

# SCIENCE

## MOCK TEST-8

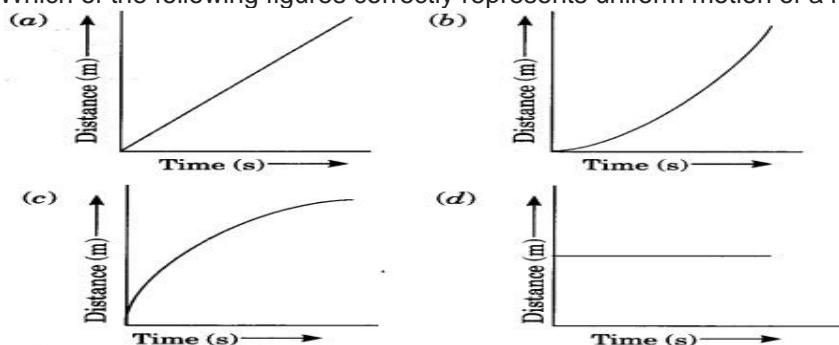


### SECTION- A (CHEMISTRY)

- During summer, water kept in an earthen pot becomes cool because of the phenomenon of  
(a) diffusion (b) transpiration (c) osmosis (d) evaporation
- Tincture of iodine has antiseptic properties. This solution is made by dissolving  
(a) iodine in potassium iodide (b) iodine in Vaseline (c) iodine in water (d) iodine in alcohol
- The relative molecular mass of  $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$  is  
(a) 250 amu (b) 250 g (c) 248 amu (d) 248
- The molecule having an atomicity of 4 is:  
(a) Sulphate molecule (b) Ozone molecule (c) Phosphorus molecule (d) Methane molecule
- The boiling point of water at sea level is  
(a)  $0^\circ\text{C}$  (b) 273 K (c) 373 K (d)  $273^\circ\text{C}$
- Which of the following methods would you use to separate cream from milk?  
(a) Fractional distillation (b) Distillation (c) Centrifugation (d) Filtration
- The ion of an element has 3 positive charges. Mass number of the atom is 27 and the number of neutrons is 14. What is the number of electrons in the ion?  
(a) 13 (b) 10 (c) 14 (d) 16
- The first model of an atom was given by  
(a) N. Bohr (b) E. Goldstein (c) Rutherford (d) J.J. Thomson
- Isobars do not differ in the number of  
(a) protons (b) electrons (c) neutrons (d) nucleons
- $\text{MnO}_2 + 4\text{HCl} \rightarrow \text{MnCl}_2 + 2\text{H}_2\text{O} + \text{Cl}_2$   
Identify the substance oxidized in the above equation.  
(a)  $\text{MnCl}_2$  (b) HCl (c)  $\text{H}_2\text{O}$  (d)  $\text{MnO}_2$
- What type of chemical reactions take place when electricity is passed through water?  
(a) Displacement (b) Combination (c) Decomposition (d) Double displacement
- In terms of acidic strength, which one of the following is in the correct increasing order?  
(a) Water < Acetic acid < Hydrochloric acid (b) Water < Hydrochloric acid < Acetic acid  
(c) Acetic acid < Water < Hydrochloric acid (d) Hydrochloric acid < Water < Acetic acid
- Brine is an  
(a) aqueous solution of sodium hydroxide (b) aqueous solution of sodium carbonate  
(c) aqueous solution of sodium chloride (d) aqueous solution of sodium bicarbonate
- At what temperature is gypsum heated to form Plaster of Paris?  
(a)  $90^\circ\text{C}$  (b)  $100^\circ\text{C}$  (c)  $110^\circ\text{C}$  (d)  $120^\circ\text{C}$
- Lime water reacts with chlorine to give  
(a) bleaching powder (b) baking powder (c) baking soda (d) washing soda

### SECTION- B (PHYSICS)

- If the displacement of an object is proportional to square of time, then the object moves with  
(a) uniform velocity (b) uniform acceleration (c) increasing acceleration (d) decreasing acceleration
- Which of the following figures correctly represents uniform motion of a moving object?



- A boy goes from A to B with a velocity of 20 m/min and comes back from B to A with a velocity of 30 m/min. The average velocity of the boy during the whole journey is  
(a) 24 m/min (b) 25 m/s (c) Zero (d) 20 m/min



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19. The inertia of an object tends to cause the object  
(a) to increase its speed (b) to decrease its speed  
(c) to resist any change in its state of motion (d) to decelerate due to friction
20. An object of mass 2 kg is sliding with a constant velocity of 4 ms<sup>-1</sup> on a frictionless horizontal table. The force required to keep the object moving with the same velocity is  
(a) 32 N (b) 0 N (c) 2 N (d) 8 N
21. If the mass of a body is doubled and its velocity becomes half, then the linear momentum of the body will  
(a) remain same (b) become double (c) become half (d) become four times.
22. When a ship floats in sea water  
(a) The weight of water displaced is greater than the weight of ship  
(b) The weight of water displaced is less than the weight of the ship  
(c) The weight of water displaced is equal to the weight of the ship (d) It displaces no water.
23. The weight of an object at the centre of the Earth of radius R is  
(a) zero (b) infinite  
(c) R times the weight at the surface of the Earth (d) 1/R<sup>2</sup> times the weight at surface of the Earth
24. The gravitational force between two objects is F. If masses of both objects are halved without changing the distance between them, then the gravitational force would become  
(a) F/4 (b) F/2 (c) F (d) 2F
25. Sound travels in air if  
(a) particles of medium travel from one place to another (b) there is no moisture in the atmosphere  
(c) disturbance moves (d) both particles as well as disturbance travel from one place to another.
26. Note is a sound  
(a) of mixture of several frequencies (b) of mixture of two frequencies only  
(c) of a single frequency (d) always unpleasant to listen
27. Infrasound can be heard by  
(a) dog (b) bat (c) rhinoceros (d) human beings
28. The defect in the eye in which the eyeball becomes too long is  
(a) myopia (b) hypermetropia (c) presbyopia (d) cataract
29. The splitting of white light into different colors on passing through a prism is called  
(a) reflection (b) refraction (c) dispersion (d) deviation
30. The least distance of distinct vision for a normal human eye is  
(a) infinity (b) 25cm (c) 2.5cm (d) 25m

### SECTION- C (BIOLOGY)

31. In which mode of nutrition an organism de-rives its food from the body of another living organism without killing it?  
(a) Saprotrophic nutrition (b) Parasitic nutrition (c) Holozoic nutrition (d) Autotrophic nutrition
32. In amoeba, food is digested in the:  
(a) food vacuole (b) mitochondria (c) pseudopodia (d) chloroplast
33. The contraction and expansion movement of the walls of the food pipe is called:  
(a) translocation (b) transpiration (c) peristaltic movement (d) digestion
34. Posture and balance of the body is controlled by  
(a) Pons (b) Medulla oblongata (c) Cerebellum (d) Cerebrum
35. Which plant hormone promotes cell division?  
(a) Auxin (b) Gibberellin (c) Cytokinin (d) Abscisic acid
36. Which of the following acts as both endocrine and exocrine gland?  
(a) Pancreas (b) Thyroid (c) Adrenal (d) Liver
37. Which of the following can be made into crystal?  
(a) A bacterium (b) An Amoeba (c) A virus (d) A sperm
38. The undefined nuclear region of prokaryotes is also known as  
(a) nucleus (b) nucleolus (c) nucleic acid (d) nucleoid
39. The feature that is not a characteristic of protochordata?  
(a) Presence of notochord (b) Bilateral symmetry and coelom  
(c) Jointed legs (d) Presence of circulatory system
40. Elephantiasis is caused by  
(a) Wuchereria (b) Pinworm (c) Planarians (d) Liver flukes

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41. Which of the following tissues has dead cells?  
(a) Parenchyma      (b) Sclerenchyma      (c) Collenchyma      (d) Epithelial tissue
42. Cartilage is not found in  
(a) nose      (b) ear      (c) kidney      (d) larynx
43. In an ecosystem, herbivores represent  
(a) producers      (b) primary consumers      (c) secondary consumers      (d) decomposers
44. Which one of the following is an artificial ecosystem?  
(a) Pond      (b) Crop field      (c) Lake      (d) Forest
45. Excessive exposure to ultraviolet radiation causes  
(a) inflammation of liver      (b) cancer of skin      (c) damage to the lungs      (d) jaundice

