

NARAYANA SCHOLASTIC APTITUDE TEST (NSAT-2014)

SYLLABUS SHEET

CLASS V Studying

FOR V STUDYING STUDENTS (Going to VI)		
GENERAL SCIENCE		MATHEMATICS
<ul style="list-style-type: none"> World around us Living and non-living objects Our body- organs and their functions Diseases - Causes and cure Plants - growth and structure Animals - our friends 	<ul style="list-style-type: none"> How things move – force and work Simple Machines The world of transport and communication Natural Resources Natural Calamities Our Universe 	<ul style="list-style-type: none"> Fractions Decimals Percentage Profit and Loss Angles Triangles Area & Perimeter

CLASS VI Studying

FOR VI STUDYING STUDENTS (Going to VII)			
SCIENCE			MATHEMATICS
PHYSICS	CHEMISTRY	BIOLOGY	
<ul style="list-style-type: none"> Motion and Measurement of Distances Light, Shadows and Reflections Electricity and Circuits 	<ul style="list-style-type: none"> Fibre to Fabric Sorting materials into groups Separation of substances Changes around us Water 	<ul style="list-style-type: none"> Food: Where does it come from? Components of Food Getting to know plants Body movements 	<ul style="list-style-type: none"> Number system Algebra (Factors & multiples, fraction, simplification, algebraic expression, linear equation one variable) Ratio and Proportion Geometry (Parallel lines, Angles, Triangle, Quadrilateral, Circle) Data Handling

CLASS VII Studying

FOR VII STUDYING STUDENTS (Going to VIII)			
SCIENCE			MATHEMATICS
PHYSICS	CHEMISTRY	BIOLOGY	
<ul style="list-style-type: none"> Heat Motion and Time Winds, Storms and Cyclones 	<ul style="list-style-type: none"> Fibre to Fabric Acids, Bases and Salts Physical and Chemical Changes 	<ul style="list-style-type: none"> Nutrition in plants Nutrition in animals Weather, Climate and Adaptations of Animals to Climate Respiration in Organisms 	<ul style="list-style-type: none"> Integer Fraction and decimals, rational numbers Data Handling Simple Equations Lines and angles The Triangle and its properties Congruence of Triangles Comparing quantities Rational Numbers

CLASS VIII Studying

FOR VIII STUDYING STUDENTS (Going to IX)			
SCIENCE			MATHEMATICS
PHYSICS	CHEMISTRY	BIOLOGY	
<ul style="list-style-type: none"> • Force & Pressure • Friction • Sound 	<ul style="list-style-type: none"> • Fibre to Fabric • Metals & Non-Metal • Coal and Petroleum 	<ul style="list-style-type: none"> • Crop Production • Micro-Organisms • Conservation of Natural Resources 	<ul style="list-style-type: none"> • Rational Numbers • Linear Equations • Square Roots • Understanding Quadrilaterals • Practical Geometry

CLASS IX Studying

FOR IX STUDYING STUDENTS (Going to X)			
SCIENCE			MATHEMATICS
PHYSICS	CHEMISTRY	BIOLOGY	
<ul style="list-style-type: none"> • Motion, Uniform, Non uniform (Accelerated) • Forces and Laws of motion • Gravitation • Work and Energy • Sound 	<ul style="list-style-type: none"> • Matter in Our Surrounding • Is matter around us is pure? Properties of Matter, Solutions, Chemical Reactions • Atoms and Molecules • Mole Concept 	<ul style="list-style-type: none"> • Cell: The Fundamental Unit of Life • Tissues • Why do we fall ill • Diversity in Living Organism 	<ul style="list-style-type: none"> • Algebra • Geometry (lines, angles, tri-angles & quadrilateral area and circle) • Mensuration • Real Numbers • Coordinate Geometry

CLASS X Studying

FOR X STUDYING STUDENTS (Going to XI)			
PHYSICS	CHEMISTRY	MATHEMATICS	BIOLOGY
<ul style="list-style-type: none"> • Electricity • Magnetic Effects of Electric Current • Sources of Energy 	<ul style="list-style-type: none"> • Metal and Non-Metals • Acid, Basis and Salts • Chemical Reaction and Equations 	<ul style="list-style-type: none"> • Real number • Introduction to Trigonometry, Triangles, Statistics & Probability • Polynomials, Pair of Linear Equations in two variables 	<ul style="list-style-type: none"> • Control And Co-ordination • Life Processes

CLASS XI Studying

FOR XI STUDYING STUDENTS (Going to XII)			
PHYSICS	CHEMISTRY	MATHEMATICS	BOTANY
<ul style="list-style-type: none"> Units and dimensions Motion in a straight line Motion in a plane Laws of motion Work, power, energy System of particles and rotational motion Gravitation 	<ul style="list-style-type: none"> Some Basic Concepts of Chemistry Structure of Atom Classification of elements and Periodicity in Properties Chemical Bonding and molecular structure States of matter Thermo Dynamic Equilibrium Redox Reaction 	<ul style="list-style-type: none"> Linear inequality Complex number Sets PMI Relation and Function Trigonometry Permutation & Combination Binomial Theorem Sequence and series 	<ul style="list-style-type: none"> Living world Biological classification Plant kingdom Morphology of Flowering plant Anatomy of Flowering plants
			ZOOLOGY
			<ul style="list-style-type: none"> Animal Kingdom Structural Organization in Animals Cell The Unit of Life Bio-molecules Cell Cycle and Cell Division

CLASS XII Studying

FOR XII BOARD APPEARING STUDENTS			
PHYSICS	CHEMISTRY	MATHEMATICS	BOTANY
<ul style="list-style-type: none"> Electric charge and field Electric potential & capacitance Current electricity Alternating Current Magnetic effects of current Magnetism and matter Electromagnetic waves Electromagnetic induction 	<ul style="list-style-type: none"> Chemistry in Every day life Polymers Biomolecules Amines Aldehydes, Ketones and Carboxylic Acid Alcohols, Phenols and Ethers Haloalkanes and haloarenes Coordination Compounds 	<ul style="list-style-type: none"> Matrix Determinants Probability Linear programming Vector Inverse trigonometric function Differentiation Integration 	<ul style="list-style-type: none"> Reproduction in Organisms Sexual reproduction in flowering plants Principles of inheritance and variation Molecular basis of inheritance Strategies for enhancement in food production Microbes in human welfare Biotechnology Principles and Process Biotechnology and its applications Ecology
			ZOOLOGY
			<ul style="list-style-type: none"> Reproduction in Organism Human Reproduction Reproductive Health Human Health and Disease

- The Sample Questions given are not pertaining to the level of question with reference to any class. The type and level of questions may be different in main exam.
- The Test paper of V–VII will contain 10 questions of MAT and 20 questions each of Maths and Science. The Test paper of VIII – IX will contain 20 questions each of MAT, Science and Maths. The test paer of class will contain 20 questions of MAT and Maths/Biology and 10 questions each of Physics and Chemistry. The Test paper of X1 – X11 will contain 20 Questions each of Physics, Chemistry, Biology/ Maths.
- Negative Marking will be there.

SAMPLE QUESTIONS

MENTAL ABILITY TEST (MAT)

Directions: (1, 2): Number in the following question follows a certain pattern. Find out the missing number.

1. 10, 11, 12, 13, 15, 19, 27, 30, 39, 66, ___
(A) 150 (B) 140 (C) 80 (D) 70
2. 2, 3, 6, 4, 5, 20, 2, 9, ___
(A) 18 (B) 20 (C) 13 (D) 17

Directions: (3, 4): In each of the following question four words have been given, out of which three are alike in some manner and the fourth one is different. Choose out the odd one.

3. (A) Fish (B) Scorpion (C) Crab (D) Octopus
4. (A) Circle (B) Ellipse (C) Sphere (D) Cube

Directions: (5, 6): Each of the questions based on the following code scheme:

Code : Z A X B Y O T W C M I

Key : B Y E T F A I R U L D

5. BEAUTY will be written on
(A) ZXOCBA (B) ZXOCFI (C) ZXCOFI (D) ZXOFCI
6. TEARFUL
(A) BXOWYCM (B) BXWOYCM (C) BXCOWYM (D) BXOYWCM

Directions: (7, 8): Read the following information and answer the questions given below it :

7. I. F is the brother of A, II. C is the daughter of A
III. K is the sister of F IV. G is the brother of C.
Who is the uncle of G?
(A) A (B) C (C) F (D) K
8. I am facing east. I turn 100° in the clockwise direction and then 145° in the anti clockwise direction. Which direction am I facing now ?
(A) East (B) North-east (C) North (D) South-west

Directions: (9, 10): A cube of side 16 cm, painted red and cut it into 4 cm small pieces of cube then answer the followings :

9. Find total number small cubes?
(A) 64 (B) 32 (C) 48 (D) 84
10. How many small cubes are there which are having only three side painted ?
(A) 16 (B) 8 (C) 24 (D) 4

SCHOLASTIC APTITUDE TEST (SAT)

11. An unbalanced force acts on a body. The body
(A) Must remain at rest (B) Must move with uniform velocity
(C) Must be accelerated (D) Must move along a circle
12. The area under a speed-time graph is represented by Which of the following S.I. unit ?
(A) cm^2 (B) m^2 (C) m (D) cm
13. Incomplete combustion of carbon produces
(A) CO (B) CO_2 (C) C_3O_2 (D) H_2CO_3
14. Intermolecular space is the least in
(A) Water (B) Steam (C) Copper metal (D) All the above
15. Which one of the following is a fluid connective tissue?
(A) Areolar tissue (B) Cartilage (C) Blood (D) Ligament
16. Anemia is caused by deficiency of
(A) Iodine (B) Iron (C) Vitamin B_{12} (D) All the above
17. The bisectors of any two adjacent angles of a parallelogram intersect at
(A) 30° (B) 45° (C) 60° (D) 90°
18. Four-fifths of a number is greater than three-fourth of the number by 4. The number is
(A) 12 (B) 64 (C) 80 (D) 102
19. Sum of the digits of a two-digit number is 9. The number obtained by interchanging the digits exceeds the given number by 27. Find the given number
(A) 36 (B) 45 (C) 27 (D) None of these
20. The perimeter of a rectangle is 240 cm. If its length is decreased by 10% and its breadth is increased by 20%, we get the same perimeter, and then the length of the rectangle is equal to
(A) 120 (B) 80 (C) 40 (D) 20

Answer :	1. (D) 2. (A) 3. (B) 4. (D) 5. (A) 6. (A) 7. (C) 8. (B) 9. (A) 10. (B)
	11. (C) 12. (C) 13. (A) 14. (C) 15. (C) 16. (B) 17. (D) 18. (C) 19. (A) 20. (B)