

Enrollment No: _____

Exam Seat No.: _____

C.U.SHAH UNIVERSITY

Winter Examination-2021

Subject Name: Industrial Chemistry-II**Subject Code: 4SC05IDC1****Branch: B.Sc. (Chemistry)****Semester: 5****Date: 15/12/2021****Time: 11:00 To 02:00****Marks: 70**

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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Q-1	Attempt the following questions:	(14)
	a) Define: Unit Process	01
	b) Define: Esterification	01
	c) What is the chemical formula of Lignoceric acid?	01
	d) Draw the chemical structure of Ethylvanillin.	01
	e) Write any two nitrating agents.	01
	f) Write the uses of extraction unit operation.	01
	g) What is the application of Coumarin?	01
	h) Which catalyst is used for the synthesis of methanol from synthesis gas?	01
	i) Write about hydrogen cell.	02
	j) Write Industrial uses of hydrogen.	02
	k) Write an industrial organic synthesis of Acetone.	02

Attempt any four questions from Q-2 to Q-8

Q-2	Attempt all questions	(14)
	a. What is Distillation? Explain it by any three methods with suitable examples.	07
	b. Write a short note on Industrial organic synthesis of Methanol.	07
Q-3	Attempt all questions	(14)
	a. What is Polymerization? Explain it with suitable examples.	07
	b. Explain: How to prepare industrial organic synthesis of Ethylene glycol.	07



- Q-4** **Attempt all questions** (14)
a. Write a note on amination unit process. 07
b. Write a note on Nitration unit process. 07
- Q-5** **Attempt all questions** (14)
a. Write a note on (a) Saponification value (b) Acid value (c) Iodine value. 07
b. Discuss on manufacturing of Soybean oil by solvent extraction. 07
- Q-6** **Attempt all questions** (14)
a. Discuss about Industrial production of Hydrogen. 07
b. Write the manufacture of Nitrogen and Oxygen by any one method. 07
- Q-7** **Attempt all questions** (14)
a. Explain: The manufacturing process of methyl anthranilate , methyl salicylate and ester of benzyl alcohol. 07
b. Manufacturing process and uses of carbon dioxide. 07
- Q-8** **Attempt all questions** (14)
a. Explain: Industrial organic synthesis of Phenol by any two different processes. 07
b. Discuss the manufacturing process of Acetic acid. 07

