Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Summer Examination-2018

Subject Name: Cell Biology

Subject Code: 4SC01CEB1 **Branch: B.Sc. (All)**

Semester: 1 **Date: 23/03/2018** **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 Stem Cell
b) Define Programmed Cell Death
c) Name the organelle known as Suicidal Bag
d) Define Oncogene
e) Name any two gram negative bacteria
f) Define Cancer
g) Name the organelle known as Powerhouse of Cell
h) Define mitosis
i) Name any semiautonomous cell organelle
j) The basic unit of Chloroplast is known as……..
k) What is the function of Golgi apparatus?
l) Define osmosis
m) Define diffusion
n) What is the function of Plasmodesmata?

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

Q-2 **Attempt all questions** **(14)**

a) Give a detailed account of the different stages involved in the cell cycle **(7)**
b) Write a short note on organization of Nucleus **(7)**

Q-3 **Attempt all questions** **(14)**

a) Write a short note on Cytoskeleton **(7)**
b) With the help of a labeled diagram describe a typical cell and its constituents **(7)**

Q-4 **Attempt all questions** **(14)**

a) Write a short note on Ribosome **(7)**
b) Differentiate between apoptosis and necrosis **(7)**

Q-5		**Attempt all questions**	**(14)**
	a)	Describe structural features and functions of Mitochondrion	**(7)**
	b)	Explain the functions of biological membranes	**(7)**
Q-6		**Attempt all questions**	
		What are the causes of cancer? Describe the different stages of cancer development. Add a note on diagnosis and treatment.	**(14)**
Q-7		**Attempt all questions**	**(14)**
	a)	Write a short note on cAMP Pathway	**(7)**
	b)	Differentiate between gram positive and gram negative bacteria	**(7)**
Q-8		**Attempt all questions**	**(14)**
	a)	Write a short note on Lysosomes	**(7)**
	b)	Write a short note on Endoplasmic Reticulum	**(7)**