

312336

12425

03 Hours / 70 Marks

Seat No.

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- Instructions* –
- (1) All Questions are *Compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Assume suitable data, if necessary.
 - (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any FIVE of the following: 10
- a) Define acid and base w.r.t. Arrhenius concept.
 - b) Define molecular weight.
 - c) State the role of reducing agent in wet processing.
 - d) State general characteristics of organic compounds.
 - e) Define Aromatic hydrocarbon.
 - f) List common methods used for the purification of organic compounds.
 - g) Define Organic compound.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Explain the classification of organic compounds based on their functional group.
 - b) Explain the term:
 - i) Heat of solution
 - ii) Heat of dilution
 - c) Explain the process of osmosis with help of diagram.
 - d) A sample of milk has pH of 6.2. Calculate H^+ and OH^- .
- 3. Attempt any THREE of the following:** **12**
- a) Describe the role of thermo chemistry in wet processing.
 - b) Differentiate between Aromatic and Aliphatic compounds.
 - c) Explain any four applications of organic compounds in textile industries.
 - d) 'Organic acids are generally weak acids'. Justify with example.
- 4. Attempt any THREE of the following:** **12**
- a) Discuss in detail heat of formation and heat of combustion.
 - b) Name any four aromatic compounds and write their chemical formulae.
 - c) Describe the procedure of determining boiling point of a liquid.
 - d) Explain distillation and sublimation process of organic compounds.
 - e) Describe following extraction methods of organic compound:
 - i) Solid - liquid
 - ii) Liquid - liquid

5. Attempt any TWO of the following:**12**

- a) Define Salts. Explain detailed classification of salt with examples.
- b) Identify following chemicals into Scouring, Bleaching Dyeing and Mercerizing agent of fabric:
 - i) Potassium permanganate
 - ii) Sodium hypochlorite
 - iii) Hydrogen peroxide
 - iv) Mixture of NaOH and Na₂CO₃
 - v) Alkyl phenol ethoxylates
 - vi) Sodium peroxide
- c) Explain physical properties of aliphatic and aromatic compounds.

6. Attempt any TWO of the following:**12**

- a) Describe addition, substitution and elimination reaction with example.
- b) Describe the effect of viscosity on the preparation of printing paste in textile wet processing.
- c) Identify and name the following organic compound according to IUPAC system.

