

SURE TEST - ICSE Board - Sample Paper

Date:

Max Marks: 120

Batch: Class X to Class XI moving students

Max Time: 1 hr 15 min

INSTRUCTIONS

Sr. No	Subject	Number Of Questions	Marks (Each Question carries 03 Marks)	Type Of Question(s)
1.	PHYSICS	06	18	MCQ (Multiple Choice Questions)
2.	CHEMISTRY	07	21	
3.	BIOLOGY	07	21	
4.	MATHEMATICS	08	24	
5.	MENTAL ABILITY	12	36	
	TOTAL		120	

Important Points to Note:

- Duration of Test is **1 hour (Reading Time -15 minutes)**
- The Test Booklet consists of **40 questions**. The maximum marks are **120**. There is **no negative** marking for incorrect answers.
- Pattern of the questions are as under:**
 - The question paper consists of **Five parts i.e., (Physics, Chemistry, Biology, Mathematics and Mental Ability)**.
 - Paper contains 40 MCQ'S which have **only one correct answer**, each question carries **+3 marks** for **correct answer**.
- Use of calculators and electronic devices is prohibited.

Thank you for your participation and good luck!

SYNERGY
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EXAM

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2025

PHYSICS

- Q.1 A uniform metre scale is balanced at 20 cm mark, when a weight of 100 gf is suspended from one end. Where the weight must be suspended? Calculate the weight of the metre scale.
 (A) 66.66 gf (B) 11.11 gf (C) 88.88 gf (D) 77.77 gf
- Q.2 A woman pushes a trunk on railway platform which has a rough surface. She supplies a force of 100 N over a distance of 10 m. Thereafter, she gets progressively tired and her applied force reduces linearly with distance to 50 N. The total distance by which the trunk has been moved is 20 m. Calculate the net work done by the two forces over 20 m.
 (A) 1000 J (B) 500 J (C) 1500 J (D) 1750 J
- Q.3 A ball of mass m is dropped from height h .
 (A) Kinetic energy of the ball at ground level is mgh
 (B) Both potential energy of the ball at height h is mgh and kinetic energy of the ball at ground level is mgh
 (C) Potential energy of the ball at ground level is mgh .
 (D) Potential energy of the ball at height h is mgh .
- Q.4 The MA of sugar tongs is
 (A) >1 (B) $=1$ (C) $\neq 1$ (D) <1
- Q.5 A prism has:
 (A) Two rectangular and three triangular surfaces
 (B) Four rectangular and three triangular surfaces
 (C) Two triangular and three rectangular surfaces
 (D) Three rectangular and three triangular surfaces
- Q.6 The angle of deviation is maximum for _____ when the dispersion of polychromatic light takes place.
 (A) Green (B) Violet (C) Red (D) Blue

CHEMISTRY

- Q.7 A polar covalent compound is
 (A) Methane (B) Ammonia (C) Nitrogen (D) Chlorine
- Q.8 An acid which has two replaceable hydrogen ions
 (A) Acetic acid (B) Hydrochloric acid (C) Phosphoric (D) Carbonic acid
- Q.9 Which of the following would occupy 22.4 L at S.T.P?
 (i) 32 g of oxygen gas
 (ii) 2 moles of hydrogen gas
 (iii) $6.00^{22} \times 10^{23}$ molecules of ammonia
 [Atomic weights : O = 16, H = 1, N = 14]
 (A) (i) and (ii) (B) (i) and (iii) (C) (ii) and (iii) (D) (i), (ii) and (iii)

- Q.10 Which of the following ions will readily discharge at the anode during the electrolysis of acidulated water?
 (A) OH^- (B) SO_4^{2-} (C) Cl^- (D) H^+
- Q.11 The compound that is not an ore of aluminum
 (A) Ceyolite (B) Corundum (C) Fluorspar (D) Bauxite
- Q.12 The property exhibited by concentrated sulphuric acid when it is used to prepare hydrogen chloride gas from potassium chloride
 (A) Dehydrating property (B) Drying property
 (C) Oxidising property (D) Non-volatile acid property
- Q.13 Drying agent used to dry hydrogen chloride gas is
 (A) Concentrated sulphuric acid (B) Calcium oxide
 (C) Sulphurous acid (D) Calcium hydroxide

BIOLOGY

- Q.14 The male accessory gland whose secretion neutralizes the acidity of the urethra and vagina is:
 (A) Seminal vesicle (B) Prostate gland (C) Seminiferous tubule (D) Bulbo-urethral gland
- Q.15 A gland which secretes enzymes and hormones both is:
 (A) Adrenal (B) Pancreas (C) Thyroid (D) Pituitary
- Q.16 Gyri and sulci are richly found in:
 (A) Renal cortex (B) Cerebral cortex (C) Spinal cortex (D) Adrenal cortex
- Q.17 The organ that does not belong to the excretory system:
 (A) Urethra (B) Uterus (C) Ureter (D) Urinary bladder
- Q.18 Which of following acts like a blood reservoir?
 (A) Tonsils (B) Lymph (C) Spleen (D) Tissue fluid
- Q.19 The phenomenon by which living/dead plant cells absorb water by surface attraction is called:
 (A) Inhibition (B) Cohesion (C) Adhesion (D) Imbibition
- Q.20 The 9 : 3 : 3 : 1 dihybrid ratio is due to
 (A) Segregation (B) Crossing over (C) Independent assortment (D) Homologous pairing

MATHEMATICS

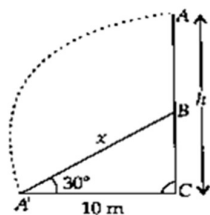
- Q.21 If a line touches a circle and chord is drawn from the point of contact and the angle between the tangent and the chord is $\frac{p}{2}$, the angle in the corresponding alternate segment is equal to
 (A) $\frac{p}{4}$ (B) $\frac{p}{2}$ (C) p (D) 2p

Q.22 If the equation has equal roots then $k = ?$

- (A) $\pm \frac{2\sqrt{2}}{3}$ (B) $\pm \frac{1}{3}$ (C) $\pm \frac{3}{4}$ (D) $\pm \frac{3}{2\sqrt{2}}$

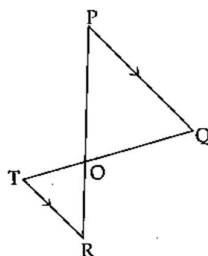
Q.23 A retailer purchased a piano for ₹ 3500 from a wholesaler and sells it to a customer at 10% profit. The sales are intra-state and the rate of GST is 18%. The amount of GST paid by the customer is
(A) ₹ 350 (B) ₹ 396 (C) ₹ 633 (D) ₹ 693

Q.24 The top of a broken tree has its top touching the ground (shown in the given figure) at a distance of 10 m from the bottom and the angle made by the broken part with ground is 30° . Which of the following is satisfied?



- (A) The length of the broken part is metres $10\sqrt{3}$ (B) The length of the broken part is metres $\frac{10}{\sqrt{3}}$
(C) The length of the broken part is metres $20\sqrt{3}$ (D) The length of the broken part is metres $\frac{20}{\sqrt{3}}$

Q.25 In the given figure PQ is parallel to TR, then by using condition of similarity:



- (A) $\frac{PQ}{RT} = \frac{OP}{OT} = \frac{OQ}{OR}$ (B) $\frac{PQ}{RT} = \frac{OP}{OR} = \frac{OQ}{OT}$
(C) $\frac{PQ}{RT} = \frac{OR}{OP} = \frac{OQ}{OT}$ (D) $\frac{PQ}{RT} = \frac{OP}{OR} = \frac{OT}{OQ}$

Q.26 The polynomial $x^3 - 2x^2 + ax + 12$ when divided by $(x + 1)$ leaves remainder 20, then 'a' is equal to:
(A) - 31 (B) 9 (C) 11 (D) - 11

Q.27 For the given n variables: $x_1, x_2, x_3, \dots, x_n$

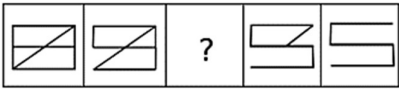
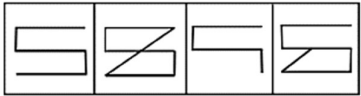
Assertion (A): Inter quartile range is the difference between the upper quartile and the lower quartile.

Reason (R): The value of inter quartile range can be either positive or negative.

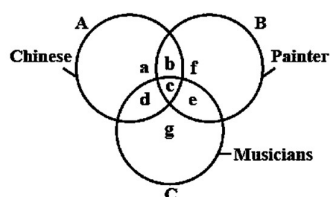
- (A) A is true, R is false (B) A is false, R is true
(C) Both A and R are true (D) Both A and R are false.

Q.28 The sum of the first three terms of an Arithmetic Progression (A.P.) is 42 and the product of the first and third term is 52. Find the first term and the common difference.
(A) 14, 26 (B) 14, 11 (C) 14, 10 (D) 14, 12

MENTAL ABILITY

- Q.29 If Ajit is the brother of the son of Sethi's son, what is the relationship between Ajit and Sethi?
 (A) Cousin (B) Grandson (C) Brother (D) Nephew
- Q.30 In the question below are given two statements and two conclusions numbered I and II. You have to take the given two 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 two given statements.
 (1) Only conclusion I follows (2) Only conclusion II follows
 (3) Both I and II follow (4) Neither I nor II follows.
Statements: All lamps are books. No book is coloured.
Conclusions: (I) Some lamps are coloured.
 (II) No lamp is coloured.
 (A) I (B) II (C) Both I & II (D) None of these
- Q.31 A clock loses 5 min for every hour and another gains 5 min for every hours. If they are set correct at 10 am on Monday then when will they be 12 hrs apart?
 (A) 10 am on Thursday (B) 10 am on Wednesday
 (C) 10 am on Tuesday (D) 10 am on Monday
- Q.32 Fill the blanks from the choices given below:
 $234 : 4614 :: 2812 : ?$
 (A) 3713 (B) 34614 (C) 121314 (D) 131415
- Q.33 Find the missing figure of the series from the answer figure
Problem figure:
- 
- (A) (B) (C) (D) (E)
- Options:**
- 
- (A) (B) (C) (D)
- Q.34 In the group of words given below all except one, share a common similarity. Select the odd one. Which group of letters is different from others?
 (A) CBAED (B) TSRVU (C) KJIMN (D) WVUYX
- Q.35 Six persons P, Q, R, S, T and U are sitting in a circle facing one another front to front. P is sitting front Q. Q is sitting to the right of T and left of R. P is to the left of U and right of S. Who is sitting opposite to R?
 (A) P (B) Q (C) S (D) U

Q.36 Chinese who are painters as well as musicians –



- (A) a (B) b (C) c (D) d

Q.37 You go North, turn right, then right again and then go to the left. In which direction are you now?

- (A) North (B) South (C) East (D) West

Q.38 If in a code language STAR = 50 and CIRUS = 65 then PLANET will be

- (A) 68 (B) 78 (C) 84 (D) 94

Q.39 Six persons P, Q, R, S, T and U are sitting in a circle facing one another front to front. P is sitting front Q. Q is sitting to the right of T and left of R. P is to the left of U and right of S.

If the positions of P and R are ex-changed, who will be sitting between S and U?

- (A) P (B) R (C) Q (D) T

Q.40 The question are based on a dice numbered 1 to 6 in different ways as indicated

The question are based on a dice numbered 1 to 6 in different ways as indicated.

If 1 is opposite to 5 and 2 is opposite to 3, then

- (A) 4 is adjacent to 3 and 6 (B) 2 is a adjacent to 4 and 6
(C) 4 is adjacent to 5 and 6 (D) 6 is adjacent to 3 and 4