

DAT SYLLABUS
Session: 2024-25
Stream: COMMERCE

A. SUBJECT-ECONOMICS

CLASS-IX

1. Poverty as a Challenge

- Two typical cases of poverty
- Poverty as seen by Social Scientists
- Poverty Estimates
- Vulnerable Groups
- Interstate disparities
- Global Poverty Scenario
- Causes of Poverty
- Anti-poverty measures
- The Challenges Ahead

CLASS-X

2. Development

- What Development Promises - Different people different goals
- Income and other goals
- National Development
- How to compare different countries or states?
- Income and other criteria
- Public Facilities
- Sustainability of development

3. Sectors of the Indian Economy

- Sectors of Economic Activities
- Comparing the three sectors
- Primary, Secondary and Tertiary Sectors in India
- Division of sectors as organized and unorganized
- Sectors in terms of ownership: Public and Private Sectors

4. Money and Credit

- Money as a medium of exchange
- Modern forms of money
- Loan activities of Banks
- Two different credit situations
- Terms of credit
- Formal sector credit in India
- Self Help Groups for the Poor

5. Globalisation and the Indian Economy

- Production across countries
- Interlinking production across countries
- Foreign Trade and integration of markets
- What is globalization?
- Factors that have enabled Globalisation

- World Trade Organisation
- Impact of Globalization on India
- The Struggle for a fair Globalization

B. SUBJECT-ENGLISH

1. Two Unseen Passage- (5+5=10)

Multiple Choice Questions based on Discursive/Factual/Literary Passages of 70-100 words each to test comprehension and interpretation.

There will be two passages each carrying 5 MCQ's

2. Grammar-(1x20=20)

Twenty Multiple Choice Questions

- | | |
|---------------------------|-------|
| a. Tenses- | 1x3=3 |
| b. Modals- | 1x3=3 |
| c. Subject-verb concord- | 1x3=3 |
| d. Reported speech- | 1x3=3 |
| e. Determiners- | 1x3=3 |
| e. Phrasal Verb- | 1x3=3 |
| f. Idiomatic Expressions- | 1x2=2 |

C. SUBJECT-MATHEMATICS (BASIC)

CLASS-X

1. REAL NUMBERS

Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples, Proofs of irrationality of $\sqrt{2}, \sqrt{3}, \sqrt{5}$.

2. POLYNOMIALS

Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials

3. PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency.

Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variables algebraically - by substitution, by elimination. Simple situational problems.

4. QUADRATIC EQUATIONS

Standard form of a quadratic equation $ax^2 + bx + c = 0$, ($a \neq 0$). Solutions of quadratic equations (only real roots) by factorization, and by using quadratic formula. Relationship between discriminant and nature of roots.

Situational problems based on quadratic equations related to day to day activities to be incorporated.

5. ARITHMETIC PROGRESSIONS

Arithmetic Progression Derivation of the n^{th} term and sum of the first n terms of A.P. and their application in solving daily life problems.

6. CO-ORDINATE GEOMETRY

Concepts of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division).

7. TRIANGLES

Definitions, examples, counter examples of similar triangle.

- I. If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.
- II. If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side.
- III. If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar.
- IV. If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar.
- V. If one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.

8. CIRCLES

Tangent to a circle at, point of contact

- I. The tangent at any point of a circle is perpendicular to the radius through the point of contact.
- II. The lengths of tangents drawn from an external point to a circle are equal.

9. INTRODUCTION TO TRIGONOMETRY

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined). Values of the trigonometric ratios of 30° , 45° and 60° . Relationships between the ratios.

10. TRIGONOMETRIC IDENTITIES

Proof and applications of the identity $\sin^2 A + \cos^2 A = 1$. Only simple identities to be given.

11. HEIGHTS AND DISTANCES: Angle of elevation, Angle of Depression.

Simple problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation / depression should be only 30° , 45° , 60° .

12. AREAS RELATED TO CIRCLES

Area of sectors and segments of a circle. Problems based on areas and perimeter / circumference of the above said plane figures. (In calculating area of segment of a circle, problems should be restricted to central angle of 60° , 90° and 120° only.

13. SURFACE AREAS AND VOLUMES

Surface areas and volumes of cubes, cuboids, spheres (including hemispheres) and right circular cylinders/cones.

14. STATISTICS

Mean, median and mode of grouped data (bimodal situation to be avoided).

15. PROBABILITY

Classical definition of probability. Simple problems on finding the probability of an event.