

QP CODE: S0100443



Reg No

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Name :

BSc DEGREE (CBCS) EXAMINATION, MARCH 2020

Sixth Semester

Core course - GL6CRT09 - STRUCTURAL GEOLOGY

B.Sc Geology Model I, B.Sc Geology and Water Management Model III

2017 Admission Onwards

FF51C65B

Time: 3 Hours

Max. Marks: 60

Part A

Answer any ten questions.

Each question carries 1 mark.

- 1. Explain Overlap.
- 2. Explain the use of current bedding in determining top & bottom of beds.
- 3. What is an unconformity? Explain discontinuity.
- 4. Explain the ductile nature of rocks.
- 5. What is stereographic projection?
- 6. Define upright and plunging folds.
- 7. Explain flexural slip folds.
- 8. Define fault and fault plane.
- 9. Give two important criteria for the recognision of a normal fault in the filed.
- 10. Explain compositional foliation.
- 11. Distinguish L and S Tectonites.
- 12. Explain columnar joints.

 $(10 \times 1 = 10)$

Part B

Answer any six questions.

Each question carries 5 marks.

- 13. What are primary and secondary sedimentary structures? Explain them with suitable examples.
- 14. Discuss how the unconformities are recognized in the field and map.





- 15. Write a shot note on the stress & strain diagrams.
- 16. Explain the drag folds and Pumpelly's rule, and discuss their geological significance.
- 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 relationship between foliations and rocks with folded rock layers.
- 20. Give a brief account of different types of lineations.
- 21. Explain procedure for geological mapping.

 $(6 \times 5 = 30)$

Part C

Answer any two questions.

Each question carries 10 marks.

- 22. Give an account of attitude of beds & linear features, and relationship between strike, true dip and apparent dip. Find out the apparent dip amount and the strike of the bed that dips 45 degree towards South 35 degree West. The angle made between the true dip and an apparent dip directions is 40 degree.
- 23. Give an account of various geometric parameters of fold and different terminologies used to distinguish the folds.
- 24. Write an essay on geometric and genetic classification of faults, and mechanisms of faulting.
- 25. Give a detailed account of procedure for geological mapping, and equipments use for it

 $(2 \times 10 = 20)$

