

22410

21819

3 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) List any four industrial applications of Ethyl Acetate.
 - b) Write the reactions involved in manufacturing of Alcohol by molasses.
 - c) Give the applications of oil.
 - d) Give the names of raw material used for manufacturing of polycarbonate.
 - e) List raw materials used for manufacturing of pulp.
 - f) Give industrial applications of polyethylene.
 - g) List manufacturing processes of Phenol.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Explain the roles of constituents used in paints.
 - b) Draw process flow diagram for manufacturing of polyvinylchloride.
 - c) Write the reactions involved in manufacturing of phenol by cumene process.
 - d) Explain process flow diagram of hydrogenation of oil.
- 3. Attempt any THREE of the following:** **12**
- a) Draw process flow diagram for manufacturing of Acetaldehyde.
 - b) Explain manufacturing of detergents.
 - c) Differentiate between paint and varnish.
 - d) Explain manufacturing process of pulp.
- 4. Attempt any THREE of the following:** **12**
- a) Explain manufacturing process of soap.
 - b) Give name of four paints manufacturing industries with their location.
 - c) Give reactions involved in manufacturing of polyester.
 - d) Draw process flow diagram for manufacture of phenol by toulene.
 - e) Draw a process flow diagram of Phenol by Rasching process.
- 5. Attempt any TWO of the following:** **12**
- a) Describe manufacturing process of pulp.
 - b) Explain manufacturing of alcohol by corn using process flow sheet.
 - c) Draw the process flow sheet of polyethylene with reactions.

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

- a) Give industrial applications of Butanol. Draw process block diagram for manufacture of Butanol.
 - b) Give industrial applications of PVC and name of PVC manufacturing industries (four names).
 - c) Give industrial applications and name of manufacturing industries for phenol.
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