

# 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** **(14)**
- What are the causes of cancer? Describe the different stages of cancer development. Add a note on diagnosis and treatment.
- 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)**

