



NSAT-2024

CLASS - VI (Mental Ability, Mathematics & Science)
(Class VI Moving to VII)

NARAYANA SCHOLASTIC APTITUDE TEST (NSAT) SAMPLE PAPER

Time: 1:00 Hr.

Maximum marks: 160

IMPORTANT INSTRUCTIONS:

1. This Booklet consists of 40 questions. The maximum marks are 160.
2. There are five parts in the question paper.
MAT (Q. No. 1 to 8) Mathematics (Q. No. 9 to 19), Physics (Q. No. 20 to 26), Chemistry (Q. No. 27 to 33) & Biology (Q. No. 34 to 40).
Each question is allotted +4 marks for each correct answer & -1 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. Darken the circle in the space provided only.
7. Use of white fluid or any other material which damage the answer sheet, is not permissible.

TO BE FILLED IN CAPITAL LETTERS

NAME OF THE STUDENT : _____

FATHER'S NAME : _____

CONTACT NUMBERS: _____ SCHOOL NAME : _____

ROLL NO. : _____ TEST CENTRE : _____

I 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

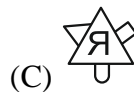
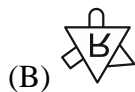
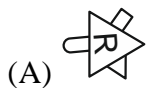
Founder, Narayana Group

MENTAL ABILITY

Direction : This question based on the following alphabet series

A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.

1. If the first half of the alphabet are written in reverse order then which will be the 16th letter from the right end.
 (A) C (B) K (C) P (D) S
2. Find the next term in the series.
 D, F, H, J, L, ?
 (A) V (B) X (C) S (D) N
3. 27, 25, 22, 18, 13, ?
 (A) 11 (B) 7 (C) 9 (D) 5
4. A boy is facing south. He turn 180° in the anti clock wise direction, then 90° in the clock wise direction and then 90° in same direction. Which direction is he facing now ?
 (A) North (B) West (C) South (D) East
5. If “FACING” is written as “AFICGN” then, What is the code of “SOUTHWAR” ?
 (A) OSTUWHRA (B) SUOHTAWR
 (C) OSUTHWRA (D) OSUHTARW
6. Introducing a boy, woman said, “His father is the only son of my father-in-law”. How is woman related to the boy ?
 (A) Sister (B) Mother (C) Grand-mother (D) Aunt
7. Find the mirror image of the words given below Z P M R.
 (A) R M P Z (B) Σ Ъ W Ъ (C) P Σ M Ъ (D) Я M P Σ
8. Find the water image of the figure given below ?



Space for rough work

MATHEMATICS

9. 1 Lakh = _____ thousands
(A) 10 (B) 100 (C) 1000 (D) None of these
10. $(7268 - 2427)$ estimated to the nearest hundred is
(A) 4900 (B) 4841 (C) 4800 (D) 5000
11. A number when divided by 46 gives 11 as quotient and 15 as remainder the number is
(A) 491 (B) 679 (C) 701 (D) 521
12. The number of whole numbers between the smallest whole number and the greatest 2 digit number is
(A) 88 (B) 98 (C) 99 (D) 101
13. If $(-13 + 6) \square - 25 - (-9)$, then the correct symbol in the place holder is
(A) $>$ (B) $<$ (C) $=$ (D) None of these
14. When 34 is subtracted from -36 we get
(A) 2 (B) -2 (C) 70 (D) -70
15. The smallest of the fractions $\frac{3}{4}, \frac{5}{6}, \frac{7}{12}, \frac{2}{3}$ is
(A) $\frac{2}{3}$ (B) $\frac{3}{4}$ (C) $\frac{5}{6}$ (D) $\frac{7}{12}$
16. If $\frac{45}{60}$ is equivalent to $\frac{3}{x}$, then the value of x is
(A) 4 (B) 5 (C) 6 (D) 20
17. The correct expanded form of 2.06 is
(A) $(2 \times 10) + \left(6 \times \frac{1}{10}\right)$ (B) $(2 \times 1) + \left(6 \times \frac{1}{10}\right)$
(C) $(2 \times 1) + \left(6 \times \frac{1}{100}\right)$ (D) None of these

Space for rough work

18. $\frac{4}{100} + \frac{7}{10000} =$
(A) 0.47 (B) 0.407 (C) 0.0407 (D) None of these
19. The diameter of a circle is 7cm. Its circumference is
(A) 44cm (B) 22cm (C) 28cm (D) 14cm

PHYSICS

20. The invention of which of the following has made a great change in modes of transport?
(A) Wheel (B) Steam engine
(C) Electric Current (D) hoofed mammals
21. Which of the following types of motion is exhibited by the earth moving around the sun?
(A) Circular (B) Rotational (C) Rectilinear (D) Periodic
22. Which one of the following is the natural source of light?
(A) Electric bulb (B) Sun
(C) Candle lamp (D) Moon
23. When an opaque object comes in the way of light, it makes _____.
(A) a shadow (B) a coloured image
(C) a black and white image (D) No image
24. All the planets move around the sun in an _____.
(A) Rectangular path (B) Straight path
(C) Elliptical path (D) Circular path
25. When we throw a ball into air, it falls back. The force responsible for this is
(A) muscular force. (B) gravitational force.
(C) mechanical force. (D) none of these
26. Which of the following activities would need energy the most?
(A) Riding a bicycle up a hill (B) Walking
(C) Riding a bicycle on a level ground (D) Doing homework

Space for rough work

CHEMISTRY

27. What is the main principle behind the process of sedimentation?
 (A) Differences in particle size. (B) Differences in density.
 (C) Differences in colour. (D) Differences in magnetic properties.
28. Which of the following substances are soluble in water?
 (i) Lime Juice (ii) Chalk powder
 (iii) Common salt (iv) Vinegar
 (A) (ii) & (iii) only (B) (i), (ii) and (iv) only
 (C) (i), (iii) & (iv) only (D) All of them
29. What are the techniques we use to separate a solid – liquid mixtures?
 (A) Sedimentation and Decantation (B) Filtration
 (C) Fractional distillation (D) Both (A) and (B)
30. What property is commonly used to group materials as biodegradable and non-biodegradable?
 (A) Having low melting point (B) Based on texture of material
 (C) Ability to decompose naturally (D) Magnetic properties
31. Materials that do not allow light to pass through are classified as:
 (A) Transparent (B) Translucent (C) Opaque (D) Reflective
32. Which of the following properties is often used to group materials?
 (A) Colour (B) Shape (C) Texture (D) All of these
33. Match the following

Column - I	Column – II
(p) Vaporisation	(i) Solid to gas
(q) Sublimation	(ii) Gas to liquid
(r) Solidification	(iii) Liquid to gas
(s) Liquefaction	(iv) Liquid to solid

- (A) p-(iii),q-(i),r(ii),s(iv) (B) p-(iii),q-(i),r(iv),s(ii)
 (C) p-(iii),q-(iv),r(i),s(ii) (D) p-(iv),q-(ii),r(iii),s(i)

Space for rough work

BIOLOGY

34. In which plant leaves have reticulate venation
(A) Maize (B) Rice (C) Mango (D) Wheat
35. When water comes out of leaves in form of water vapour through stomata it is called as
(A) Respiration (B) Transpiration (C) Evaporation (D) Sublimation
36. Which food items are a good source of dietary fibre?
(A) Salad (B) Whole grains (C) Fruits (D) All of the above
37. Which statement about milk's nutrients is correct?
(A) Milk is a good source of calcium
(B) Milk is a good source of protein
(C) Milk is a good source of vitamin C
(D) Both A and B
38. The flight adaptation of birds is :
(A) Light pneumatic bones (B) Solid heavy bones
(C) Heavy pointed bones (D) No bones
39. Biotic components of environment comprises of :
(A) Plants (B) Animals (C) Microorganisms (D) All of these
40. What is the chemical name of Vitamin C?
(A) Ascorbic Acid (B) Thyamine (C) Citric Acid (D) Tartaric Acid

Space for rough work