

Science (Solution)

**S1. Ans.(a)**

**Sol.** Coliform bacteria are a commonly used bacterial indicator of sanitary quality of food and water.

**S2. Ans.(a)**

**Sol.** Iodine solution is used to test for starch; a dark blue color indicates the presence of starch.

**S3. Ans.(d)**

**S4. Ans.(b)**

**Sol.** Methanoic acid is also known as formic acid. Formic acid is sprayed out of a specialized nozzle at the back end of ants in the sub family formicidae. Chemical formula of Methanoic is  $\text{HCO}_2\text{H}$ .

**S5. Ans.(d)**

**Sol.** Hematite, it is the mineral form of iron oxide. It is a mineral, coloured black to steel or silver-gray, brown to reddish brown or red.

**S6. Ans.(b)**

**Sol.** In solid state ions i.e.,  $\text{Na}^+$  and  $\text{Cl}^-$  are strongly bonded with each other. So they can't leave their positions. But when dissolved in water, they get separated and move freely in water. The flow of electrons or ions is electric current.

**S7. Ans.(b)**

**S8. Ans.(d)**

**S9. Ans.(d)**

**Sol.** Hemoglobin is the iron containing oxygen transport metalloprotein in the red blood cells.

**S10. Ans.(c)**

**Sol.** Bakelite is used today for wire insulation. Brake pads and related automotive components and industrial electrical related application.

**S11. Ans.(b)**

**Sol.** Transpiration is the process of water movement through a plant and its evaporation from aerial parts, such as from leaves, stems and flower.

**S12. Ans.(b)**

**Sol.** Because 1/10 part of energy available for all in food chain rest lost to environment.

 Adda 247  
Test Series

 **UPTET 2018**  
**PAPER - I**

**20 TOTAL TESTS**

- 5 FULL LENGTH MOCKS
- 15 PRACTICE SETS

**S13. Ans.(d)**

**Sol.** Blister is an impure form of copper having a blister like surface due to the release of gas during cooling.

**S14. Ans.(c)**

**Sol.** Boiling point is the temperature at which the vapor pressure of a liquid equals the external pressure surrounding the liquid.

**S15. Ans.(a)**

**S16. Ans.(a)**

**S17. Ans.(a)**

**Sol.** Distillation is a process of separating component substances from liquid mixtures through vaporization and condensation. Water can be distilled to remove impurities.

**S18. Ans.(c)**

**Sol.** A homologous series of compounds with the same general formula. The concept of homologous series was proposed in 1843 by the French chemist Charles Gerhardt.

**S19. Ans.(a)**

**S20. Ans.(b)**

**S21. Ans.(a)**

**Sol.** Magnetic field lines are useful for visually representing the strength and direction the magnetic field.

**S22. Ans.(c)**

**S23. Ans.(a)**

**S24. Ans.(a)**

**S25. Ans.(d)**

**Sol.** Fleming's right hand rule is held with the thumb, first figure and second figure. Represent field and second figure represent current.

**S26. Ans.(c)**

**S27. Ans.(c)**

**Sol.** On the moon the escape speed is low thus the faster moving atom escape overtime.

**S28. Ans.(c)**

**Sol.**  $G = \left( \frac{M_1 M_2}{R^2} \right)$

**S29. Ans.(d)**

**Sol.** Violet deviates through the prism.

**S30. Ans.(b)**

**Sol.**  $V = \frac{d}{t}$  constant.

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 **UPTET 2018**  
Paper -II

(Mathematics & Science)

**30 TOTAL TESTS**

- 5 FULL LENGTH MOCKS
- 25 PRACTICE SETS