

Bankura University
B.Sc 3rd Semester (Honours) Theory Examination,2021
SUB: Microbiology

Course ID: 32212

Course Code: SH/MCB/302/C-6

Course Title: Cell Biology

Time: 1h 15 min

Full Marks: 25

The figures in the margin indicate full marks

Answer all the questions.

UNIT I

1. Answer *any five* of the following questions: (1x5=5)

- a) What is NOR?
- b) What is apoptosis?
- c) What is nuclear lamina?
- d) What is flip flop movement?
- e) Why mitochondria and chloroplast are called semi autonomous cell organelles?
- f) What do you mean by polysome?
- g) What is glycocalyx?
- h) Mention the function of P53 gene product.

UNIT II

2. Answer *any two* of the following questions: (5x2=10)

- a) Write a short note on structure and function of peroxisome. 3+2=5
- b) What do you mean by pluripotent stem cell? Write down the utility of stem cells. 1+4=5
- c) Write a short note on G protein couple receptor.
- d) Write a short note on structure and organization of Actin filaments.

UNIT III

3. Answer *any one* of the following questions: (10x1=10)

- a) What is protein glycosylation? Describe the process of targeting of proteins into Endoplasmic Reticulum. 2+8=10
- b) Distinguish Transcriptionally active chromatin and Heterochromatin? Describe with suitable illustration how mitotic chromosomes are formed from chromatin in its condensed state. 2+8=10