

**2014**

( 6th Semester )

**GEOLOGY**

NINTH PAPER

**( Palaeontology and Stratigraphy—II )**

( PART : A—OBJECTIVE )

( Marks : 20 )

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

SECTION—A

( Marks : 5 )

1. Put a Tick (✓) mark against the correct answer in the brackets provided : 1×5=5

(a) Which of the following statements is wrong?

- (i) The first vertebrate fossil appeared in the Ordovician period ( )
- (ii) Mammals and birds diverge from reptiles in Triassic and Jurassic period ( )
- (iii) Amphibians evolved from reptiles over 340 million years ago ( )
- (iv) A life exists in the earth from over 3.4 billion years ago ( )

(b) Gangamopteris is similar to Glossopteris, but the difference is

(i) Gangamopteris is without any mid-rib ( )

(ii) Gangamopteris is having mid-rib ( )

(iii) Gangamopteris is leaf genera ( )

(iv) None of the above ( )

(c) Microfossils are generally not larger than

(i) 3 mm ( )

(ii) 2 mm ( )

(iii) 4 mm ( )

(iv) 5 mm ( )

(d) Which of the following formations is not the Jurassic sequence of Kutch?

(i) Umia formation ( )

(ii) Chari formation ( )

(iii) Uttatur formation ( )

(iv) Katrol formation ( )

(e) In Upper Assam, which of the following geologic horizons is considered to be the source rocks of petroleum?

(i) Dihing group ( )

(ii) Barail group ( )

(iii) Surma group ( )

(iv) Dupitila group ( )

( 4 )

SECTION—B

( Marks : 15 )

2. Define/Write on the following :

3×5=15

(a) Principle of fossil correlation

( 5 )

(b) Siwalik vertebrate fauna

( 6 )

(c) Organic walled and mineral walled forms

(d) Peninsular gneiss

(e) Karewas of Kashmir

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# VI/GEOL (ix)

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( 6th Semester )

GEOLOGY

NINTH PAPER

( **Palaeontology and Stratigraphy—II** )

*Full Marks : 55*

*Time : 2 hours*

( PART : B—DESCRIPTIVE )

( *Marks : 35* )

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

Answer **five** questions, taking **one** from each Unit

## UNIT—I

1. Elucidate paleobiogeography using Gondwana reconstruction. 7
2. Answer the following :
  - (a) Explain the effect of temperature for the size of fossil preservation in marine environment. 4

( 2 )

- (b) Write notes on the following :  $1\frac{1}{2}\times 2=3$
- (i) Trace fossil
  - (ii) Extraction of microfossil

UNIT—II

3. Write short notes on the following :  $3\frac{1}{2}\times 2=7$
- (a) Mode of preservation of plant fossils
  - (b) Gondwana flora
4. Write short notes on the following :  $3\frac{1}{2}\times 2=7$
- (a) Origin of vertebrates
  - (b) Dinosaurs

UNIT—III

5. Give a brief idea of different microfossil groups. Add a note on geological significance of Foraminifera.  $4+3=7$
6. Write a note on application of microfossil in hydrocarbon exploration. 7

UNIT—IV

7. Give a classification of Gondwana Supergroup. Also write the detailed account of Upper Gondwana sequence.  $3+4=7$

8. Write about the stratigraphic succession and lithological characteristics of Dharwar Supergroup. 7

UNIT—V

9. Write about the succession, lithology, age, economic importance and fossil content of Deccan Trap. 7
10. Write about the succession, lithology, age, economic importance and fossil content of paleogene of Assam. 7

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