



KC-6131

B. E. II (Sem. III) (Chem.) Examination

November / December – 2012

Unit Process

(Old Course)

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दृष्टावेव निशानीवाणी विगतो उत्तरवही पर अवश्य लपनी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
☛ B. E. II (SEM. III) (CHEM.)	<input type="text"/>
Name of the Subject :	<input type="text"/>
☛ UNIT PROCESS (OLD)	<input type="text"/>
☛ Subject Code No. : <input type="text"/> 6 <input type="text"/> 1 <input type="text"/> 3 <input type="text"/> 1	<input type="text"/>
☛ Section No. (1, 2,.....): <input type="text"/> Nil	<input type="text"/>
	Student's Signature

- (2) Give chemical reactions and neatly draw diagram with necessary parameters wherever required.
- (3) Figures to the right indicate full marks.
- (4) Process parameters must be high lighted if applicable.

- 1 (a) Answer the following : 10
 - (1) State various sulfonating agents.
 - (2) Name of Nitrating agents used.
 - (3) Application of amination by reduction
 - (4) Define DVS value and Nitric ratio
 - (5) Define Halogenation and sulfonation.
- (b) Write a note on Biazzi nitrator. 8

- 2** Attempt any two : **16**
- (a) Discuss different halogenating agents. Give sandmeyer reaction.
 - (b) Manufacturing of Vinyl chloride from ethylene by alkali route.
 - (c) Describe sulfonation of diethyl ether.
- 3** Attempt any two : **16**
- (a) Define nitration and discuss manufacturing of mono-nitrobenzene by continuous nitration of benzene with 63% conc. HNO_3 .
 - (b) Discuss various types of sulfonators with neat diagram.
 - (c) Discuss sulfonation of lauryl alcohol.
- 4** (a) Attempt the following : **10**
- (1) Define hydrogenation with example
 - (2) Discuss addition polymerization.
 - (3) State hydrolysing agents.
 - (4) List catalyst used in amination reaction in ammonolysis.
 - (5) Define Oxidation with examples.
- (b) Explain hydrogenation of fat and oil. **8**
- 5** Attempt any two : **16**
- (a) Define polymerization. Discuss addition and condensation polymerization with example.
 - (b) Answer the following :
 - (i) List various sources of H_2 production.
 - (ii) What is stereospecific polymerization.
 - (c) Describe hydrolysis of carbohydrates.

6 Attempt any **two** :

16

- (a) Discuss shell process for manufacturing of ethanol from ethylene.
 - (b) Discuss preparation of nitro aniline with example.
 - (c) Answer the following :
 - (i) Discuss effect of pressure and temperature on hydrolysis.
 - (ii) List oxidizing agents and explain importance of any one.
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