

SEMESTER V

MAJOR COURSE – MJ 10

PALEONTOLOGY

Full Marks: 75 Time: 3 Hours

GROUP – A

Q1. Choose the correct answer:

1. Fossils are most commonly preserved in: **(1 mark)**
A. Sedimentary rocks B. Fresh magma C. Meteorites D. Unweathered mantle rocks
2. Which of the following is an invertebrate fossil group? **(1 mark)**
A. Trilobites B. Dinosaurs only C. Mammals D. Humans
3. Lamellibranchia is another name associated with: **(1 mark)**
A. Bivalves B. Cephalopods C. Trilobites D. Brachiopods
4. The study of fossil pollen and spores is called: **(1 mark)**
A. Palynology B. Ichology C. Seismology D. Volcanology
5. Fossils can provide evidence about past: **(1 mark)**
A. Climate and environment B. Only mineral hardness C. Only present rainfall D. Only modern tectonics

Q2. Differentiate between body fossils and trace fossils with suitable examples. (5 marks)

Q3. Explain the importance of fossils in reconstructing ancient environments. (5 marks)

GROUP – B

Answer any four questions.

- Q4. Describe fossilisation processes and modes of preservation. Explain why the fossil record is important for reconstructing geological history. (15 marks)**
- Q5. Explain the species concept and taxonomy in palaeontology. Discuss the theory of organic evolution with suitable examples. (15 marks)**
- Q6. Write a detailed note on Trilobites, Gastropods and Cephalopods, including their morphology and geological history. (15 marks)**
- Q7. Discuss the evolution of the horse, human evolution and intercontinental migrations. Add a brief account of Gondwana Flora. (15 marks)**
- Q8. Explain the role of fossils in stratigraphy with special reference to palynology, biostratigraphy, biozones, index fossils and correlation. (15 marks)**
- Q9. Discuss palaeobiogeography and palaeoecology. Explain how fossils help in reconstructing palaeoclimate, palaeogeography and the evolution of ecosystems. (15 marks)**