

G-1/169/22

Roll No.

I Semester Examination, January 2022

M.Sc.

GEOLOGY

Paper III

(Principles of Stratigraphy and Indian Geology)

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.** Who was first to say that “The earths” cannot contain a chronological history of geologic events” ?
- (a) Niels Stensen (b) J. D. Dana
(c) Ravindra Kumar (d) James Hutton.

P.T.O.

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- 2.** Talchir formation is an Indicative of cold and glaciated climate is depicted from :
- (a) Boulder bed and undecomposed felspar in ouelders.
(b) Glossopteris follils in Gondwana S. Group.
(c) Coal in Gondwana Gondwana S. Group.
(d) Talchir is in Orissa state of India.
- 3.** Diamonds in Panna (Majhgawan) in M.P. is found in :
- (a) Kimberlitis in Vindhyan
(b) "Conglomerate in unconformity in Vindhyan
(c) Sandstone in Vindhyan
(d) All of the above
- 4.** Index fossil is one which has :
- (a) Wide geographical and short vartical range
(b) Wide vertical and shart geographical range
(c) Wide vertical and wide geographical range
(d) Short geographical and short vertical range
- 5.** The first land plants appeared in ;
- (a) Ordovician (b) Sillurian
(c) Devonian (d) Carboniferous

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6. The word formation denotes similarity of :
 (a) Lithologic composition
 (b) Genesis
 (c) Time of deposition
 (d) All of the above
7. The mesozoic existed about.....ago.
 (a) 120 mg (b) 160 mg
 (c) 200 mg (d) 225 mg
8. Choose the correct combination from the following :
 (a) Eon/Era/Formation/Stage
 (b) Eon/Era/Period/Epoch
 (c) Group/Formation/Member/Stage
 (d) Group/Formation/Period/Stage
9. Lametabeds in Madhya Pradesh are the examples of :
 (a) Infratrappean (b) Intertrappean
 (c) Deccan traps (d) Volcanic eruption
10. Different evolution of elephants in African and Indian Subcontinents may be due to :
 (a) Continental drifting
 (b) Difference in vegetation
 (c) Cross-mutation
 (d) All of the above

SECTION B

5×4=20

(Short Answer Type Questions)

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

Unit-I

1. Why lithostratigraphic units are preferred for correlation over the earlier used biostratigraphic units.

Or

What are the chrono-stratigraphic units of correlation ?

Unit-II

2. Give the correlation of Chhattisgarh with Vindhyan.

Or

Write on the physiographic division in India.

Unit-III

3. What are the proterozoic sedimentary basins in India ?

Or

Write on Economic Importance of Vindhyan.

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Unit-IV

4. Give the major subdivision of Geological time scale with palaeo climates.

Or

Give the distribution of Gondwana rocks in Chhattisgarh.

Unit-V

5. Write on palaeogeography in Geological time scale.

Or

Write on Bombay problem with reference to Indian stratigraphy.

SECTION C

10×5=50

(Long Answer Type Questions)

Note : Answer the following questions in **500** words.

Unit-I

1. Give critical comparison of Biostratigraphic Chrono-stratigraphic and lithostratigraphic correlation.

Or

Write on principles of Stratigraphy.

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Unit-II

2. How the lithosphere is evolved ? Write on shields and proterozoic covers.

Or

Write in short on Indian Geology and economic importance.

Unit-III

3. Write on formations of BIF in proterozoics.

Or

Write in detail on economic importance (only) of Vindhyan, Chhattisgarh and Cuddapah S. Group.

Unit-IV

4. Write in detail on Mesozoics of India.

Or

Write only on climatic changes and fossils of Gondwana in India depicted from rock records.

Unit-V

5. Write in detail on Evolution of Man.

Or

How will you summarise stratigraphy Chhattisgarh in short ?

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