



AC-1564

M. Sc. (Part - II) (Sem. IV) Examination

April / May - 2015

Organic Chemistry : Paper - II

(Industrial Chemicals & Process) (Regular & Evening)

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दशांशिक निशानियाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="M. SC. (PART - II) (SEM. IV)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="ORGANIC CHEMISTRY : PAPER - II"/>	<input type="text"/>
Subject Code No. : <input type="text" value="1"/> <input type="text" value="5"/> <input type="text" value="6"/> <input type="text" value="4"/>	<input type="text" value="Student's Signature"/>
Section No. (1, 2,.....): <input type="text" value="Nil"/>	

(2) All questions are compulsory.

(3) Figures to the right indicate full marks of the question.

Q.1 Answers any three of the following.

18

- What is sulphation, sulphamation and sulphonation? State different sulphonating and sulphating agents. Discuss industrially important compounds obtained by sulphonation of benzene and its homologues.
- What is nitration? Name the different nitrating agents. Discuss about industrial important chemicals derived by nitration from anthracene.
- Explain unit process. How is amination carried out for the manufacturing of chemicals on large scale? Give the industrially obtained chemicals that are obtained by ammonolysis.
- Describe halogenation reactions with examples. Explain the chlorination and bromination in the manufacture of industrially important chemicals.

Q.2 Answers any three of the following.

18

- What are petrochemicals? Discuss how industrially obtained chemicals by C₃ and C₄ cuts.
- Explain crude petroleum. Discuss how industrially obtained chemicals from acetylene.

- c. Discuss the industrial manufacturing and uses of vinyl polymers and elastomers.
- d. What are polymers? How are they classified? Name the techniques of polymerization. Discuss any one of them in detail.

Q.3 Give the industrial production and uses of following **18**
With diagram (Any three)

- a. Acetone
- b. MIBK
- c. Power alcohol
- d. Ethylene glycol

Q.4 Answer any four of the following. **16**

- a. How ethanol amines are industrially prepared? Give its industrial applications with diagram.
- b. Define alkylation. Discuss industrially important alkyl compounds derived by various routes.
- c. Give brief account on polyesters.
- d. Give the industrial production and uses of Benzyl penicillin with diagram.
- e. Write short note on techniques of polymerization.