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(November)

GEOLOGY

(Major)

Course : 501

(**Palaeontology**)

Full Marks : 48

Pass Marks : 19

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

1. What is palaeontology? Name different branches of palaeontology. Discuss various applications of palaeontology. 2+2+6=10

2. Describe with neat sketches the shell morphology and geological distribution of any *one* of the following : 7+3=10
 - (a) Pelecypoda
 - (b) Echinoidea
 - (c) Brachiopoda

3. Discuss the role of fossils in the study of palaeogeography and palaeoclimatology. $5+5=10$

4. Write briefly on any *two* of the following :

$3 \times 2 = 6$

(a) Index fossil and its significance

(b) Reworked and leaked fossils

(c) Microfossils and megafossils

5. Write notes on any *two* of the following :

$3\frac{1}{2} \times 2 = 7$

(a) Organic evolution

(b) Fossil flora of India

(c) Palynology

6. Answer the following as directed :

$1 \times 5 = 5$

(a) *Glossopteris* flora can be distinguished from *gangamopteris* flora on the basis of presence of —.

(Fill in the blank)

(b) The Foraminifera belong to the class

(i) sarcodina

(ii) sporozoa

(iii) flagellata

(iv) masteigophora

(Choose the correct one)

- (c) The trilobite fauna is restricted to
- (i) lower palaeozoic
 - (ii) upper palaeozoic
 - (iii) mesozoic
 - (iv) cenozoic
- (Choose the correct one)

- (d) The shell of a brachiopod consists of
- (i) two equal but inequilateral valves
 - (ii) two unequal but equilateral valves
 - (iii) two equal and equilateral valves
 - (iv) None of the above
- (Choose the correct one)

- (e) The fauna which comprises exclusively of active swimmers is described as
- (i) plankton
 - (ii) nekton
 - (iii) benthic
 - (iv) pelagic
- (Choose the correct one)

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