

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, NOVEMBER 2018

First Semester

Core Course I – BASIC LIFE SCIENCES

(For B.Sc. Biotechnology)

[2013 – 2016 Admissions]

Time : Three Hours

Maximum Marks : 80

Part A (Short Answer Questions)

Answer all questions.

Each question carries 1 mark.

1. Mention functions of Bile.
2. Write about importance of Saliva.
3. What is glycolysis?
4. What is anaerobic respiration?
5. What is blastula?
6. What is pollination?
7. Name a disease related to defects in blood clotting.
8. Define Fertilization.
9. Name two normal constituents of urine.
10. What is oxidative phosphorylation?

(10 × 1 = 10)

Part B (Brief Answer Questions)

Answer any eight questions.

Each question carries 2 marks.

11. Write a note on plasma proteins.
12. Describe structure of a complete flower.
13. Write about C₃ cycle.
14. Explain fate map.
15. Write a note on water transport in plants
16. Mention structure of gynoecium.

Turn over

17. Write about morula stage.
18. Explain Photoperiodism.
19. What is Oogenesis?
20. Write about megasporogenesis.
21. Explain Transpiration.
22. Illustrate structure of dicot embryo.

(8 × 2 = 16)

Part C (Short Essay Type Questions)

Answer any six questions.

Each question carries 4 marks.

23. Explain structure and functions of Hb.
24. Write about CO₂ fixation.
25. Give an account on polyembryony.
26. Write a note on enzymes involved in digestion.
27. Explain plant movements.
28. Give an account of respiratory system.
29. Write a note on spermatogenesis.
30. Explain absorption of nutrients in digestive system.
31. Write a note on macro and micro nutrients.

(6 × 4 = 24)

Part D (Long Essay Type Questions)

Answer any two questions.

Each question carries 15 marks.

32. Write an account of digestive system.
33. Explain stages of flower development.
34. Describe light reaction.
35. Explain the structure and functions of kidney and nephron.

(2 × 15 = 30)