**QP CODE: 25020413**

25020413

**Reg No : .....**

**Name : .....**

# B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

## Sixth Semester

## CORE COURSE - GL6CRT09 - STRUCTURAL GEOLOGY

Common for B.Sc Geology Model I & B.Sc Geology and Water Management Model III

2017 Admission Onwards

CF1793B0

Time: 3 Hours Max. Marks : 60

**Part A**

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. On a levelled ground a bed outcrops with a width of 50 meters. Findout the actual thickness of the bed dipping 30 degree towards NE.
2. Define unconformity, and explain how the nonconformities are formed.
3. Define unconformity, and explain how does it recognize in the map.
4. Explain the ductile nature of rocks.
5. Discuss Schmidt's stereo net.
6. Define upright and plunging folds.
7. Define polyharmonic fold.
8. List out any four important geometric parameters of a fault.
9. Explain Traslational and Rotational fault.
10. Differentiate flow and fracture cleavages.
11. Distinguish L and S Tectonites.
12. Give any two uses of Brunton Compass for geological field work.

(10×1=10)

**Part B**

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. What are the Overlap and Offlap, and discuss their significance in palaeogeographic studies.

14. What are primary and secondary sedimentary structures? Explain them with suitable examples.

15. Discuss the nature of distribution of stress and strain in a rock body.

16. Discuss fundamental processes of formation of fold, and write a short note on types of antifom and synform.

17. Discuss various criteria for recognition of folds in the field.

18. Discuss Horst-Graben and half Graben structures, and their tectonic significance.

19. Discuss different types of lineations.

20. What are joints? Explain geoloical significance of the joints.

21. Explain procedure for geological mapping.

(6×5=30)

**Part C**

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Give an account of primary & secondary sedimentary structures, and discuss their use in detrmining top and bottom of the beds.

23. Illustrate various mechanisms of folding, and genetical classification of flods.

24. Give an ccount of fundamental mechanisms of faulting with respect to stress-strain regime, and criteria for the recognition of faults in the field.

25. Write an essay on the procedure and equipments use for geological mapping.

(2×10=20)