

S.No. 3532

P 16 BC 14

(For candidates admitted from 2016 – 2017 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Biochemistry

CELL BIOLOGY AND PHYSIOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20)

Answer ALL the questions.

1. Define cell junction.
2. What is the role of tubulin?
3. Why is the membrane a bilayer?
4. What is the purpose of a cell cycle checkpoint?
5. What do red blood cells do?
6. What is meant by anticoagulants?
7. Define lymph functions.
8. Write about the bile secretion.
9. Define cardiac myopathy.
10. Write the sources of energy for muscle contraction.

SECTION B — (5 × 5 = 25)

Answer ALL the questions choosing either (a) or (b).

11. (a) Write about the anchoring and tight junctions.

Or

- (b) Give a short note on the collagen and its functions.

12. (a) Write a short note on the membrane transport.

Or

- (b) Write a note on apoptosis.

13. (a) Give a short note on the composition and functions of blood.

Or

(b) Write about the formation of RBC.

14. (a) Give a short note on the CSF composition and its function.

Or

(b) Write about the structure of nephron.

15. (a) How to classify neurotransmitters?

Or

(b) Write a short note on the muscle concentration.

SECTION C — (3 × 10 = 30)

Answer any THREE questions.

16. Describe about the cell adhesion molecule (CAMs).

17. Discuss about the membrane transport.

18. Explain briefly on blood coagulation mechanism and regulation.

19. Give note on the digestion and absorption of carbohydrates.

20. Discuss about the structure of skeletal muscle.
