Line-Chart) and mapping of Data.
- Data Interpretation.
- Data and Governance.

Unit - 8 : Information and Communication Technology (ICT)

- ICT: General abbreviations and terminology.
- Basics of Internet, Intranet, E-mail, Audio and Video-conferencing.
- Digital initiatives in higher education.
- ICT and Governance.

Unit - 9 : People, Development and Environment

- Development and environment: Millennium development and Sustainable development goals.
- Human and environment interaction: Anthropogenic activities and their impacts on environment.
- Environmental issues: Local, Regional and Global; Air pollution, Water pollution, Soil pollution, Noise pollution, Waste (solid, liquid, biomedical, hazardous, electronic), Climate change and its Socio-Economic and Political dimensions.
- Impacts of pollutants on human health.
- Natural and energy resources: Solar, Wind, Soil, Hydro, Geothermal, Biomass, Nuclear and Forests.
- Natural hazards and disasters: Mitigation strategies.
- Environmental Protection Act (1986), National Action Plan on Climate Change, International Agreements/ efforts – Montreal Protocol, Rio-Summit. Convention on Biodiversity, Kyoto Protocol, Paris Agreement, International Solar Alliance.

Unit - 10 : Higher Education System

- Institutions of higher learning and education in ancient India.
- Evolution of higher learning and research in Post Independence India.
- Oriental, Conventional and Non-Conventional learning programmes in India.
- Professional, Technical and Skill Based education.
- Value education and environmental education.
- Policies, Governance and Administration.

NOTE: (i) Five questions each carrying 2 marks are to be set from each Module.

(ii) Whenever graphical / pictorial question (s) are set for sighted candidates, a passage followed by equal number of questions and weightage be set for visually impaired candidates.