

09/12/23
A

**2023/TDC(CBCS)/ODD/SEM/
GELDSC/GE-301T/128**

TDC (CBCS) Odd Semester Exam., 2023

GEOLOGY

(3rd Semester)

Course No. : GELDSC/GE-301T

(Petrology)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

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

SECTION—A

Answer fifteen questions, selecting three from each

Unit :

1×15=15

UNIT—I

- 1. Define sheet structure.**
- 2. Write the essential minerals of granite.**
- 3. Define vesicular structure.**
- 4. What is fractional crystallization?**

(2)

UNIT—II

5. Define extrusive igneous rock.
6. What is essential mineral in igneous rock?
7. Write two primary minerals of felsic rock.
8. Define plutonic rock.

UNIT—III

9. Write briefly on non-clastic sedimentary rock.
10. Write briefly one process of formation of sedimentary rock.
11. Write briefly on the size of rudaceous rock.
12. Write one essential mineral of carbonate rock.

UNIT—IV

13. Write one factor of metamorphism.
14. Write one product of metamorphism.
15. Write one principal process that takes place in metamorphism.
16. Write the characteristic minerals of high grade metamorphism.

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(Continued)

(3)

UNIT—V

17. Write the composition of marble.
18. Write the name of rock which shows banding.
19. Write the structure of schist.
20. Which sedimentary rock is metamorphosed to quartzite?

SECTION—B

Answer *five* questions, selecting *one* from each
Unit : 2×5=10

UNIT—I

21. Write a short note on discontinuous reaction series.
22. Write the types of magma.

UNIT—II

23. Write a short note on granite.
24. Write a short note on syenite.

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(Turn Over)

(4)

UNIT—III

25. Write a short note on ripple mark.
26. Write a short note on cement bedding.

UNIT—IV

27. Write a short note on grades of metamorphism.
28. Write a short note on factors of metamorphism.

UNIT—V

29. Write a short note on gneiss.
30. Write a short note on marble.

SECTION—C

Answer *five* questions, selecting *one* from each

Unit : $5 \times 5 = 25$

UNIT—I

31. Define magma. Write a note on origin of magma.
32. Write a note on the Bowen's reaction series.

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(Continued)

(5)

UNIT—II

33. Describe the mineralogical classification of igneous rocks.
34. Give a detailed petrographic description of gabbro.

UNIT—III

35. Write an explanatory note on texture of sedimentary rocks.
36. Write a detailed note on shale.

UNIT—IV

37. Write a detailed note on the types of metamorphism.
38. Write briefly on the classification of metamorphic rocks.

UNIT—V

39. Describe the petrographic varieties of schists.
40. Give a detailed petrographic description of slate.

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