

C.U.SHAH UNIVERSITY

Summer Examination-2016

Subject Name: Industrial Chemistry-I

Subject Code: 4SC05CHE1

Branch: B.Sc.(Chemistry)

Semester: 5

Date: 02/05/2016

Time: 02:30 To 05:30

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.

Q-1	Define the following terms:	(14)
	a) Nitration	1
	b) Mineral oil	1
	c) Halogenation	1
	d) Iodine oil	1
	e) Amination	1
	f) Animal oil	1
	g) Calcinations	1
	h) Condensation	1
	i) Silicon oil	1
	j) Esterification	1
	k) Nitro musk	1
	l) Hydrolysis	1
	m) Polymerization	1
	n) Unit operation	1

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

Q-2	Attempt all questions	(14)
	1 Write the differences between unit process and unit operation	05
	2 Discuss the basic principles of unit process	05
	3 Write a short note on "Petrochemicals"	04
Q-3	Attempt all questions	(14)
	1 Write the industrial organic synthesis of methanol.	05
	2 Draw the industrial organic synthesis for phenol and glycol.	05
	3 What are industrial gases? Discuss the hydrogen cell.	04



Q-4	Attempt all questions	(14)
1	Describe the industrial organic synthesis of ethanol.	05
2	Draw the industrial organic synthesis of ethyl acetate and acetone.	05
3	Discuss the manufacturing process and uses of Ammonia.	04
Q-5	Attempt all questions	(14)
1	Write a note on filtration.	05
2	Explain the industrial production of hydrogen with proper diagram.	05
3	Discuss the manufacturing process and uses of carbon dioxide.	04
Q-6	Attempt all questions	(14)
1	Write a note on extraction.	05
2	Discuss the industrial uses of hydrogen.	05
3	Write the industrial synthesis of acetylene and nitric acid.	04
Q-7	Attempt all questions	(14)
1	Define distillation? Discuss different assemblies of distillation	07
2	Discuss the physical and chemical properties of oil and fats	07
Q-8	Attempt all questions	(14)
1	Define crystallization? Discuss different types of crystallization	07
2	What are synthetic perfumes? Write the differences between flower and artificial perfumes	07

