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(November)

GEOLOGY

(Major)

Course : 501

(**Palaeontology**)

Full Marks : 48 .

Pass Marks : 19 (Backlog)/14 (2014 onwards)

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. 1+2+7=10
2. Describe with neat sketches the shell morphology and geological distribution of any one of the following : 7+3=10
 - (a) Gastropoda
 - (b) Echinoidea
 - (c) Trilobita

3. Write notes on any *two* of the following : $5 \times 2 = 10$

(a) Role of fossils in the study of palaeoclimatology

(b) Importance of foraminifera in stratigraphy

(c) Application of fossils in correlation and in petroleum exploration.

4. Write briefly on any *two* of the following : $3\frac{1}{2} \times 2 = 7$

(a) Index fossil and its significance

(b) Fossil flora of India

(c) Organic evolution

5. What is palynology? Discuss various applications of palynology. $1 + 5 = 6$

6. Answer the following as directed : $1 \times 5 = 5$

(a) Law of Faunal Succession was proposed by _____.

(Fill in the blank)

(b) The fauna which comprises exclusively of active swimmers is described as

(i) plankton

(ii) nekton

(iii) benthic

(iv) pelagic

(Choose the correct one)

- (c) The foraminifera belong to the class
- (i) Sarcodina
 - (ii) Sporozoa
 - (iii) Flagellata
 - (iv) Mastigophora
- (Choose the correct one)

- (d) The shell of a Pelecypoda 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) 'Petrification' is a type of fossilization where
- (i) the original form is preserved
 - (ii) the original form and structure are preserved
 - (iii) the entire organism is preserved
 - (iv) only the hard parts are preserved
- (Choose the correct one)

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