

2019

(November)

GEOLOGY

(Major)

Course : 501

(Palaeontology)

Full Marks : 48

Pass Marks : 19/14

Time : 2 hours

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

1. What is fossil? What are the types of fossil?
Write about different processes of formation
of fossils in different physico-chemical
conditions. 1+3+6=10

2. Write short notes on any *two* of the
following : 5×2=10
 - (a) Nomenclature of fossils
 - (b) Palynology and palaeobotany
 - (c) Application of fossils in palaeoclimatic
studies

3. Give a descriptive note on shell morphology, stratigraphic significance and geological occurrence with neat and clean sketch on any *one* of the following : $5+2+2+1=10$
- (a) Cephalopoda
 - (b) Brachiopoda
 - (c) Trilobita
4. Write briefly on any *two* of the following : $3\frac{1}{2}\times 2=7$
- (a) Subdivisions of plant fossils of India
 - (b) Range zone and interval zone
 - (c) Petrification
5. What is organic evolution? Write about prevailing theory of evolution with suitable example. $2+4=6$
6. Fill in the blanks (any *five*) : $1\times 5=5$
- (a) In 1825, the term Palaeontology was coined by _____.
 - (b) Fossils which range from ancient time up to the present day without significant change are called _____.
 - (c) Palaeo-proteins or amino acids may be referred to as _____ fossils.

- (d) Body of strata in which the maximum abundance of a particular fossil is found is called ____.
- (e) Posterior protuberance in each valve of a Brachiopoda is called ____.
- (f) The initial chamber of a Cephalopoda or Gastropoda shell is called ____.
- (g) Trilobite body is divided into three segments, and the posterior segment is called ____.

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