Name:....

Reg. No.....

# FIRST SEMESTER, M.Sc. DEGREE EXTERNAL EXAMINATION, FEB. 2016

### (2015 Admission)

# CC15P GEL1 C02 STRUCTURAL GEOLOGY & GEOTECTONICS

# (Geology)

Time: 3 Hrs.

Total: 36 Weightage

#### I. Answer *all* questions in two or three sentence each:

- 1. Plunging folds.
- 2. Measurement of strain in deformed rocks.
- 3. Equal area projection.
- 4. Ductile shear zone.
- 5. Fault breccia.
- 6. Mohr diagram.
- 7. Fracture cleavage.
- 8. Minor folds.
- 9. Crenulation cleavage.
- 10. Mural joints.
- 11. Volcanic arcs.
- 12. Deep sea trenches.
- 13. Benioff zone.
- 14. Orogeny.

## (14 x 1 = 14 weightage)

### II. Answer any seven questions, each not exceeding two pages:

- 15. Fault geometry.
- 16. Tectonic fabric.
- 17. Features of fault plane.
- 18. Use of universal stage in fabric studies.

### 15P147

- 19. Mylonites and their significance.
- 20. Seafloor spreading.
- 21. Continental shield areas.
- 22. Geodynamics of the Indian plate.
- 23. Seismicity and plate tectonics.
- 24. Magnetic anomalies in Mid oceanic ridges.  $(7 \times 2 = 14 \text{ weightage})$

#### III Write essays on:

25. Describe the geometric and genetic classifications of folds.

Or

- 26. Explain the stress-strain ellipsoid and their application in the study of faults and joints. (1 x 4 = 4 weightage)
- 27. Describe the continental drift concept giving evidences for and against.

#### Or

28. Explain orogeny and epeirogeny. Evaluate the relation between orogeny and plate tectonics.

#### (1 x 4 = 4 weightage)

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