

19P149

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Name:

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(CUCSS PG)

CC19P GEL1 C02 – STRUCTURAL GEOLOGY AND GEOTECTONICS

(Applied Geology)

(2019 Admission Regular)

Time: Three Hours

Maximum: 30 Weightage

(Drew neat sketches wherever necessary)

I. Explain any **four** of the following.

1. Fractures.
2. Stereographic projection.
3. Stress-Strain ellipsoid.
4. Pampelley's rule.
5. Lithospheric plates.
6. Continental shield areas.
7. Island Arc.

(4 x 2 = 8 Weightage)

II. Answer any **four** of the following questions.

8. Spreading ridges and growth of ocean basins.
9. Behavior of rocks and minerals under deformation.
10. Petrofabric analysis.
11. MOR
12. Application of paleomagnetism in paleogeographic reconstruction.
13. Interference patterns of superposed folds.
14. Mechanism of fold.

(4 x 3 = 12 Weightage)

III. Write essays on any **two** of the following questions.

15. Discuss geometry, types of shear zones, shear sense indicators, and important rock types associated with the shear zones.
16. Illustrate the tectonic elements of collisional, accretionary and intracratonic orogens, and discuss Evolutionary history of the Himalayas in terms of collision tectonics.
17. Illustrate the dynamics of faulting, geometry, genetic classification of faults, and characteristics of fault zones.
18. Discuss various causes of plate tectonism and geodynamic evolution of Indian Plate.

(2 x 5 = 10 Weightage)
