| 18P156 | (Pages: 2) | Name:   |
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|        |            | Reg. No |

# FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2018

(Regular/Supplementary/Improvement)

(CUCSS-PG)

# CC15P GEL1 C02 – STRUCTURAL GEOLOGY AND GEOTECTONICS

(Applied Geology)

(2015 Admission onwards)

Time: Three Hours Maximum: 36 Weightage

#### Part A

Answer *all* questions in two or three sentences. Each question carries 1 weightage.

- 1. Bouger anomaly.
- 2. Circum pacific belt.
- 3. Benioff zone.
- 4. Klippe.
- 5. Mid Atlantic Ridge.
- 6. Neotectonics.
- 7. Rift valley.
- 8. Tectonites.
- 9. Dip isogon.
- 10. Crenulation cleavage.
- 11. Accretionary wedge.
- 12. Inlier.
- 13. Beta diagram.
- 14. *S*-fold.

 $(9 \times 1 = 9 \text{ Weightage})$ 

## Part B

Answer any *seven* questions each not exceeding two pages. Each question carries 2 weightage.

- 15. Evidences for continental drift.
- 16. Lineation.
- 17. Genesis and growth of continental crust.
- 18. Mylonites and pseudo tachylites.
- 19. Magnetic reversals and their cause.
- 20. Stages of deformation and stress strain curve.

- 21. Back bearing method in structural mapping.
- 22. Polar wandering curve.
- 23. Mantle plumes.
- 24. Shear joints and tension joints.

 $(7 \times 2 = 14 \text{ Weightage})$ 

## Part C

Write essays on any two questions. Each question carries 4 weightage.

25. Discuss in detail the classification and mechanism of folding. Draw neat sketches wherever necessary.

Or

- 26. Give a detailed account of the different types of plate boundaries with neat sketches. Add a note on the petrographic significance of different plate boundaries.
- 27. Explain the geometrical classification of faults. Add a note on the relation between principal stress direction and type of faulting.

Or

28. Describe the emergence of plate tectonic theory from the concepts of seafloor spreading.

 $(2 \times 4 = 8 \text{ Weightage})$ 

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