



B.Sc. DEGREE (CBCS) EXAMINATION, MAY 2019

Second Semester

B.Sc Biotechnology Model III

Core Course - BT2CRT05 - EVOLUTIONARY BIOLOGY AND DEVELOPMENTAL BIOLOGY

2017 ADMISSION ONWARDS

41064B86

Maximum Marks: 60

Time: 3 Hours

Part A

Answer any **ten** questions.

Each question carries **1** mark.

1. What is palaeontology?
2. What is the main reason behind the origin of life ?
3. What is allopatric speciation?
4. What is modern synthetic theory.
5. Define human evolution.
6. What does Homosapiens means ?
7. What is gynoecium?
8. Define hypocotyl.
9. What is primary dormancy?
10. What are the stages of Embryo development in animals ?
11. What is spermatogenesis?
12. What is blastomere?

(10×1=10)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain theory of panspermia.
14. Write short note on 'struggle for existence'.
15. Explain adaptive radiation with example.
16. Explain th effect of mutation in evolution?





17. Mention unique characters of Homo erectus.
18. Explain unique characters of homo sapiens.
19. Differentiate true polyembryoni and false polyembryoni.
20. Differentiate spermatids and spermatocytes.
21. Explain the process of gastrulation

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. Explain the history of evolution.
23. Explain classification of organisms based on evolutionary relationships.
24. Discuss in detail the structure of monocot and dicot embryo with the help of diagrams.
25. Write an essay on parthenogenesis.

(2×10=20)