This question paper contains 2 printed pages.]

Your Roll No. .....

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## B.Sc. (Hons.)/II GEOLOGY—Course V

## **Palaeontology**

(Admissions of 2004 and onwards)

Time: 3 Hours Maximum Marks: 45

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

Attempt any five questions.

All questions carry equal marks.

- 1. Write notes on any two of the following:
  - (a) Species concept in Palaeontology
  - (b) Saurischian and ornithischian dinosaurs
  - (c) Punctuated Equilibrium and Phyletic Gradualism
- Write an essay on important milestones during the evolution of vertebrates through time.
- 3. Write notes on any two of the following:
  - (a) Evolution of sutures in ammonites

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- (b) Mode of life in brachiopods
- (c) Cenozoic diversification of mammals
- Describe the morphology and geological history of trilobites with suitable diagrams.
- 5. Write notes on any two of the following:
  - (a) Explain palaeogeographic significance of fossils with suitable examples
  - (b) Agnathous
  - (c) Biostratigraphic significance of graptolites
- Discuss the progressive changes during the evolution of horses and the role of climate in shaping these changes.
- 7. Write notes on any two of the following:
  - (a) Marine environments
  - (b) Effects of climate on the distribution of Gondwana flora
  - (c) Role of microfossils in palaeoceanographic studies
- 8. Write notes on any two of the following:
  - (a) Modes of fossil preservation
  - (b) Gastropod shell forms with suitable illustrations
  - (c) Use of corals in geological studies.