



N-SCORE-2022

CLASS – IX: - (Mental Ability, Mathematics & Science)
(Class VIII Moving to IX)

(SET-2) **N-SCORE TEST**

Time Duration: 1 Hour

Maximum marks: 140

Please read the instructions carefully. You are allotted 5 minutes specifically for this purpose.

INSTRUCTIONS:

1. This question paper contains 35 questions: Mental Ability (Q. No. 1 to Q. No. 7), Mathematics (Q. No. 8 to Q. No. 14), Physics (Q. No. 15 to Q. No. 21), Chemistry (Q. No. 22 to Q. No. 28) & Biology (Q. No. 29 to Q. No. 35)
2. There will be individual qualifying cut-offs for all sections.
3. **For Each correct answer 4 marks will be awarded. No Negative Marking.**
4. Use OMR-Sheet for answering
5. Use HB Pencil / Pen to darken the circles.
6. If you wish to change your answer, erase the already darkened circle completely and then darken the appropriate circle.
7. Use of a calculator and mobile phone is strictly prohibited during the exam.

TO BE FILLED IN CAPITAL LETTERS

NAME OF THE STUDENT : _____

FATHER'S NAME : _____

CONTACT NUMBER: _____ **SCHOOL NAME :** _____

ROLL NO. : _____ **TEST CENTRE :** _____

I have read all the instructions and shall abide by them

.....
Signature of Candidate

I have verified all the information filled in by the Candidate

.....
Signature of Invigilator

MENTAL ABILITY (MAT)

1. If $A + B$ means A is the mother of B; $A - B$ means A is the brother of B; $A \% B$ means A is the father of B and $A \times B$ means A is the sister of B, which of the following shows that P is the maternal uncle of Q?
(A) $Q - N + M \times P$ (B) $P + S \times N - Q$ (C) $P - M + N \times Q$ (D) $Q - S \% P$
2. Choose the word which is different from the rest.
(A) Beaker (B) Glass (C) Mug (D) Saucer
3. Look at this series: F2, __, D8, C16, B32 what number should fill the blank?
(A) A16 (B) G4 (C) E4 (D) E3
4. Rahul put his timepiece on the table in such a way that at 6 P.M. hour hand points to North. In which direction the minute hand will point at 9.15 P.M.?
(A) South-East (B) South (C) North (D) West
5. If P denotes 'Multiplication', T denotes 'subtraction', M denotes 'addition' and B denotes 'division', then $28 B 7 P 8 T 6 M 4 = ?$
(A) $-3/82$ (B) 30 (C) 32 (D) 36
6. In a certain code of language,
'134' means 'good and tasty'
'478' means 'see good pictures' and
'729' means 'pictures are faint'
Which of the following digits stands for 'see'?
(A) 9 (B) 2 (C) 1 (D) 8
7. In a row of boys, if A who is 10th from the left and B who is 9th from the right interchange their positions, A becomes 15th from the left. How many boys are there in the row?
(A) 23 (B) 31 (C) 27 (D) 28

Space for Rough Work

MATHEMATICS

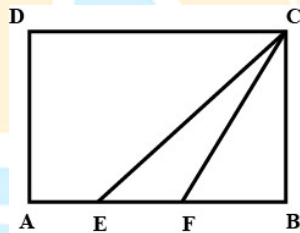
8. k is an even number and p is an odd number. Which of the following statement is not correct?
- (A) $p - k - 1$ is an odd number (B) $p + k + 1$ is an even number
(C) $pk + p$ is an odd number (D) $p^2 + k^2 + 1$ is an even number
9. There are 180 multiple choice questions in a test. If a candidate gets 4 marks for every correct answer and for every unattempted or wrongly answered question one mark is deducted from the total score of correct answers. If a candidate scored 450 marks in test, how many questions did he answer correctly?

(A) 128 (B) 139 (C) 142 (D) 126

10. If $b \neq d$, then fractions $\frac{ax+b}{cx+d}$ and $\frac{b}{d}$ are unequal, if

(A) $a = c = 1$ and $x \neq 0$ (B) $a = b = 0$
(C) $a = c = 0$ (D) $x = 0$

11. In the diagram ABCD is a rectangle with $AE = EF = FB$, the ratio of the area of triangle CEF and that of rectangle ABCD is



(A) 1 : 6 (B) 1 : 8 (C) 1 : 9 (D) 1 : 10

12. If $a = \sqrt{6 - \sqrt{11}}$ and $b = \sqrt{6 + \sqrt{11}}$, then the value of $(a + b)$ is:

(A) $\sqrt{22}$ (B) $2\sqrt{11}$ (C) $\sqrt{6}$ (D) $\sqrt{12}$

13. The sum of $\frac{a^3}{b-a}$ and $\frac{b^3}{a-b}$ is

(A) $a^2 + ab + b^2$ (B) $-a^2 - ab + b^2$ (C) $a^2 - ab + b^2$ (D) $-(a^2 + b^2 + ab)$

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14. If $a^2 + \frac{1}{a^2} = 27$, then the value of $a - \frac{1}{a}$ is

(A) ± 5 (B) ± 6 (C) ± 7 (D) ± 8

PHYSICS

15. Comets spend most of their time.....

(A) Fair away from the sun (B) Close to planet or the other
(C) Very close to sun (D) Very close to earth

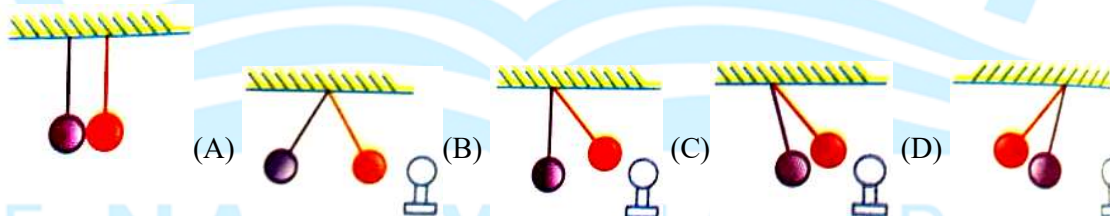
16. When electric current is flown through a conductor, some amount of:

(A) Electrical energy is converted into heat energy
(B) Electrical energy is converted into mechanical energy
(C) Mechanical energy is converted into electrical energy
(D) Heat energy is converted into electrical energy

17. A polyethylene strip rubbed against a woollen cloth can attract small pieces of paper. Which of the following changes takes place on small pieces of paper during the application of the force?

(A) The shape of the object (B) the position of the object
(C) The density of the object (D) the mass of the object

18. Two identical neutral light conducting balls suspended by insulating threads touch each other as shown. Which of the following shows the positions of balls when a heavy positively charged sphere is placed near them?



19. The movement of earth plate causes

(A) Cyclones (B) Lighting (C) Earthquake (D) Thunder storm

20. In which month the earth is nearest to the sun:

(A) January (B) March (C) April (D) February

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21. Which device is used to protect a building from the effect of lightning?
(A) Lightning electroscope (B) Electroscope
(C) Lightning insulator (D) Lightning conductor

CHEMISTRY

22. Which of the following groups contain all synthetic substances?
(A) Nylon, Terylene, Wool (B) PVC, Polythene, Bakelite
(C) Cotton, Polycot, Rayon (D) Acrylic, Silk, Wool
23. Aqua regia is mixture of
(A) 1 volume of conc. HCl and 3 volumes of conc. HNO_3
(B) 1 volume of conc. HNO_3 and 3 volumes of conc. HCl
(C) Equal volumes of conc. HNO_3 and conc. HCl
(D) 1 volume of conc. HNO_3 and 3 volumes of conc. H_2SO_4
24. Which of the following is not the property of a metal?
(A) Malleability (B) Ductility
(C) Form acidic oxides (D) Conductivity
25. Choose the reactions which are not feasible
(I) Iron + Zinc sulphate \rightarrow Iron sulphate + Zinc
(II) Magnesium + silver nitrate \rightarrow Magnesium nitrate + Silver
(III) Copper + dil. Sulphuric acid \rightarrow Iron + Zinc sulphate
(A) I, II and III (B) II and III only (C) I and III only (D) All of these
26. Total amount of heat produced by a fuel having calorific value of 20 kJ/kg was found to be 50,000 Joules, How much fuel was burnt?
(A) 2500 kg (B) 250 kg (C) 25 kg (D) 2.5 kg
27. Which of the following fuels is expected to leave a residue upon burning?
(A) Coal (B) Petrol (C) LPG (D) None of these
28. Which type of coal has the highest percentage of carbon?
(A) Anthracite (B) Bituminous (C) Peat (D) Lignite

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BIOLOGY

29. Which is pesticides
(A) 2, 4 – dichlorophenoxyacetic acid (B) Malathion
(C) Metolachlor (D) Chloroform
30. Bacteria present in root nodules of Pea
(A) Coli (B) Plasmodium (C) Rhizobium (D) Penicillin
31. Which of the following gas is needed by plants for photosynthesis
(A) Oxygen (B) Nitrogen (C) Carbon dioxide (D) Sulphur
32. Which type of membrane found in vacuoles
(A) Tonoplast (B) Plasma membrane
(C) Lipo-protein membrane (D) Karyotheca
33. The number of modes by which animals reproduce are
(A) Two (B) Three (C) Four (D) None of these
34. Out of these which one determines the sex of the baby?
(A) Hormones (B) Enzyme (C) Chromosomes (D) Pituitary gland
35. The removal of topmost layer of soil is called
(A) Soil erosion (B) Soil Conservation (C) Ploughing (D) Terracing



Space for Rough Work