

MM : 40

MOCK TEST SERIES

Time : 1½ Hrs.

Mock Test –1 (Class-10) Paper-I

**Topics covered**

**Science :** Complete Syllabus of Class-X

**Instructions :**

- (1) Duration of Test is 1½ hrs.
- (2) The Test booklet consists of 30 questions. The maximum marks are 30. There is no negative marking.

**PHYSICS & CHEMISTRY**

- Q 1 A Choose the correct alternative [5]
- i. The height of the satellite's orbit above the earth's surface is greater than or equal to \_\_\_\_\_ km, the orbit is called High Earth Orbit.
 

(a) 30000	(b) 2000
(c) 35780	(d) 180
  - ii. Which colour bends the most when white light is incident on the prism
 

(a) Green	(b) Blue
(c) Red	(d) Violet
  - iii. Which gas is released when ferrous sulphate crystals are heated for long?
  - iv. Which non metal is liquid at room temperature?
  - v. Newland's law of Octaves was applicable till which element?
- Q 1 B Solve the following questions. [5]
- i. Write full form of INSAT
  - ii. Name the lens that forms a real image or a virtual image depending on the position of the object.
  - iii. Write the value of gravitational constant with its SI unit.
  - iv. Find the odd one out: Methane, Ethane, Propene, Propane, Butane
  - v. Draw the structural formula of 1st member of alkyne family.

- Q 2 A Give reason (Any two) [4]
- i. If crushed ice is pressed and then the pressure is released, a lump of ice is formed.
  - ii. Tungsten metal is used to make a solenoid type coil in an electric bulb.
  - iii. Why Dobernier's law is known as Triad law?
- Q 2 B Solve the following questions (Any 3) [6]
- i. Heat energy is being produced in a resistance in a circuit at the rate of 900 W. The current of 6 A is flowing in the circuit. What must be the value of the resistance?
  - ii. Equal heat is given to two objects A and B of mass 1 g. Temperature of A increases by 2°C and B by 7°C. Which object has more specific heat? And by what factor?
  - iii. Explain Newland's law of octaves and its limitations.
  - iv. Differentiate between displacement and double displacement reaction with example.
- Q 3 Solve the following questions (any five) [15]
- i. Two convex lenses of equal focal lengths are kept in contact with each other. If the power of their combination is 20 D. find the focal length of each convex lens.
  - ii. If the absolute refractive indices of glass and water are 3/2 and 4/3 respectively, what is the refractive index of glass with respect to water?

- iii. Write full form of PSLV and Draw a neat labeled diagram: Structure of PSLV made by ISRO.
- iv. Explain the following: What is the role of anomalous behavior of water in preserving aquatic life in regions of cold climate?
- v. Who will spend more electrical energy? 500 W TV set in 30 minutes, or 600 W heater in 20 minutes?
- vi. why carbon form large number of organic compounds?
- vii. explain roasting and calcination.
- viii. Explain the trend of metallic character in group and period.
- Q 4 Solve the following questions **[5]**
- i. Define rate of reaction and explain the factors affecting rate of reaction.