

ACADEMIC SESSION : 2021-22

SAMPLE TEST PAPER (For IX to X Moving)

Duration : 18 Min.

Max. Marks : 96

Name : \_\_\_\_\_ Application Form Number \_\_\_\_\_

Reg. Number : 

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### GENERAL INSTRUCTIONS

1. There are 5 pages in the booklet containing **24** questions of **Physics (01 to 05), Chemistry (06 to 10), Mathematics (11 to 15), Biology (15 to 20) & Mental Ability (21 to 24)**, each question carry 4 mark.
2. Blank papers, clip boards, log tables, slide rule, calculators, mobile or any other electronic gadgets in any form is not allowed.
3. Write your Name and Roll No. in the space provided at the top of this booklet.
4. Before answering the paper, fill up the required details in the blank space provided in the answer sheet.
5. Do not forget to mention your roll number neatly and clearly in the blank space provided in the answer sheet.
6. No rough sheets will be provided by the invigilators. All the rough work is to be done in the blank space provided in the question paper.
7. In case of any dispute, the answer filled in the OMR sheet available with the institute shall be final.

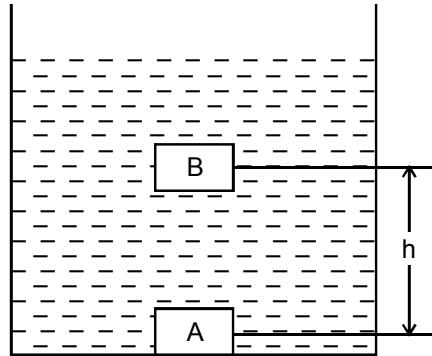
### MARKING CRITERIA

No. of Questions	Type	Marks		
		Correct	Incorrect	Blank
1-24	Only one correct	Q.No. 1 to 24 (4 Mark each)	-1 negative marks	0

**PHYSICS**

**This section contains 5 multiple choice questions. Each question has four choices (1),(2),(3) and (4) out of which only one is correct**

- When bike suddenly starts moving from rest, the rider tends to fall backwards. It is due to :  
(1) inertia of direction (2) inertia of motion (3) inertia of rest (4) momentum of bike
- Two bodies A and B of same dimensions and same material are kept at different heights in a liquid. Which of the following statement is correct.



- (1) A will experience greater upthrust (2) B will experience greater upthrust  
(3) Both will experience equal upthrust (4) None of these
- A body travels half the distance with speed of 20 m/s and the other half with speed of 30 m/s. The average speed of the body during whole journey is :  
(1) zero (2) 24 m/s (3) 23 m/s (4) none of these
- The density of a block is  $981 \text{ kg/m}^3$ . It is immersed in water. State the situation.  
(1) Sinks  
(2) partially immersed  
(3) No part immersed  
(4) None of these
- When a constant force is applied to a body, it moves with uniform :  
(1) speed (2) acceleration  
(3) velocity (4) momentum

**CHEMISTRY**

**This section contains 5 multiple choice questions. Each question has four choices (1),(2),(3) and (4) out of which only one is correct**

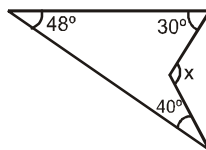
- The atomicity of  $\text{K}_2\text{CrO}_4$  is  
(1) 9 (2) 6 (3) 7 (4) 12
- The process used to separate oil and water is:  
(1) Distillation (2) Sublimation (3) Separating funnel (4) Chromatography
- The formula of a chloride of a metal M is  $\text{MF}_3$ , the formula of the phosphate of metal M will be  
(1)  $\text{MPO}_4$  (2)  $\text{M}_2\text{PO}_4$  (3)  $\text{M}_3\text{PO}_4$  (4)  $\text{M}_2(\text{PO}_4)_3$

9. The isotopes of an element contain
- (1) same number of neutrons but different number of protons
  - (2) same number of neutrons but different number of electrons
  - (3) different number of protons as well as different number of neutrons
  - (4) different number of neutrons but same number of protons
10. Plasma have
- (1) Very low kinetic energy
  - (2) Low kinetic energy
  - (3) High kinetic energy
  - (4) Highest kinetic energy.

## MATHEMATICS

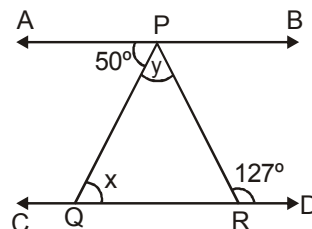
**This section contains 5 multiple choice questions. Each question has four choices (1),(2),(3) and (4) out of which only one is correct**

11. If 'a' and 'b' are rational numbers and  $\frac{2+\sqrt{3}}{2-\sqrt{3}} = a + b\sqrt{3}$  then b =
- (1) 4
  - (2) 7
  - (3) 6
  - (4) 8
12. What is the value of the  $(x - y)(x + y)$ , when  $x = 12$  and  $y = -12$  ?
- (1) 288
  - (2) 144
  - (3) 12
  - (4) 0
13. The linear equation  $y = 2x + 3$  cuts the y-axis at -
- (1) (0,3)
  - (2) (0,2)
  - (3)  $\left(\frac{3}{2}, 0\right)$
  - (4)  $\left(\frac{2}{3}, 0\right)$
14. The value of x in the given figure is -



- (1) 20°
- (2) 223°
- (3) 118°
- (4) 72°

15. If  $AB \parallel CD$ ,  $\angle APQ = 50^\circ$  and  $\angle PRD = 127^\circ$ , then x and y are



- (1) 40°, 30°
- (2) 50°, 77°
- (3) 30°, 45°
- (4) 90°, 30°










**BIOLOGY**

**This section contains 5 multiple choice questions. Each question has four choices (1),(2),(3) and (4) out of which only one is correct**

16. The function of the nucleolus in the cell is  
 (1) Secretory (2) Synthesis of DNA  
 (3) Synthesis of RNA and ribosomes (4) None of these
17. Which of the following phenomena is commonly referred as 'cell drinking'?  
 (1) Exocytosis (2) Pinocytosis (3) Endocytosis (4) Phagocytosis
18. Naked seeds are present in  
 (1) Pinus (2) Mango (3) Mustard (4) Lemon
19. Which of the diseases is not communicable?  
 (1) Chicken pox (2) Cancer (3) Measles (4) None of these
20. Which of the following is a free living nitrogen fixing bacterium present in soil?  
 (1) Azotobacter (2) Clostridium (3) Rhizobium (4) Pseudomonas

**MENTAL ABILITY**

**This section contains 4 multiple choice questions. Each question has four choices (1),(2),(3) and (4) out of which only one is correct**

21. Choose the odd one out.  
 (1) Flute (2) Guitar (3) Sitar (4) Violin
22. Which of the following diagrams indicates the best relation between Bus, Bike and Vehicle ?  
 (1)  (2)  (3)  (4) 
23. Choose the correct water image of the given figure (X) from amongst the four alternatives.  




  
 (X) (1) (2) (3) (4)
24. Solve the given equation to find the answer  
 $(370 \div 70) + 309 - 847 + 86 = ?$   
 (1) - 445.72 (2) - 464.7 (3) - 456 (4) - 446.72

Space for rough work

**R-NET (SAMPLE PAPER) (IX to X moving students)**

**ANSWER KEY**

<b>Que.</b>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<b>Ans.</b>	3	3	2	2	2	3	3	1	4	4	1	4	1	3	2	3	2	1	2	1
<b>Que.</b>	21	22	23	24																
<b>Ans.</b>	1	3	2	4																