



QP CODE: 26019187



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Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, MARCH 2026
Fourth Semester
M Sc GEOLOGY
ELECTIVE - GL800402 - ADVANCED PALAEONTOLOGY

2019 Admission Onwards

B518A53B

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Discuss the role of Palaeontology in the paleosupercontinent studies.
2. Differentiate simple & complex iterative evolutions.
3. List out any four major mass extinction events in the Earth's history.
4. Write down any four major morphological characters of Ostracoderms.
5. What are the five main classifications of fishes?
6. Discuss the morphology of early reptiles in the Paleozoic.
7. Give the important morphological features and stratigraphic range of Ichthyosaurs.
8. Explain the first fossil of Homo Sapiens and its relation to Mitochondrial Eve.
9. Define Palynology, and give two important uses of it.
10. Discuss spores and pollens.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Write a short note on the use of stable isotope studies of oxygen, carbon and sulphur in Palaeontology.
12. Write a short note on the theories of Lamarckism, Natural selection and Mutation.
13. What are the types of stromatolites? Discuss the classification of stromatolites.





14. Discuss the adaptive modifications of Ammonites from Paleozoic to Late Cretaceous.
15. Give a brief account of the evolution and primitive forms of amphibians.
16. Give a short account of Paleognathae and Neognathae.
17. Discuss morphological changes of horses during their evolution to the present form.
18. Write a short note on the extinct primates of Siwalik vertebrates.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Give a detailed account of various evolutionary & adaptive modifications, forms and stratigraphic importance of Trilobites and Graptolites.
20. Differentiate the Mesozoic, Cenozoic and modern birds, and discuss various evolutionary forms of Mesozoic and Cenozoic birds.
21. Write an essay on the morphological characteristics and the habitat of living of various species & sub-species of the family Elephantidae.
22. Explain the palynofossils, and discuss different steps involved in their preparation for geoscientific analyses.

(2×5=10 weightage)

