Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Summer Examination-2019

Subject Name: Cell Biology
Subject Code: 4SC01CEB1 **Branch: B.Sc (All)**
Semester: 1 **Date: 16/03/2019** **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) Cell organelle which has electron transport system is centriole. True/False
b) Function of Golgi bodies in plants is translocation of enzymes. True/False
c) Cell membrane is composed of lipids and proteins. True/False
d) Hydrolytic enzymes are abundant in microsomes. True/False
e) Ribosomes are the center of protein synthesis. True/False
f) Lysosome is a single membrane structure. True/False
g) Extra nuclear DNA is found in ribosomes. True/False
h) Cell theory was proposed by……
i) Semiautonomous organelle in the cell is…….
j) The subunit of prokaryotic ribosomes is……..
k) Plant cell wall mainly composed of…….
l) The largest cell organelle is……..
m) The unit of heredity is……
n) Chemical constitution of nucleus is ……..

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

Q-2 **Attempt all questions** **(14)**
(a) Explain the respiratory chain mechanism in mitochondria **(7)**
(b) Briefly describe the meiotic cell division. **(7)**

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

(a) Write in detail about nucleus and its organelles. **(7)**
(b) Explain the fluid mosaic model of plasma membrane. **(7)**

Q-4 **Attempt all questions** **(14)**
(a) Discuss the major functions of ribosomes. **(4)**
(b) Describe the process of phagocytosis. **(3)**
(c) Explain the structure of bacterial cell wall. **(7)**

Q-5 **Attempt all questions** **(14)**
(a) Write an essay on the history of cell biology. **(7)**

	(b)	Bring out the functions of chloroplasts during day and night.	**(7)**
Q-6		**Attempt all questions**	**(14)**
	(a)	Write a note on ultrastructure and chemical composition of plant cell wall.	**(7)**
	(b)	Discuss in detail the structure and functions of Golgi apparatus.	**(7)**
Q-7		**Attempt all questions**	**(14)**
	(a)	Give ultrastructure, chemical composition, and function of chromosomes.	**(7)**
	(b)	Discuss the different mechanisms of transport across membranes.	**(7)**
Q-8		**Attempt all questions**	**(14)**
	(a)	Describe the molecular mechanism of signal transduction?	**(7)**
	(b)	Write a detail account on cytoskeleton structures and their functions.	**(7)**