



NSAT-2024

CLASS – V (Mental Ability, Mathematics & Science)
(Class V Moving to VI)

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 is based on the following alphabet series.

1. 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.

Which letter is the 15th to the left of 9th letter from the right ?

- (A) H (B) C (C) N (D) X

Direction : What will come in place of question mark (?) in the following series

2. 15, 20, 25, 30, 35, ?

- (A) 45 (B) 55 (C) 35 (D) 40

3. L, O, R, U, ?

- (A) X (B) Y (C) Z (D) B

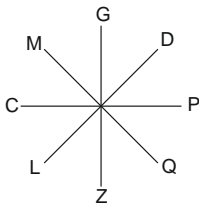
4. Pointing to a man, I said, "he is the father of my mother's sister. How is that man related to me?"

- (A) Grand father (B) Father (C) Brother (D) Uncle

5. Which of the following is different from the rest of the options ?

- (A) Pen (B) Eraser (C) Notebook (D) Computer

6. Adam is facing North-west. When he turns 4 right angle clock wise direction in which place does he face now ?



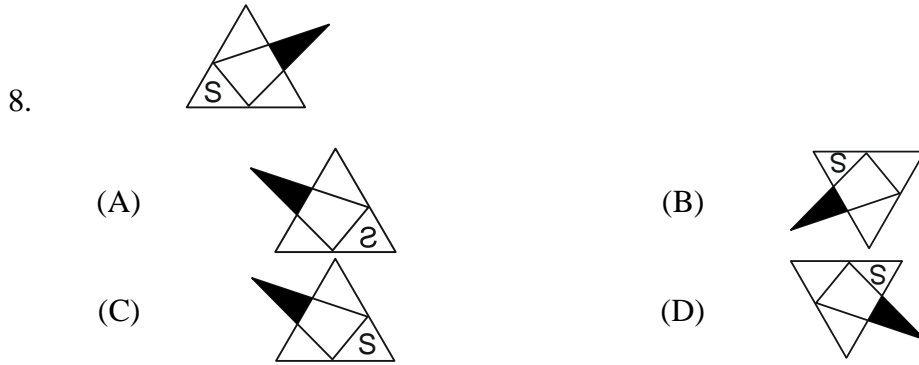
- (A) D (B) C (C) M (D) L

7. $64 \div 4 - 17 = ?$ is equivalent to

- (A) $17 + 11$ (B) $37 - 38$ (C) 19 (D) $30 \div 2$

Space for rough work

Direction : Find the mirror image of the given picture.



MATHEMATICS

9. The mixed fraction of $\frac{9}{2}$ is
 (A) $4\frac{2}{1}$ (B) $2\frac{1}{4}$ (C) $2\frac{2}{3}$ (D) $4\frac{1}{2}$
10. Smallest whole number that is divisible by 10 and 12
 (A) 40 (B) 30 (C) 60 (D) 72
11. What are the common factors of 9 and 36
 (A) 1, 3, 9 (B) 1, 3, 4, 5, 9 (C) 1, 4, 5 (D) 1, 3, 4, 9
12. Ninety million ninety thousand ninety is
 (A) 9090090 (B) 90090090 (C) 909090 (D) 9090900
13. In 4,768,139, the digit 7 stand for
 (A) 7 Hundred thousands (B) 7 Thousands
 (C) 7 ten thousand (D) 70 lakhs
14. 1, 3, 7, 15,
 (A) 31 (B) 63 (C) 73 (D) 84
15. 1, 8, 6, 11, 7, _____
 (A) 14 (B) 3 (C) 5 (D) None of these

Space for rough work

16. The product of least two digit numbers and 30 is
(A) 10 (B) 30 (C) 300 (D) 0
17. $17 \div 0$
(A) 0 (B) 1 (C) 17 (D) Impossible
18. Area of square is 64cm^2 . Find its perimeter
(A) 32cm (B) 24cm (C) 8cm (D) None of these
19. Find the perimeter of carpet whose length is 3m and breadth is 1.8m
(A) 9.5m (B) 4.5m (C) 4.6m (D) 9.6m

PHYSICS

20. $1\text{m} = \underline{\hspace{2cm}}\text{cm}$.
(A) 0.1 (B) 10 (C) 100 (D) 10000
21. 100 ml is equal to
(A) $\frac{1}{4}$ liter (B) $\frac{1}{2}$ liter (C) $\frac{1}{10}$ liter (D) $\frac{1}{5}$ liter
22. Which one of the following are after effects of earthquake?
(A) Cracking of roads (B) Shattering of buildings
(C) Collapsing of communication system (D) All of these
23. The atmosphere is held to the earth by
(A) Winds (B) Gravity (C) Clouds (D) None of the above
24. Weightlessness experienced while orbiting the earth in space-ship, is the result of
(A) Inertia (B) Acceleration
(C) Zero gravity (D) Free fall towards earth
25. _____ is the ability to do work.
(A) Energy (B) Power (C) Force (D) None of these
26. Which of the following is the renewable source of energy?
(A) Water (B) Biomass (C) Petrol (D) Coal

Space for rough work

CHEMISTRY

27. The force of attraction between the particles of matter are least in
(A) Solid (B) Liquid (C) Gas (D) None of these
28. What happens to the particles in a liquid when it is heated to its boiling point?
A) Converted into solid.
B) Condensed to liquid.
C) They move faster and spread apart.
D) They form a solid.
29. Which state of matter is characterized by having particles that are very close together and vibrate in place?
(A) Solid (B) Liquid (C) Gas (D) Plasma
30. Which process in the water cycle is responsible for water vapor turning into clouds?
(A) Evaporation (B) Condensation (C) Precipitation (D) Transpiration
31. How does planting more trees help improve air quality?
(A) Trees absorb nitrogen and release oxygen gas
(B) Trees absorb carbon dioxide and release oxygen gas
(C) Trees release carbon dioxide and absorb oxygen gas
(D) None of these
32. Which state of matter takes the shape of its container but has a definite volume?
(A) Solid (B) Liquid (C) Gas (D) Plasma
33. Which of the following is an example of sublimation?
(A) Ice melting into water
(B) Water boiling into steam
(C) Dry ice changing directly to carbon dioxide gas
(D) Water freezing into ice

Space for rough work

BIOLOGY

34. Which components are called protective food?
(A) Proteins (B) Carbohydrates
(C) Vitamins and minerals (D) Fats
35. Deficiency of proteins and carbohydrate causes
(A) Marasmus (B) Rickets (C) Anemia (D) Obesity
36. Image is formed on which part of human eye
(A) Lens (B) Eyelids (C) Retina (D) Cornea
37. Which sense organ makes us feel hot or cold weather.
(A) Ears (B) Nose (C) Tongue (D) Skin
38. Management of land and environment to produce food crop is called
(A) Agriculture (B) Sericulture (C) Pisciculture (D) Animal husbandry
39. Irrigation helps in
(A) Seed germination (B) Make water available to roots of plants
(C) Kill pests (D) Both A and B
40. Our body is protected from diseases by our
(A) Respiratory system (B) Immune system
(C) Digestive system (D) Nervous system

Space for rough work