

Santosh Academia Talent Examination

(2025-26)

CLASS-IX (STUDYING)

PAPER-1 SET CODE: [A]

Test ID: 710 Time: 1 Hour Max. Marks: 120

IMPORTANT INSTRUCTIONS:

GENERAL

- 1. This booklet is your Question Paper. Ensure that question paper belongs to the Class in which you are currently studying. If not, contact the invigilator for change of question paper.
- 2. The Test ID is printed on the left-hand top corner of this sheet. If not, contact the invigilator for change of question paper.
- **3.** Use the Optical Mark Recognition (OMR) sheet provided separately for answering the questions. DO NOT FILL till you are told to do so.
- 4. The TEST PAPER NUMBER is printed on the left-hand top corner of the question paper and SET CODE is printed on the Right-hand top corner of the question paper. Ensure that you fill this in OMR as that on the question paper booklet.
- **5.** Blank spaces are provided within this booklet for rough work. No additional rough sheet will be provided.
- 6. You are ALLOWED to take away the Question Paper at the end of the examination.

QUESTION PAPER FORMAT

7. This Paper contains 30 questions in total.

Section-I: Question Number 1 to 3 belongs to Physics.

Section-II: Question Number 4 to 6 belongs to Chemistry.

Section-III: Question Number 7 to 10 belongs to Biology.

Section-IV: Question Number 11 to 20 belongs to Mathematics.

Section-V: Question Number 21 to 30 belongs to Mental Ability.

MARKING SCHEME:

- **8.** Each question carries 4 marks. For each correct response, the candidate will get 4 marks.
- **9.** There is no negative marking for incorrect response or unmarked questions.









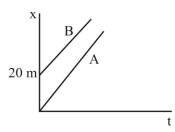
SAMPLEPAPER





SECTION-I PHYSICS

1. The displacement-time graphs of two bodies *A* and *B* are parallel lines as shown in figure. Which of the following statements is correct?



(a) A is moving faster than B

(b) B is moving faster than A

(c) B is always 20 m behind A

- (d) A is always 20 m behind B
- 2. A field gun of mass 1.5 tonne fires a shell of mass 15 kg with a velocity of 150 m s⁻¹. Calculate the velocity of the recoil of the gun.
 - (a) 1 m s^{-1}
- (b) 1.5 m s^{-1}
- (c) 3 m s^{-1}
- (d) 5 m s^{-1}

- 3. The unit of $\frac{G}{g}$ is
 - (a) kgm^{-1}
- (b) kgm^{-2}
- (c) $m^2 kg^{-2}$
- (d) mkg^{-1}

SECTION-II CHEMISTRY

- 4 1 atm = 1.01×10^x Pa, the value of x is
 - (a) 2
- (b) =
- (c) 5
- (d) 10

5. Match them correctly

Column-I

- (A) Steel
- (B) Air
- (C) Water
- (D) Diamond
- (a) $(A)\rightarrow(R),(B)\rightarrow(P),(C)\rightarrow(Q),(D)\rightarrow(S)$
- (c) $(A)\rightarrow(P),(B)\rightarrow(S),(C)\rightarrow(R),(D)\rightarrow(Q)$

- Column-II
- (P) Mixture
- (Q) Compound
- (R) Alloy
- (S) Element
- (b) $(A)\rightarrow(S),(B)\rightarrow(P),(C)\rightarrow(Q),(D)\rightarrow(R)$
- (d) $(Q)\rightarrow(R),(B)\rightarrow(S),(C)\rightarrow(P),(D)\rightarrow(A)$
- **6.** The charge on 1 electron is 1.602×10^{-19} coulomb. What will be the charge on 1 mole of electrons?
 - (a) 1.602×10^4 coulomb

(b) 96488 coulomb

(c) 964880 coulomb

(d) 1.602×10^{-19} coulomb

SECTION-III BIOLOGY

- 7. Lysosomes are known as "Suicidal bags" because
 - (a) Parasitic activity

(b) Presence of food vacuole

(c) Hydrolytic activity

(d) Catalytic activity







- **8.** _____ is not found in Xylem tissues
 - (a) Sieve tubes

(b) Xylem parenchyma

(c) Tracheids

- (d) Vessels
- **9.** A cell without a cell wall is termed as
 - (a) Tonoplast
- (b) Protoplast
- (c) Symplast
- (d) Apoplast

- 10. The Nodes of Ranvier are found in
 - (a) Nerve cells
- (b) Heart cells
- (c) Liver cells
- (d) All of the above

SECTION-IV MATHEMATICS

- 11. If $x \ge 0$, then $\sqrt{x\sqrt{x\sqrt{x}}}$ is equal to
 - (a) $x\sqrt{x}$
- (b) $x\sqrt[4]{x}$
- (c) $\sqrt[8]{x}$
- (d) $\sqrt[8]{x^7}$

- 12. The value of $\left(\frac{x^q}{x^r}\right)^{\frac{1}{qr}} \times \left(\frac{x^r}{x^p}\right)^{\frac{1}{rp}} \times \left(\frac{x^p}{x^q}\right)^{\frac{1}{pq}}$ is equal to
 - (a) $x^{\frac{1}{p} + \frac{1}{q} + \frac{1}{r}}$
- (b) 0
- (c) $x^{pq+qr+rp}$
- (d)

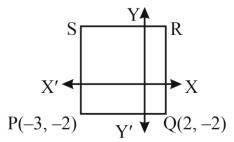
- 13. If a + b + c = 0 then $a^3 + b^3 + c^3$ is equal to
 - (a) abc
- (b) 3*abc*
- (c) 2*abc*
- (d) -3abc

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- **14.** Factors of $x^4 x^2 12$ are
 - (a) $(x+2), (x-2), (x^2+3)$
- (b) $(x+3), (x-3), (x^2+2)$
- (c) $(x+2), (x-2), (x^2-3)$

(d) $(x^2+2), (x^2-6)$

- 15. The graph of line y = 6 is a line
 - (a) Parallel to x-axis at a distance of 6 units from the origin
 - (b) Parallel to y-axis at a distance of 6 units from the origin.
 - (c) Making an intercept of 6 units on the x-axis.
 - (d) Making an intercept of 6 units on both the axes.
- **16.** The given diagram is drawn on a cartesian plane. *PQRS* is a square. The coordinates of *S* are



- (a) (-3,3)
- (b) (3, -3)
- (c) (-3, -3)
- (d) (-3,2)

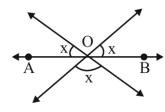






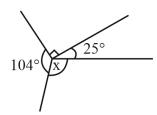


17. The value of x if AOB is a straight line is



- (a) 36°
- (b) 60°
- (c) 30°
- (d) 35°

18. Calculate the value of x.



- (a) 141°
- (b) 70°
- (c) 105°
- d) 45°
- 19. The percentage increase in the area of a triangle if its each side is quadrupled is equal to
 - (a) 1500%
- (b) 1200%
- (c) 900%
- (d) 800%
- 20. If the height of a cone is doubled then its volume is increased by
 - (a) 100%
- (b) 200%
- (c) 300%
- (d) 400%

SECTION-V MENTAL ABILITY

21. *Direction:* Study the given pattern carefully and select the number that can replace the question mark (?) in it.

18:30::36:?

- (a) 54
- (b) 62
- (c) 64
- (d) 66
- 22. In this following question, three statements are given and these statements are followed by three conclusions numbered (I),(II) and (III). You have to take the given three statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the three given statements, disregarding commonly known facts.

Statements:

- (I) Some Potatoes are onions
- (II) All onions are peanuts
- (III) All peanuts are samosas

Conclusion:

- (I) Some potatoes are peanuts
- (II) Some peanuts are potatoes
- (III) All onions are samosas
- (a) All follow

(b) Only I, III follow

(c) Only I, II follows

(d) Only II, III, follow









23. *Direction:* Study the following information carefully and answer the given question.

If A + B means A is the brother of B; A - B means A is the sister of B and $A \times B$ means A is the father of B. Which of the following means that C is the son of M?

- (a) $M N \times C + F$
- (b) $F C + N \times M$
- (c) $N + M F \times C$
- (d) $\mathbf{M} \times \mathbf{N} \mathbf{C} + \mathbf{F}$
- **24.** *Direction:* Study the following information carefully and answer the given question.

Two motorcycles start from the opposite places of a main road, 150 km apart. The first motorcycle runs for 25 km and takes a right turn and then runs 15 km. It then turns left and then runs for another 25 km and then takes the direction back to reach the main road. In the meantime, due to minor break down the other motorcycle has run only 35 km along the main road. What would be the distance between two motorcycles at this point?

- (a) 65 km
- (b) 75 km
- (c) 80 km
- (d) 85 km
- **25.** *Direction:* Study the given pattern carefully and select the number that can replace the question mark (?) in it.

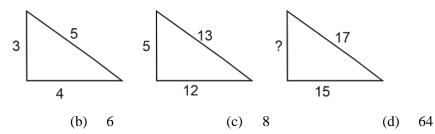
If BJ = 20 and BEG = 70, then find TAE = ?

(a) 100

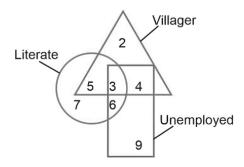
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(a)

- (b) 120
- (c) 80
- (d) 115
- **26.** *Direction:* Study the given pattern carefully and select the number that can replace the question mark (?) in it.



27. *Direction*: Study the diagram carefully & answer the following question.



What is the number of literate villagers?

- (a) 3
- (b) 8
- (b) 6
- (d) 4
- **28.** *Direction:* Study the following information carefully and answer the given question.

Eight friends -P, Q, R, S, T, U, V & W are sitting around a circle facing the center. V is third to the right of Q & second to the left of R. Q is second to the left of T & immediate right of S. U is between Q & T. P is not at the left of R.

Who is exactly at left of S?

- (a) Q
- (b) P
- (c) U
- (d) V









29. In the following question, arrange the given words in a meaningful Sequence of Words and then select the appropriate sequence from the alternatives provided below each question.

1. Cut

2. Put on

3. Mark

4. Measure

5. Tailor

(a) 3,1,5,4,2

(b) 1,3,2,4,5

(c) 2,4,3,1,5

(d) 4,3,1,5,2

30. *Direction:* Study the following information carefully and answer the given question.

In a row of girls, Nithya and Suganya occupy the ninth place from the right end and tenth place from the left end, respectively. If they interchange their places, then Nithya and Suganya occupy seventeenth place from the right and eighteenth place from the left respectively.

SAMPLE

How many girls are there in the row?

(a) 22

(b) 24

(c) 26

(d) 28









ROUGH WORK



