

APRIL/MAY 2019

**BBT11 — CELL BIOLOGY**

Time : Three hours

Maximum : 75 marks



SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Who discovered cell?
2. Define plasmid.
3. Write the functions of cristae.
4. Write the composition of prokaryotic ribosomes.
5. Differentiate between RER and SER.
6. Give the functions of Centrosome.
7. Expand PCD.
8. Write any two regulatory proteins of cell cycle.
9. What are the uses of SEM.
10. Write the principle of Fluorescence microscope.



SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) What are the cytoskeleton? Add a note on its functions.

Or

- (b) Describe the fluid mosaic model of plasma membrane.

12. (a) Write about the structure of food factory of cell.

Or

- (b) Explain the classification of ribosomes.

13. (a) Outline the functions of Golgicomplex.

Or

- (b) Discuss the structure of nucleus with a neat diagram.

14. (a) Explain the mechanism of apoptosis.

Or

- (b) Write a brief note on regulation of cell cycle.

15. (a) Outline the principle of fluorescence microscope.

Or

- (b) How cell organelles were separated by differential centrifugation?

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elaborate on ultra structure of eukaryotic cell with a neat diagram.

17. Give the ultra structural features and functions of mitochondria.

18. Write a detailed account on the structure and functions of Endoplasmic reticulum.

19. Describe the process of meiosis with a neat diagram.

20. Explain the principle and application of density gradient centrifugation.