

2025 II 27

0930

Seat No.

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Time : 3 Hours

GEOLOGY

Subject Code

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Total No. of Questions : 35 (Printed Pages : 7)

Maximum Marks : 70

- INSTRUCTIONS :**
- (i) All questions are compulsory.
 - (ii) Draw a neat labelled diagram wherever necessary.
 - (iii) Figures to the right indicate full marks.
 - (iv) The question paper consists of four Sections–A, B, C and D.
 - (a) Section A has 14 questions of **1** mark each.
 - (b) Section B has 10 questions of **2** marks each.
 - (c) Section C has 8 questions of **3** marks each.
 - (d) Section D has 3 questions of **4** marks each.
 - (v) The total number of questions in the paper are 35.
 - (vi) There is no overall choice, however an internal choice is provided in one question of Section C and two questions of Section D.
 - (vii) Select the proper alternative for the multiple choice type questions and write the completed statement. Multiple choice type questions should be attempted only once.
 - (viii) Answers to the questions carrying **1, 2, 3** and **4** marks should be written in about 1 to 10, 50, 80 and 120 words.

Section A

1. An ore mineral which shows non-metallic lustre is 1
 - Galena
 - Hematite
 - Bauxite
 - Magnetite
2. Choose the ore mineral with its correct streak from the following 1
 - Chalcopyrite-Greenish black
 - Psilomelane-Brown
 - Chromite-Cherry red
 - Limonite-White
3. Landforms formed due to graben are called as 1
 - Block Mountains
 - Caves
 - Rift Valleys
 - Dome Mountains

4. When Plunge of a fold is 90° , then the axis of the fold would be 1

- Inclined at 45° to the horizontal
- Vertical
- Horizontal
- Inclined at 45° to its normal

5. An example of Acid Igneous rock is 1

- Basalt
- Granite
- Syenite
- Diorite

6. A metamorphic product of Limestone is 1

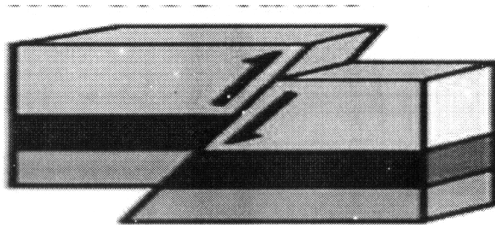
- Slate
- Gneiss
- Marble
- Phyllite

7. Carboniferous period is known as age of 1
- Graptolites
 - Cockroaches
 - Trilobites
 - Fishes
8. What do you mean by Gutenberg Discontinuity ? 1
9. Define the term 'Epicentre'. 1
10. State *one* Arenaceous sedimentary rock. 1
11. Olivine and Quartz do not occur together in any rock. Justify. 1
12. What are Conjugate Joints ? 1
13. Name the metamorphic product of Schist ? 1
14. What are volcanic bombs ? 1

Section B

15. Explain with a neat labelled diagram, Early magmatic segregation Deposits. 2

16. Give *two* points of difference between Conglomerate and Shell Limestone. 2
17. Explain with a neat labelled diagram Poikilitic texture. 2
18. What are slickensides. Give its significance. 2
19. Give a brief account of economic importance of Dharwar Supergroup. 2
20. Explain in brief Lithostratigraphic units. 2
21. State the classification of Cuddpah Supergroup. 2
22. Write a short note on Anthracite. 2
23. “Two individuals may conclude different intensities for the same earthquake at the same time”. Justify. 2
24. Study the following diagram, identify and explain type of fault. 2



Section C

25. Explain in brief : 3
- (i) Principle of Intrusion
- (ii) Principle of Inclusion.
26. Explain how igneous rocks are classified based upon silica saturation. 3
27. Explain with a neat diagram Throw and Heave of a fault. 3
28. Explain Strombolian and Vulcanian type of volcanic eruption. 3

Or

Explain with a neat labelled diagram, Composite cone volcano.

29. Illustrate and explain the concept of an oil trap. 3
30. Explain copper belts in India. 3
31. Give 3 points of difference between P-wave and S-wave. 3
32. Explain in brief : 3
- (a) Chevron folds
- (b) Non-conformity.

Section D

33. With a neat labelled diagram explain elements of fold. 4
34. Illustrate and explain various features of ocean-ocean convergent plate interaction. 4

Or

Explain origin of Himalayas with respect to plate tectonics.

35. Describe the stratigraphy of 'Goa Group' of rocks. 4

Or

Describe any *four* modes of preservation of fossils.