

G-1/170/22

Roll No.

I Semester Examination, January 2022

M.Sc.

GEOLOGY

Paper IV

(Palaeontology)

Time : 3 Hours]

[Max. Marks : 80

Note : *All questions are compulsory. Question Paper comprises of 3 Sections. Section A is objective type/multiple choice questions with no internal choice. Section B is short answer type with internal choice. Section C is long answer type with internal choice.*

SECTION A

1 × 10 = 10

(Objective Type/Multiple Choice Questions)

Choose the correct answer :

1. Source of fossil is :

- (a) Sedimentary rock
- (b) Igneous rock
- (c) Plutonic rock
- (d) Volcanic rock

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2. Favourable environment for fossil preservation is :

- (a) Marine (b) Lacustrine
- (c) Fluvial (d) Terrestrial

3. Which of the following Gastropoda's base is flat ?

- (a) Turbo (b) Murex
- (c) Conus (d) Trochus

4. Which of the following is an example of Index fossil ?

- (a) Pecten (b) Sponge
- (c) Fish (d) Trilobites

5. The skeleton of a simple colony of Graptolites is known as :

- (a) Phenotype (b) Rhomboid
- (c) Test (d) Rhabdosome

6. Most ancient ancestors of Man seen to have appeared during :

- (a) Eocene (b) Oligocene
- (c) Pliocene (d) Pleistocene

7. The Mouth of echinoids are surrounded by a membrane called :

- (a) Madreporite (b) Peristome
- (c) Periproct (d) None of these

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8. "Pallial Sinus" seen in :

- (a) Lamellibranchia (b) Vertebrate fossil
(c) Foraminifers (d) Plant fossil

9. Which of the following shows sinistral type of coiling ?

- (a) Physa (b) Conus
(c) Murex (d) Bellorophon

10. Glossopteris belongs to :

- (a) Upper Gondwana
(b) Triassic
(c) Lower Gondwana
(d) Cretaceous

SECTION B

5×4=20

(Short Answer Type Questions)

Note : Answer the following questions in **250** words.

Unit-I

1. Mass extinction and its causes.

Or

Geological distribution of Brachiopods.

Unit-II

2. Morphology of Gastropods.

Or

Suture lines in cephalopods

Unit-III

3. Classification and geological history of Echinoids.

Or

Morphology and evolutionary trends of Graptolites.

Unit-IV

4. Describe Siwatile Fauna.

Or

Evolution of plant through geological time.

Unit-V

5. Explain techniques in micropalaeontology

Or

Use of microfossils in palaeoenvironmental studies.

SECTION C**10 × 5 = 50****(Long Answer Type Questions)****Note :** Answer the following questions in **500** words.**Unit-I**

1. Define Fossil. Describe the application of study fossils in the field of Palaeobiogeography and Palaeoclimatology.

Or

Write an essay on fossils and their mode of preservation.

Unit-II

2. Describe the morphology classification and evolutionary trends of Trilopites.

Or

Describe morphology, classification evolutionary trends and distribution of cephalopods.

Unit-III

3. Write an essay on evolutionary history of man.

Or

Describe the morphology classification and evolution of graptolites.

Unit-IV

4. Write an essay on “Gondwana Flora”.

Or

Describe the evolution of plant fossils and their relation with Geological Time Scale.

Unit-V

5. What are Microfossils ? How are they used in Hydrocarbon exploration ?

Or

Write an essay on “Micropalaentology.

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