

QP CODE: 21103144



Reg No : .....

Name : .....

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

**DECEMBER 2021**

**Second Semester**

B.Sc Biotechnology Model III

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

2017 ADMISSION ONWARDS

7F9A3F94

Time: 3 Hours

Max. Marks : 60

**Part A**

*Answer any **ten** questions.*

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

1. What is linguistic evolution?
2. What is mutation theory?
3. What is 'Use and Disuse' theory?
4. Explain neodarwinism.
5. What did Australopithecus for the 'use of tools' ?
6. What are the morphological characters of Homo sapiens.
7. What is coleorrhiza?
8. Define seed dormancy.
9. Differentiate gymnosperms and angiosperms.
10. What is sperm?
11. Define fertilization.
12. Mention fate of mesoderm.

(10×1=10)

**Part B**

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. Briefly explain theories of evolution.
14. Explain the main postulates of Darwin's theory.
15. What are the five steps of natural selection ?
16. Mention the role of adaptive radiation in evolution.
17. Explain unique features of Ramapithecus.
18. Explain different stages of flower development.
19. Differentiate and explain epicotyl and hypocotyl.
20. Differentiate and explain morula and blastula.
21. Explain parthenogenesis and its types with examples.

(6×5=30)

### **Part C**

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain theories based on origin of life.
23. Explain in detail role of mutation in evolution.
24. Discuss steps involved in germination.
25. Explain in detail the steps involved in gastrulation.

(2×10=20)

