



DDD-1564

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

April / May - 2016

Organic Chemistry : Paper - II
(Industrial Chemicals & Process)

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

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

(2) All questions are compulsory.

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

1 Answer any three of the following : 18

- Differentiate Unit processes and unit operations. Name the different nitrating agents and discuss industrially important chemicals obtained by nitration from benzene.
- Name different halogenating agents. Discuss industrial chemicals obtained from, benzene naphthalene and anthracene by chlorination.
- Discuss how industrially important chemicals obtained from xylene.
- Define alkylation and enlist different alkylating agents. Discuss about industrial importance of these compounds.

2 Answer any three of the following : 18

- Discuss how industrially chemicals obtained by aromatics and C₁ cut. Give their applications.
- Discuss the industrial manufacturing and uses of polyvinylchloride and elastomers.
- What are polymers ? How are they classified ? Name the techniques of polymerization. Discuss any one of them in detail.
- What are petrochemicals ? Discuss industrially important products obtained from acetylene."

- 3** Give the industrial production and uses of following with diagram : (any **three**) **18**
- (a) Vitamin C
 - (b) Ethyleneglycol
 - (c) Acetone
 - (d) Ethanolamines.
- 4** Answers any four of the following : **16**
- (a) Give a brief account of techniques of polymerization.
 - (b) Give the mechanism of aromatic sulphonation. Explain briefly an industrial production of chemicals by sulfonation of benzene and naphthalene.
 - (c) Give the industrial production and uses of Penicillin with diagram.
 - (d) "Petroleum products have been the most vital raw material for chemical industry" justify this statement with reference to propylene.
 - (e) What is hydroxylation ? Discuss about industrial important hydroxyl compounds derived by various routes.
-