



NSAT-2025

CLASS – VI (Mental Ability, Mathematics, Physics, Chemistry & Biology)
(Class VI Moving to VII)

NARAYANA SCHOLASTIC APTITUDE TEST (NSAT)

SAMPLE PAPER

Time: 2:00 Hr.

Maximum marks: 300

IMPORTANT INSTRUCTIONS:

1. The test Booklet consists of 75 questions. The maximum marks are 300.
2. There are five parts in the question paper of MAT (Q. No. 1 to 15) Mathematics (Q. No. 16 to 39), Physics (Q. No. 40 to 51), Chemistry (Q. No. 52 to 63) & Biology (Q. No. 64 to 75) having 75 questions. Each question is allotted +4 (four) marks for each correct response & 0 for each incorrect answer
3. Mark only one correct answer out of four alternatives.
4. Use Blue/Black Ball Point Pen only for writing particulars/markings.
5. Use of Calculator is not allowed.
6. Dark the circle in the space provided only.
7. Use of white fluid or any other material which damage the answer sheet, is not permissible on the Answer Sheet.

TO BE FILLED IN CAPITAL LETTERS

NAME OF THE STUDENT: _____

FATHER'S NAME: _____

CONTACT NUMBERS: _____ SCHOOL NAME : _____

ROLL NO.: _____ TEST CENTRE : _____

have read all the instructions and shall abide by them

.....

Signature of the Candidate

I have verified all the information filled in by the Candidate

.....

Signature of the Invigilator



EDUCATION IS INTEGRAL FOR GROWTH AND DEVELOPMENT

Education is integral for the growth and development of an individual. The expectation from an educational institute is always about making the society better for all and to bring out one's true Potential in the service of mankind.

At Narayana, we believe that a student's education is complete only when we are able to contribute towards his/her overall development besides imparting knowledge based and career oriented training.

With an aim to provide top of the league training to students to excel in every sphere of their lives, Narayana Group has been focusing on result oriented inputs.

Narayana's courses have been designed to cater to all the needs of the aspirants to help them excel in various competitive as well as Board examinations. Innovative strategies and techniques adopted in our centres keep our students abreast of the ever-changing pattern of top level Engineering/Medical Entrance Exams. As a result, Narayana's time-tested learning formulae are percolating to far-flung corners of India to benefit students from all backgrounds.

"Footprints on the sands of time are not made by sitting down". Today we rededicate the last 4 decades of our success to your dreams. I wish all our students a very successful academic year ahead.

Dr. P. NARAYANA

Founder, Narayana Group

MENTAL ABILITY

1. 'I' is related to 'R' in a certain way. Similarly 'G' is related to _____.
 (1) R (2) T (3) S (4) U
2. In the given question if + means -, \times means /, - means + and / means \times then find out the answer of the following question. $1 - 564 - 36 + 40 - 60$
 (1) 628 (2) 629 (3) 623 (4) 621
3. P is Q's brother, X is P's mother, Y is X's father, Z is Q's son. How is Z related to P?
 (1) Cousin (2) Grandfather (3) Nephew (4) Uncle
4. **Directions:** Find the mirror image of the following numbers:
 275
 (1) 572 (2) 7LS (3) 272 (4) 275
5. If VICTORY is coded as YLFWRUB, how can SUCCESS be coded?
 (1) VXEEIW (2) VXFFHV (3) VYEEHW (4) VYEEIV
6. In a row Dhruv is 18th from left and 17th from right. How many persons are there in the row.
 (1) 33 (2) 34 (3) 35 (4) 32
7. If Red means yellow, yellow means Blue, Blue means Orange, Orange means Green, Green means Red then what is the colour of clear sky.
 (1) Yellow (2) Blue (3) Orange (4) Red
8. A man walked 3m towards north, turned west and walked 2m, then turned north again and walked 1m and then turned east and walked 5m. How far away is he from the starting point?
 (1) 1m (2) 2m (3) 3m (4) 5m
9. In certain code, PAPER is written as SCTGW. How is 'MOTHER' written in that code?
 (1) ORVLGW (2) PQVJGT (3) PQXJJT (4) PQXKJV
10. Pointing to a girl, John said, "She is the daughter of the only sister of my father." How is John related to the girl?
 (1) Uncle (2) Cousin (3) Father (4) Grandfather
11. 0, 7, 26, 63, ?
 (1) 111 (2) 124 (3) 121 (4) 128

Space for rough work

12. If HAND is coded as IBOE, in the same way SILK can be coded as ?
 (1) TJML (2) TJNP (3) TJPQ (4) None of these
13. A is 6 km East of B, C is 4 km North of B, D is 12 km south of C, Now how far and in which Direction is D From A ?
 (1) 10 km South-West (2) 10km North-East (3) 40km South- west (4) 40 km North-East
14. CE GI KM OQ ?
 (1) TW (2) TV (3) SU (4) RT
15. **Directions:** Find the mirror image of the following numbers:
 5062
- (1) 2095 (2) 2095 (3) 5002 (4) 2095

MATHEMATICS

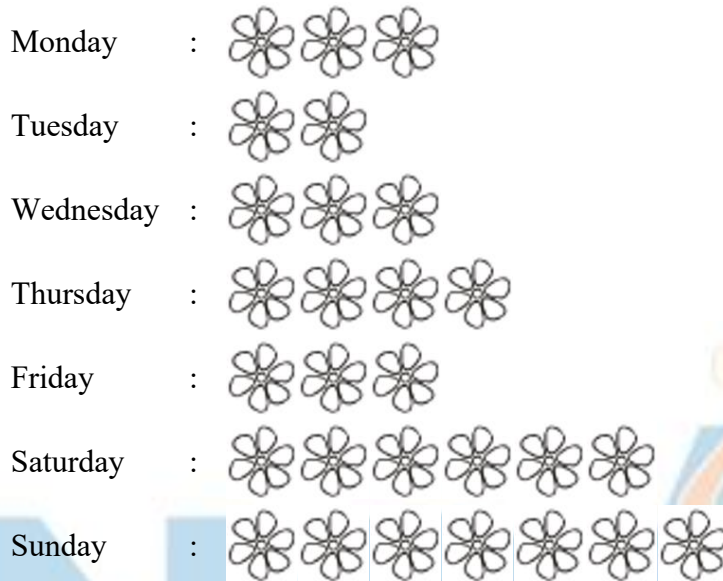
16. Write 2 rupees and 50 paise as decimal.
 (1) Rs 2.005 (2) Rs 2 (3) Rs 2.05 (4) Rs 2.50
17. The perimeter of square park is given as 320 m. The area of the square park is
 (1) 6400 m² (2) 640 m² (3) 64000 m² (4) 720 m²
18. If O represents 5 eggs how many eggs does OOOO represent?
 (1) 4 (2) 16 (3) 20 (4) 25
19. The _____ of each bar gives the required information.
 (1) Breadth (2) Height (3) Length (4) None of these
20. Product of -140 and +8 is
 (1) 1120 (2) 3200 (3) -1120 (4) -3200
21. Which of the following is the greatest negative integer?
 (1) -1 (2) Does not exist (3) -100 (4) -10
22. What is the fractional form of five eighteenths?
 (1) $\frac{15}{18}$ (2) $\frac{18}{5}$ (3) $\frac{5}{18}$ (4) 5.18

Space for rough work

23. What is the simplified form of the product $\frac{12}{24}$ and $\frac{36}{72}$?
- (1) $\frac{16}{24}$ (2) $\frac{3}{5}$ (3) $\frac{1}{4}$ (4) 1
24. Which pair has same digits at hundreds place?
- (1) 4232, 4341 (2) 5432, 6922 (3) 6524, 7823 (4) 2334, 2340
25. Which of the following statements is not true?
- (1) The HCF of two distinct prime numbers is 1
(2) The HCF of two co prime numbers is 1
(3) The HCF of two consecutive even numbers is 2
(4) The HCF of an even and an odd number is even
26. Write the natural numbers from 102 to 113. What fraction of them are prime numbers?
- (1) $\frac{1}{3}$ (2) $\frac{1}{2}$ (3) $\frac{1}{4}$ (4) None of these
27. Make the greatest four digit number by using any one digit twice by 3, 8, 7?
- (1) 8378 (2) 8873 (3) 3387 (4) 7783
28. When rounded off to nearest thousands, the number 85642 is
- (1) 85600 (2) 85700 (3) 85000 (4) 86000
29. Decimal form of 'Three hundred six and seven-hundredths' is _____.
- (1) 306.007 (2) 306.07 (3) 306 (4) 306.7
30. The square park and the rectangular park have the same area. The breadth of the rectangular park when the side of the square park is 60 m and the length of the rectangular park is 90 m is
- (1) 40 m (2) 60 m (3) 35 m (4) 65 m
31. Give a proper fraction whose numerator is 5 and denominator is 7.
- (1) $\frac{7}{5}$ (2) $\frac{5}{7}$ (3) $\frac{3}{7}$ (4) None of these
32. How many millimeters are there in 8.05 km
- (1) 80500 (2) 805000 (3) 8050000 (4) 805

Space for rough work

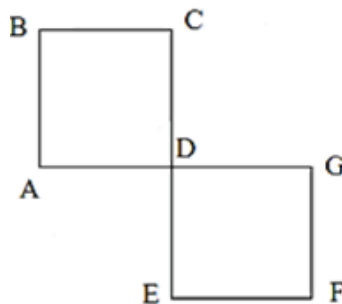
33. The pictograph given below shows the number of deliveries made by a florist during a week.



Each  represents 3 deliveries

Which two days have a total of 18 deliveries ?

- (1) Monday, Tuesday (2) Friday, Wednesday
(3) Thursday, Friday (4) Saturday, Sunday
34. How many time does the digit 5 occur between 1 and 100?
(1) 11 (2) 15 (3) 18 (4) 20
35. The product of the prime numbers between 1 to 15 is
(1) 30030 (2) 450450 (3) 15015 (4) 405405
36. A child needs 101 gm of vegetable per day. How many Kg of vegetables will be need for 39 children ?
(1) 3.939 kg (2) 39 kg (3) 39.39 kg (4) 3 kg
37. How many line segments are there in the given figure ?



- (1) 5 (2) 8 (3) 7 (4) 10

Space for rough work

38. From 10 million take away 28th multiple of 5798
(1) 9837656 (2) 9857656 (3) 9597656 (4) 9897686
39. What fraction of an hour is 45 min.
(1) $\frac{5}{6}$ (2) $\frac{4}{3}$ (3) $\frac{1}{2}$ (4) $\frac{3}{4}$

PHYSICS

40. Which of the following does not express a time interval?
(1) A day (2) A second
(3) A school period (4) Time of the first bell in the school
41. Why is the earth called as Blue Planet?
(1) Air colour is blue (2) Land colour is blue
(3) Building having blue colour (4) Two-third surface is covered by water
42. Force acting on per unit area is called
(1) non-contact forces (2) contact forces (3) force (4) pressure
43. What is the name of motion when an object repeats its motion after some time?
(1) Curvilinear motion (2) Periodic motion (3) Rectilinear motion (4) Circular motion
44. Stars appear to move from
(1) West to east (2) East to west (3) North to south (4) South to west
45. Neha pushes a toy car with a force of 5 Newtons and it moves a distance of 2 meters. How much work does she do?
(1) 2.5 joules (2) 7 joules (3) 10 joules (4) None of the above
46. Substance through which light can pass partially and things cannot be seen clearly through them are
(1) Translucent (2) Transparent (3) Opaque (4) None of these
47. All the planets move around the sun in an _____.
(1) Rectangular path (2) Straight path (3) Elliptical path (4) Circular path
48. Small thickness is measured by using
(1) Vernier scale (2) Measuring tap (3) Measuring rod (4) Barometer
49. Which of the following objects does not emit light of its own?
(1) The sun (2) The star (3) The moon (4) A firefly

Space for rough work

50. Any two objects that have mass will also have which type of force between them?
(1) Magnetic (2) Gravitational (3) Nuclear (4) Chemical
51. Which one of the following is NOT an effect of force?
(1) Change of speed of an object. (2) Change of motion of an object.
(3) Change of shape/size of the object. (4) Change of the mass of the object.

CHEMISTRY

52. Which of the following is non-renewable energy source?
(1) solar (2) wind (3) coal (4) hydroelectric
53. This harmful microbe in water causes typhoid is
(1) Virus (2) Bacteria (3) Algae (4) Fungi
54. Vinegar is a solution of acetic acid in water. What kind of mixture is vinegar?
(1) A homogeneous mixture of solid and liquid
(2) A heterogeneous mixture of liquid and liquid
(3) A homogeneous mixture of liquid and liquid
(4) A heterogeneous mixture of solid and liquid
55. Hardest known natural substance is
(1) Mercury (2) Wood (3) Gold (4) Diamond
56. Non-metal which is good conductor of electricity is
(1) Graphite (2) Diamond (3) Sulphur (4) Nitrogen
57. Identify the mixture from the following.
(1) Oxygen (2) Carbon dioxide (3) Hydrogen (4) Air
58. Which one is not a transparent object?
(1) Clean water (2) Glass (3) Diamond (4) Muddy water
59. Source of energy in the biosphere is
(1) Producer (2) Decomposer (3) Sunlight (4) Heat of earth
60. The amount of space each thing takes up is called its
(1) Volume (2) Weight (3) Area (4) All of these
61. Which pair of substance float in water
(1) Pin, oil drops (2) Thermocol, Cotton thread
(3) Plastic ball, feather (4) Coin, rubber band

Space for rough work

62. CNG stands for
(1) Compressed natural gas (2) Compound natural gas
(3) Common natural gas (4) Common neutral gas
63. The molecules in a solid are packed very _____ together.
(1) close (2) far (3) both (4) none of these

BIOLOGY

64. Tiny pores on the surface of leaves are called
(1) Lenticels (2) Guard cell (3) Both (1) and (2) (4) Stomata
65. Science of study of living things is called _____.
(1) Botany (2) Biology (3) Zoology (4) None of these
66. What type of root system does wheat have?
(1) Taproot (2) Fibrous root (3) Aerial root (4) None of these
67. An example of complete food is
(1) Milk (2) Carrot (3) Pulses (4) Fish
68. _____ has thick & fleshy stem.
(1) Cactus (2) Deoder (3) Bougenvillea (4) all of these
69. Primary source of energy for most ecosystems ?
(1) wind (2) water (3) sunlight (4) soil nutrients
70. Pollen grains are produced in _____ ?
(1) Flower (2) Ovaries (3) Anthers (4) Fruits
71. Which vitamin helps our body to use calcium for bones and teeth?
(1) Vitamin D (2) Vitamin A (3) Vitamin C (4) Vitamin B₁₂
72. Which of the following is longest bone of our body ?
(1) Humerus (2) Femur (3) Tibia (4) Fibula
73. What is the most important trait needed to explore and understand the world through science ?
(1) Memorization (2) Curiosity (3) Discipline (4) Obedince
74. The place where living beings live is called their _____.
(1) Adaptation (2) Habitat (3) Habit (4) Movement
75. Following plant(s) is/are the source of cooking oil
(1) Castor oil (2) Petroleum (3) Coconut (4) none of these

Space for rough work