

17U621

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Name:

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2020

(CUCBCSS-UG)

(Regular/Supplementary/Improvement)

CC15U GL6 B17 - STRUCTURAL GEOLOGY AND GEOTECTONICS

Geology – Core Course

(2015 Admission onwards)

Duration: 3 Hours

Maximum: 80 Marks

(Draw neat sketches and give proper examples where necessary)

PART A

Answer *all* the questions in one or two words. Each question carries 1 mark.

1. Name the deformation takes place under uniform pressure from all directions.
2. What is the true dip amount of a vertical fault?
3. The angle between an inclined lineation and the strike of a vertical plane which confines the lineation is called -----
4. Name the structural depression form between two adjacent horsts.
5. An upright fold is characterized by a vertical axial plane and a ----- axis.
6. Name the point at which the elastic property of an object ceases.
7. Which plate tectonic margin is known as the conservative margin?
8. The name Pangaea was coined by -----
9. Trenches are associated with ----- type of plate margins
10. Name the structure formed by convex uplift of rock strata, and dipping all directions from the centre.

(10 x 1 = 10 Marks)

PART B

Answer any *ten* questions. Each question carries 2 marks.

11. Hot spot and Super swells
12. Uses of Clinometer
13. Inlier & Outlier
14. Palaeomagnetism
15. Overlaps
16. Stress & Strain
17. Overturned fold
18. Thrust fault

19. Doubly plunging fold & Canoe structure
20. Strike slip faults
21. Benioff zone
22. Primary foliation

(10 x 2 = 20 Marks)

PART C

Answer any *five* questions in a paragraph. Each question carries 6 marks.

23. Explain various models of mantle convection
24. Discuss the Continental Drift Theory
25. Lineation and types.
26. Discuss various geometrical elements of folded surfaces
27. Explain stress-strain diagrams
28. Discuss rules of 'V'
29. Discuss the genetic classification of faults
30. Write a short note on seafloor spreading and the age of oceanic crust

(5 x 6 = 30 Marks)

PART D

Write an essay on any *two* questions. Each question carries 10 marks.

31. Discuss joints and types. Explain the geological significance of joints.
32. Give an account of various types of unconformities, their recognition in the field, and geological significance
33. Explain different types of plate tectonic margins, and illustrate various kinds of morphologic and structural features associated with those margins
34. Discuss the structure of interior of the Earth, and give an account of the petrological, geochemical & geophysical characters of lithosphere & mantle

(2 x 10 = 20 Marks)
