Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Summer Examination-2018

Subject Name: Industrial Chemistry - II

Subject Code: 4SC06CHE1 **Branch: B.Sc. (Chemistry)**

Semester: 6 **Date: 07/05/2018** **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		**Attempt the following questions**	**(14)**
	a)	Define: Pigments	01
	b)	Define: Paints	01
	c)	Define: Detonation	01
	d)	Define: Lubricants	01
	e)	Define: Viscosity	01
	f)	Write the physical properties of white lead.	01
	g)	Why: The Peptizers are used for manufacturing of crude rubber?	01
	h)	Write any two names of organic pigments.	01
	i)	Give any two examples of homogeneous solid propellants.	01
	j)	Write the formula for Viscosity index.	01
	k)	What are the drawbacks of raw rubber.	02
	l)	Write the characteristics of explosives.	02

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

Q-2		**Attempt all questions**	**(14)**
	a.	Discuss on the manufacturing process of white lead pigment by Dutch process.	07
	b.	Discuss on the classification of Paints on the basis of application.	07
Q-3		**Attempt all questions**	**(14)**
	a.	Write a note on raw materials of Varnishes.	05
	b.	Describe the manufacture of paints with labeled diagram.	05
	c.	Write a note on Oxygen balance.	04
Q-4		**Attempt all questions**	**(14)**
	a.	What are explosives? How are they classified? Give two examples of each.	07
	b.	Write the preparation and applications of any three primary explosives.	07

Q-5		**Attempt all questions**	**(14)**
	a.	Write the characteristics of a good propellant.	05
	b.	Discuss on the applications of explosives.	05
	c.	Describe the types of blasting fuses with suitable example of each.	04
Q-6		**Attempt all questions**	**(14)**
	a.	Discuss the physical and chemical properties of rubber.	05
	b.	Write a note on Neoprene rubber.	05
	c.	Write a note on Silicon rubber	04
Q-7		**Attempt all questions**	**(14)**
	a.	Discuss the Refining of crude rubber.	07
	b.	Explain the procedure for measuring flash point and Fire point of lubricant.	07
Q-8		**Attempt all questions**	**(14)**
	a.	Discuss the classification of lubricants.	07
	b.	Write a note on synthetic lubricants.	07