

DELHI PUBLIC SCHOOL, BANGALORE (SOUTH)
PORTIONS FOR CLASS XI ENTRANCE EXAMINATION

PAPER – I	ENGLISH	50 MARKS	1 ½ HRS
PAPER – II	SCIENCE	50 MARKS	1 ½ HRS
PAPER- III	MATHS	50 MARKS	1 ½ HRS
PAPER –IV	SOCIAL SCIENCE	50 MARKS	1 ½ HRS

Candidates applying for the streams given below will appear in papers mentioned alongside

HUMANITIES	PAPER I & IV
COMMERCE	PAPER I & III
SCIENCE	PAPER II & III

PORTIONS:

ENGLISH(PAPER – I)

- I. Reading Comprehension
- II. Writing:
Analytical writing
Formal Letter
Article writing
- III. Grammar :
Editing Cloze passage
Reported speech

SCIENCE (PAPER - II)

Physics: Electricity, Light, Human eye and the colourful world, Motion, Gravitation

Chemistry: 1.Mole concept

2. Chemical reactions and equations

3. Acids, bases and salts

4. Carbon and it's compounds (excluding

functional groups, nomenclature, chemical properties of organic compounds, ethanol, acetic acid, soaps and detergents)

5. Periodic classification of elements.

Biology: Life processes, How do organism reproduce, Heredity

MATHS (PAPER III)

1.REAL NUMBER

Fundamental Theorem of Arithmetic, Proofs of irrationality , Decimal representation of rational numbers in terms of terminating/non-terminating recurring decimals.

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. Situational problems.

Problems on equations reducible to linear equations.

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.

5. ARITHMETIC PROGRESSIONS

Derivation of the nth term and sum of the first n terms of A.P.

6. TRIANGLES

Definitions, examples, counter examples of similar triangles. BPT and Pythagoras Theorem and problems based on application of them

7. COORDINATE GEOMETRY

Concepts of coordinate geometry, graphs of linear equations. Distance formula.Section formula .

8. INTRODUCTION TO TRIGONOMETRY

Trigonometric ratios of an acute angle of a right-angled triangle. Values of the trigonometric ratios of

30° , 45° and 60° .Relationships between the ratios. Proving problems based on Trigonometric identities

9.HEIGHTS AND DISTANCES : Problems based on Real life application of Trig. Ratios(angle of elevation and angle of depression)

10. CIRCLES

Tangent to a circle at point of contact, problems based on application of theorem(radius is perpendicular and equal tangents from an external point) .

11. AREAS RELATED TO CIRCLES

Problems based on areas and perimeter / circumference of the plane figures ,Calculating area of segment of a circle, sector of a circle.

12. SURFACE AREAS AND VOLUMES

Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones. Problems involving converting one type of metallic solid into another and other mixed problems.

13. STATISTICS AND PROBABILITY

STATISTICS : Mean, median and mode of grouped data .

PROBABILITY : Simple problems on finding the probability of an event.

SOCIAL SCIENCE (PAPER IV)

Economics:

Money and Credit, Globalization, Sectors of Indian economy

History:

Nationalism in India, Nationalism in Europe

Political Science:

Power Sharing, Federalism, Outcomes of Democracy

Geography:

Manufacturing Industries, Agriculture