

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, NOVEMBER 2016**First Semester****Core Course I—BASIC LIFE SCIENCES**

(For B.Sc. Biotechnology)

[2013 Admission onwards]

Time : Three Hours

Maximum Marks : 80

Part A (Short Answer Questions)*Answer all questions.**Each question carries 1 mark.*

1. What is cyclic photophosphorylation ?
2. Name *two* micro elements.
3. What is anemophily ?
4. Name important metallic constituent in haemoglobin.
5. What is glomerular filtration ?
6. Explain fatemap.
7. Name *two* digestive enzymes.
8. What is transpiration ?
9. Name a anticoagulant ?
10. What is a pistillate flower ?

(10 × 1 = 10)

Part B (Brief Answer Questions)*Answer any eight questions.**Each question carries 2 marks.*

11. Explain photoperiodism.
12. Write about normal constituents of urine.
13. Give an account of blastula stage.
14. What is oxidative phosphorylation ? Mention its significance.
15. What is vernalization ?
16. Write about plasma proteins.

Turn over

17. Explain respiratory system.
18. What is micro sporogenesis ?
19. Write about nephrons.
20. Explain different types of pollination.
21. Write a note on structure of pollen.
22. What is polyembryony ? Point out its significance.

(8 × 2 = 16)

Part C (Short Essay Type Questions)

*Answer any six questions.
Each question carries 4 marks.*

23. Explain spermatogenesis and Oogenesis.
24. Explain the role of micronutrients in metabolism of plants.
25. Explain lymphatic system.
26. Write a note on clotting disorders.
27. Explain dark reaction.
28. Give an account of transport of water in plants.
29. Explain megasporogenesis in plants.
30. Explain structure of monocot and dicot embryos.
31. Illustrate TCA cycle.

(6 × 4 = 24)

Part D (Long Essay Type Questions)

*Answer any two questions.
Each question carries 15 marks.*

32. Give an account of structure and function of a flower.
33. Explain storage and mobilization of reserve food in body.
34. Describe types of plant movements.
35. Explain function and components of blood.

(2 × 15 = 30)