

**May 2025**  
**M.Sc.**  
**Second Semester**  
**CORE – 05**  
**GEOLOGY**  
*Course Code: MGLC 2.11*  
(Palaeontology)

*Total Mark: 70*

*Pass Mark: 28*

*Time: 3 hours*

*Answer five questions, taking one from each unit.*

**UNIT-I**

1. Discuss in detail the mechanism and types of preservation of fossils. 14
2. Write a note each on the following: 7×2=14
  - (a) Environmental factors controlling distribution and abundance of life
  - (b) Ichnofacies and palaeobathymetry

**UNIT-II**

3. Discuss about the functional morphology of trilobites and add a note on its evolutionary trends. 14
4. Write a note each on the following: 7×2=14
  - (a) Mode of life of pelecypods interpreted from shell morphology
  - (b) Morphology of gastropods

**UNIT-III**

5. Discuss the evolutionary history of horse, with major emphasis on morphology, dental, and ecological adaptations across different geological periods. 14
6. Write a note each on the following: 7×2=14
  - (a) Major events in the Precambrian life
  - (b) Biological evolution and major climatic shifts during Paleozoic Era

#### UNIT-IV

7. Discuss the classification, morphology, and palaeoecological significance of foraminifers. 14
8. Write a note each on the following: 7×2=14
- (a) Application of micropalaeontology in hydrocarbon exploration
  - (b) Morphological and palaeoecological significance of Ostracods

#### UNIT-V

9. Explain the morphology and environmental application of calcareous nannofossils. 14
10. Describe the morphology, classification, and application of pollen and spores. 14
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