



PROF. G. RAM REDDY CENTRE FOR DISTANCE EDUCATION

(Recognized by the Distance Education Bureau, New Delhi.)

OSMANIA UNIVERSITY, HYDERABAD – 500 007

SYLLABUS OF THE TEST

100 Questions – 100 Marks – 90 Minutes

Section - A: Analytical Ability (35 Questions 35 Marks)

1. Data Sufficiency: (10 Questions 10 Marks)

A question is given followed by data in the form of two statements labeled as i and ii. If the data given in i alone is sufficient to answer the question then choice (1) is the correct answer. If the data given in ii alone is sufficient to answer the question then choice (2) is the correct answer. If both i and ii put together are sufficient to answer the question but neither statement alone is sufficient, then choice (3) is the correct answer. If both i and ii put together are not sufficient to answer the question and additional data is needed, then choice (4) is the correct answer.

2. Problem Solving (25 Questions 25 Marks)

- Sequences and Series:** Analogies of numbers and alphabet, completion of blank spaces following the pattern in a:b::c:d relationship; odd thing out: missing number in a sequence or a series.
- Data Analysis :** The data given in a Table, Graph, Bar diagram, Pie Chart, Venn Diagram or a Passage is to be analyzed and the questions pertaining to the data are to be answered.
- Coding and Decoding Problems:** A code pattern of English Alphabet is given. A given word or a group of letters are to be coded or decoded based on the given code or codes.
- Date, Time & Arrangement Problems :** Calendar problems, clock problems, blood relationships, arrivals, departures and schedules, seating arrangements, symbol and notation interpretation.

Section -B: Mathematical Ability (40 Questions 40 Marks)

I. Arithmetical Ability (20 Questions 20 Marks)

Laws of indices, ratio and proportion; surds; numbers and divisibility, *l.c.m.* and *g.c.d.*; Rational numbers, Ordering.; Percentages; Profit and loss; Partnership, Pipes and cisterns, time, distance and work problems, areas and volumes, mensuration, modular arithmetic.

II. Algebraical and Geometrical Ability

(15 Questions 15 Marks)

Statements, Truth tables, implication converse and inverse, Tautologies-Sets, Relations and functions, applications - Equation of a line in different forms.

Trigonometry - Trigonometric ratios, Trigonometric ratios of standard angles, (0° , 30° , 45° , 60° , 90° , 180°): Trigonometric identities: sample problems on heights and distances, Polynomials; Remainder theorem and consequences; Linear equations and expressions; Progressions, Binomial Theorem, Matrices, Notion of a limit and derivative; Plane geometry - lines, Triangles, Quadrilaterals, Circles, Coordinate geometry-distance between points.

III. Statistical Ability: (5 Questions 5 Marks)

Frequency distributions, Mean, Median, Mode, Standard Deviations, Correlation, simple problems on Probability.

Section-C: Communication Ability: (25 Questions 25 Marks)

Objectives of the Test

Candidates will be assessed on the ability to

- identify vocabulary used in the day-to-day **communication.** (5Questions 5Marks)
- understand the functional use of grammar in day-to-day communication as well as in the business contexts. (5Questions 5Marks)
- identify the basic terminology and concepts in computer and business contexts (letters, reports, memoranda, agenda, minutes etc.). 5Questions 5Marks)
- understand written text and drawing inferences. (10 Questions 10 Marks)