

C.U.SHAH UNIVERSITY

Summer Examination-2016

Subject Name: Chemistry-X

Subject Code: 4SC04CHE2

Branch: B.Sc.(Chemistry)

Semester: 4

Date: 16/05/2016

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	Attempt the following questions:	(14)
a)	Define plant nutrients	1
b)	Complete the reactions. $2\text{NH}_4^+ + 4\text{O}_2 \rightarrow 2\text{NO}_3^- + \dots + 2\text{H}_2\text{O}$	1
c)	Complete the reactions. $(\text{NH}_4)_2\text{SO}_4 + 2\text{H}_2\text{O} \rightarrow \leftarrow \dots + \dots$	1
d)	Define industrial chemistry	1
e)	Write the full form of LPG	1
f)	Write the full form of LNG	1
g)	Define R _f value	1
h)	Define cement	1
i)	Define ceramic	1
j)	Define glass	1
k)	Define chromatography	1
l)	Write the formula of urea	1
m)	Write the formula of superphosphate	1
n)	Define cracking	1

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

Q-2	Attempt all questions	(14)
A.	Write the complete classification of fuel in detail	05
B.	Write a note on octane number	05
C.	Discuss the Origin and composition of petroleum	04
Q-3	Attempt all questions	(14)
A.	Write a note on fertilizers.	05
B.	Define chromatogram and discuss the factors affecting R _f value.	05
C.	Write a note on petrochemicals.	04



Q-4	Attempt all questions	(14)
	A. Write a note on DDT and Paraquate.	05
	B. Write short note on thin layer chromatography: choice of adsorbent and solvents.	05
	C. Write a note on Micronutrients.	04
Q-5	Attempt all questions	(14)
	A. Write a note on bio fertilizer in detail.	05
	B. Write a note on heating value.	05
	C. Write a note on paper chromatography.	04
Q-6	Attempt all questions	(14)
	A. Write short note on principle of adsorption and partition chromatography.	05
	B. Write short note on Column chromatography and its adsorbents.	05
	C. Write a note on paper chromatography.	04
Q-7	Attempt all questions	(14)
	A. What is pesticides? Discuss the applications and synthesis of Parathion and Malathion pesticides in detail.	07
	B. Discuss the manufacturing process of Ammonia.	07
Q-8	Attempt all questions	(14)
	A. Discuss the complete industrial manufacture process for cement.	07
	B. Discuss the complete industrial manufacture process for ceramic and glass.	07

