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Your Roll No.

B.Sc. (Hons.) Geology / II Sem. A

Paper – GEHT-206 – PALAEONTOLOGY (Admissions of 2010 and onwards)

Time: 3 Hours Maximum Marks: 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt any **five** questions.

All questions carry equal marks.

- 1. What are the limiting factors in palaeoecology? How can we use fossils in interpreting palaeoecology?
- 2. Discuss any two of the following:
 - (a) Evolution of jaw in vertebrates.
 - (b) Fossilization processes.
 - (c) Allopatric and sympatric speciation.
- 3. Write notes on any two of the following:
 - (a) Compound eye in trilobites.

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- (b) Utility of fossils in palaeoclimatic reconstruction.
- (c) Major steps in the evolution of plants.

4. Explain any two of the following:

- (a) Procedure for describing and naming of a new species.
- (b) Biostratigraphic significance of Mesozoic ammonoids.
- (c) Vertebrate fauna of Deccan volcanic province.
- 5. How do you classify trace fossils? How do ichnofossils help us in palaeoenvironmental reconstructions?
- 6. What are the major trends in the evolution of horses?

 Discuss the different stages of horse evolution and climatic changes associated with them.
- 7. Explain any two of the following:
 - (a) Sexual dimorphism in cephalopods
 - (b) Life habitats of brachiopods
- 8. Describe the morphology of graptolites. What are the characteristic features of graptolites that make them index fossils for the lower Palaeozoic.