

NOVEMBER/DECEMBER 2018

BBT11— CELL BIOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What are the components of cell wall?
2. Define symport.
3. Define cristae.
4. What are photosynthetic pigments?
5. Write the functions of microbodies.
6. Mention the role of nucleolus.
7. What is cell renewal?
8. Define Go phase.
9. What are the uses of SEM?
10. Write the principle of light microscope.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Describe the structure of prokaryotic cell.
Or
(b) Outline the functions of plasma membrane.
12. (a) Describe the composition of prokaryotic ribosomes.
Or
(b) Discuss about the functions of plastids.
13. (a) Draw the structure of chromosome and label the parts.
Or
(b) Discuss the functions of golgi complex.
14. (a) Briefly explain the mechanism of apoptosis.
Or
(b) How cell cycle is regulated?
15. (a) List the applications of phase contrast microscope.
Or
(b) Describe the principles of Density gradient centrifugation.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elaborate on the structure and function of cytoskeletal elements.
17. Explain in detail about the power house of the cell.
18. Give a detailed account of structure and functions of lysosome.
19. Elucidate the stages of meiosis and its significance.
20. Discuss the principle and working of Fluorescent microscope.