

B.Sc. (Hons.)/III

A

GEOLOGY - Paper XII(v)
(Applied 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.)

*Answer any five questions.
All questions carry equal marks*

1. Write one line answer to any five of the following
 - i. Give the Stratigraphic range of Pteropods.
 - ii. When did planktic foraminifera appear in the geological history?
 - iii. Name the oldest fossil found on Earth
 - iv. Name any ubiquitous fossil
 - v. What is the Test composition of Ostracoda?
 - vi. Name a Phosphatic microfossil
 - vii. Where does the effect of Coriolis force become zero.
 - viii. Name the fossil that marks the Pliocene/Pleistocene boundary
 - ix. What is the approximate depth of ACD
 - x. Name the plant fossil characteristic of upper Gondwana.
2. Tabulate the Geological time scale up to Period level and also provide the major biotic events that occurred during different time periods.
3. Discuss different types of microfossil and briefly mention their application in paleoclimatic and Paleoceanographic studies.
4. Write shot notes on any two of the following
 - i. Application of planktic foraminifera in hydrocarbon exploration.
 - ii. How do you infer the paleobathymetry of sea floor by the help of foraminifera
 - iii. Application of Gondwana flora.
5. Write short notes on any two of the following
 - i. Biostratigraphic utility of trilobite
 - ii. Suture patterns in cephalopods
 - iii. Carbonate compensation depth
6. Describe any two of the following
 - i. Thermocline and Pycnocline
 - ii. Ocean Surface circulation
 - iii. Ekman spiral
7. How can fossils be used for studying past land sea distribution?
8. Describe briefly any two of the following
 - i. Demarcation of convergent plate boundaries with microfossils.
 - ii. Conodont color alteration index (CAI)
 - iii. Diatom bloom