



22103104

**QP CODE: 22103104**

**Reg No** : .....

**Name** : .....

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE  
EXAMINATIONS, OCTOBER 2022**

**Second Semester**

B.Sc Biotechnology Model III

**Core Course - BT2CRT05 - EVOLUTIONARY BIOLOGY AND DEVELOPMENTAL  
BIOLOGY**

2017 ADMISSION ONWARDS

4D540F50

Time: 3 Hours

Max. Marks : 60

**Part A**

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Who formulated modern synthetic theory ?
2. What are Darwins four postulates on theory of evolution?
3. Who proposed theory of natural selection ?
4. What is microevolution?
5. Define Australopithecus afarensis.
6. When did human started use of fire and cloth?
7. What is androecium?
8. Define scutellum.
9. What is Gibberellins?
10. Define spermatid.
11. Define morula.
12. What is cyclic parthenogenesis?

(10×1=10)





### Part B

Answer any **six** questions.

Each question carries **5** marks.

13. What are the contributions of Charles Darwin to evolutionary biology ?
14. Mention theories behind Origin of life.
15. Discuss the effect of adaptive radiation in evolution.
16. Differentiate microevolution and macroevolution.
17. Differentiate Homo erectus and Homo sapiens.
18. Explain structure of flower with labelled diagram.
19. How germination is activated from seed dormancy?
20. Discuss the process of fertilization in animals.
21. Comment on methods of fatemapping techniques.

(6×5=30)

### Part C

Answer any **two** questions.

Each question carries **10** marks.

22. Write an essay about the theories behind origin of life.
23. Explain briefly speciation and its types. Mention one example each.
24. Discuss in detail the steps involved in seed germination.
25. Explain briefly the different stages of embryonic development.

(2×10=20)

