Scheme – I

Sample Question Paper

Program Name	: Diploma in Chemical Engineering	
Program Code	: CH	
Semester	: Fourth	22410
Course Title	: Technology of Organic Chemicals	
Marks	: 70	Time: 3 Hrs.

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1) Attempt any FIVE of the following.

- a. List any four industrial applications of ethanol.
- b. Write the reaction involved in manufacturing of acetaldehyde.
- c. Define iodine value of oil.
- d. Write the names of raw materials used for manufacturing of polyester.
- e. List any four sources for manufacturing of pulp.
- f. List any four industrial applications of poly vinyl chlorides.
- g. Write the reaction involved in manufacturing of phenol by toluene.

Q.2) Attempt any THREE of the following.

- a. Describe the roles of constituents used in paint.
- b. Draw PFD for manufacturing for polyethylene.
- c. Write any four properties of phenol and list its any four industrial applications.
- d. Describe the need of edible oil refining process.

Q.3) Attempt any THREE of the following.

- a. Draw PFD for manufacturing for ethanol from molasses.
- b. Explain manufacturing of soap from oil.
- c. Differentiate between varnish and lacquers.

10 Marks

12 Marks

d. Explain manufacturing of paper from pulp with moisture range in different drying rolls.

Q.4) Attempt any THREE of the following.

- a. Differentiate between soap and detergent.
- b. Draw process block diagram for manufacturing of paint.
- c. Write reaction involved in manufacturing of polyester.
- d. Describe the process for manufacturing of phenol by toluene
- e. Draw process flow diagram for manufacturing of phenol by Raschig process.

Q.5) Attempt any TWO of the following.

- a. Describe manufacturing process of pulp by Kraft process with neat flow diagram.
- b. Explain manufacturing process of butanol with neat process flow diagram.
- c. Describe addition and condensation polymerisation with examples. Explain manufacturing of polyethylene

Q.6) Attempt any TWO of the following.

- a. List industrial applications of acetaldehyde. Explain its process with neat flow diagram.
- b. Describe manufacturing of vinyl chloride monomer with neat flow diagram.
- c. Explain manufacturing process of phenol by cumene peroxidation with neat flow diagram.

12 Marks

12 Marks

Scheme - I

Sample Test Paper - I

Program Name	: Diploma in Chemical Engineering	
Program Code	: CH	
Semester	: Fourth	
Course Title	: Technology of Organic Chemicals	
Marks	: 20	Т

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FOUR.

- a. List the four industrial uses of ethanol
- b. Write raw material used for manufacturing of soap.
- c. List industrial uses of ethyl acetate
- d. Name the catalyst used for hydrogenation of oil.
- e. Name the pigments used to give black and white colour in paint.
- f. Write the reaction involved in manufacturing of butanol.

Q.2 Attempt any THREE.

- a. Draw process flow diagram for manufacturing of ethanol from molasses.
- b. Explain manufacturing of ethyl acetate with reaction.
- c. Describe the role of any four constituents of pain.
- d. Differentiate between soap and detergent.
- e. Explain hydrogenation of oil.

22410

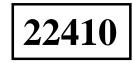
Time: 1 Hour

08 Marks

Scheme - I

Sample Test Paper - II

Program Name	: Diploma in Chemical Engineering
Program Code	: CH
Semester	: Fourth
Course Title	: Technology of Organic Chemicals
Marks	: 20
Program Code Semester Course Title	: CH : Fourth : Technology of Organic Chemicals



Time: 1 Hour

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1 Attempt any FOUR.

- a. List any four industrial uses of polyvinyl chloride.
- b. Write reaction involved in manufacturing of phenol by cumene peroxidation.
- c. Name any four raw materials used for manufacturing of pulp.
- d. Define addition polymerisation.
- e. Write any two important properties of phenol.
- f. Write name of processes used for manufacturing of pulp.

Q.2 Attempt any THREE.

- a. Draw process flow diagram for manufacturing of vinyl chloride.
- b. Describe manufacturing of paper with mentioning moisture content in drying rolls.
- c. Describe manufacturing of polyethylene by high pressure process.
- d. Write the reaction involved in manufacturing of polyester.
- e. Draw process flow diagram for manufacturing of phenol by Raschig process.

08 Marks