

Enrollment No: _____

Exam Seat No: _____

C. U. SHAH UNIVERSITY

Summer Examination-2020

Subject Name: Cell Biology

Subject Code: 4SC01CEB1

Branch: B.Sc. (Microbiology, Chemistry)

Semester : 1

Date : 28/02/2020

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)

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|----|--|----|
| a) | Enlists the functions of nucleus | 01 |
| b) | Which organelle provides the energy to cell? | 01 |
| c) | Give the full form of RER | 01 |
| d) | Give the full form of AMP and GMP | 01 |
| e) | Enlists the functions of cell wall | 01 |
| f) | Ribosomes are not required in translation process. True/ False | 01 |
| g) | Actin is made-up from lipid molecules. True/ False | 01 |
| h) | What are the major differences between plant and animal cell? | 01 |
| i) | Expand: MAPK | 01 |
| j) | What is glycosylation? | 01 |
| k) | What is DNA? | 01 |
| l) | Transcription means | 01 |
| m) | DNA contains negative charge. True/ False | 01 |
| n) | What is cancer? | 01 |

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

Q-2 Attempt all questions (14)

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|-----|--|----|
| (a) | Explain: Plasma membrane and its functions | 07 |
| (b) | Write about role and properties of cell wall | 07 |

Q-3 Attempt all questions (14)

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|-----|---|----|
| (a) | Describe: Endoplasmic reticulum and Golgi apparatus | 10 |
| (b) | Enlists the functions of Mitochondria and Lysosome | 04 |

Q-4 Briefly explain Eukaryotic cell cycle and its regulation 14



Q-5	Attempt all questions	(14)
	(a) Which organelle is responsible for photosynthesis, briefly explain about it	07
	(b) Write about nuclear pore and nuclear pore complex	07
Q-6	Attempt all questions	(14)
	(a) Explain MAP kinase pathway	09
	(b) Write a short note on signalling molecules and receptors	05
Q-7	Attempt all questions	(14)
	(a) Explain: Development of cancer and its types	08
	(b) Draw a diagram of animal and plant cell	06
Q-8	Attempt all questions	(14)
	(a) Briefly explain: programmed cell death	10
	(b) Define: Dephosphorylation, Phosphorylation, Replication and Reverse transcription	04

