K25U 0118

Reg. No. : .....

Name : .....

Sixth Semester B.Sc. Degree (C.B.C.S.S.-OBE – Regular/Supplementary/ Improvement) Examination, April 2025
(2019 to 2022 Admissions)
CORE COURSE IN BOTANY/PLANT SCIENCE
6B13BOT/PLS : Evolution and Palaeobotany

Time : 3 Hours Max. Marks : 40

SECTION – A
(Objective Type Questions)

Answer **all**. **(4×1=4)**

1. The germplasm theory of inheritance was proposed by
   a) C. Darwin b) Hugo de Vries
   c) J. B. Lamarck d) A. Weismann
2. The first cell-like structure appeared in
   a) Air b) Ocean
   c) Soil d) River
3. The first seed plant appeared during the period
   a) Silurian b) Devonian
   c) Carboniferous d) Cretaceous
4. The ultimate source of organic variation during evolution is due to
   a) Natural selection b) Sexual reproduction
   c) Hormonal action d) Mutations

SECTION – B
(Short Essay Questions)

Answer **any eight.** **(8×2=16)**

5. What is natural selection ?
6. What is Phylogenetics ?

P.T.O.

7. Define epoch.
8. Explain there placement theory of fossilization.
9. What is genetic drift ?
10. Discuss the role of hybridization in evolution.
11. How can we domesticated plants or animals ?
12. Differentiate molds and casts.
13. What is cladogram ?
14. Define gene pool.
15. Explain the germplasm theory.
16. Comment on divergent evolution with suitable example.

SECTION – C
(Essay Questions)

Answer **any four.** **(4×3=12)**

17. Briefly describe the features of Coenozoic era.
18. Describe the morphological and anatomical characters of lyginopteris.
19. Compare the chromosome homology of ape and human.
20. Briefly describe the major objectives of Palaeobotany.
21. Differentiate sympatrick and parapatrick evolution.

SECTION – D
(Long Essay Question)

Answer **any one.** **(1×8=8)**

22. Explain Hardy-Weinberg law and its application.
23. Compare the origin of prokaryotes and eukaryotes.
24. Explain the process of evolution of fungi and bryophytes.
