C.U.SHAH UNIVERSITY Winter Examination-2018

Subject Name: Cell Biology

	Subject	Code: 4SC01CEB1	Branch: B.Sc. (All)		
	Semester	:1 Date: 30/11/2018	Time: 02:30 To 05:30 M	larks: 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) h)	What is active transport? Enlist two functions of cell wall			
	c)	Define plasmodesmata.			
	d)	Give two functions of Golgi comple	X.		
	e)	Name the organelle commonly know	wn as suicide bag.		
	f)	Define eukaryotic cell.	C		
	g)	Give significance of pachytene.			
	h)	Mention any two functions of micro	tubules.		
	i)	What are intermediate filaments?			
	j)	What are F_1 particle?			
	k)	Write the role of spindle fiber in mit	tosis.		
	l)	Define cytoskeleton.			
	m)	What is centrosome?			
	n)	Define cell.			
Atte	empt any f	our questions from Q-2 to Q-8			
Q-2		Attempt all questions		(14)	
	(a)	Describe the ultra structure and func	tion of Endoplasmic Reticulum.	(7)	
	(b)	How are lysosomes synthesized? D in a cell.	iscuss their relation with endocytosis	process (7)	
Q-3	5	Attempt all questions		(14)	
	(8)	How a cancer cell differs from a nor	rmal cell? Discuss intrinsic causes of c	cancer. (7)	
	(b)	Describe the organization of the organization differ from that of mite	membrane of a chloroplast. How d	oes this (7)	
0-4	l	Attempt all questions		(14)	
V-4	(a)	Describe mitotic cell division. Add	d a note on the role of centriole in	the cell (7)	
	(b)	State chemical composition and fund	ction of nucleolus.	(3)	
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	(c)	Explain fluid mosaic model of plasma membrane.	(4)
Q-5		Attempt all questions	(14)
	(a)	Explain the cell-cell and cell- matrix interaction.	(7)
	(b)	Compare the cell organization in prokaryotes and eukaryotes.	(7)
Q-6		Attempt all questions	(14)
-	(a)	Write a note on ultrastructure and chemical composition of plant cell wall.	(7)
	(b)	Discuss the different mechanism of transport of small molecules across membranes.	(7)
Q-7		Attempt all questions	(14)
-	(a)	Give the ultra structure, chemical composition, and function of Golgi apparatus.	(7)
	(b)	Describe the typical structure of prokaryotic cell.	(7)
Q-8		Attempt all questions	(14)
-	(a)	Describe the major classes of cell surface receptors. Explain briefly G-protein linked and enzyme linked receptors?	(7)
	(b)	Explain the structure and function of microtubules and microfilaments with the help of neat and labeled diagram.	(7)

