24U3127 (Pages: 2) Name : .....

Reg. No : .....

THIRD SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025

(FYUGP)

CC24UGEL3MN200 - CRYSTALLOGRAPHY & STRATIGRAPHY

(Geology - Minor Course)

(2024 Admission - Regular)

Time: 2.0 Hours Maximum: 70 Marks

Credit: 4

Part A (Short answer questions)

Answer ***all*** questions. Each question carries 3 marks.

1. Explain Type Mineral. [Level:2] [CO2]
2. Explain law of constancy of interfacial angles. [Level:2] [CO1]
3. Compare different domes present in the Monoclinic system. [Level:2] [CO2]
4. Explain Cyclin twin. [Level:2] [CO2]
5. Explain Japan law. [Level:2] [CO2]
6. State the Principle of Lateral Continuity. [Level:1] [CO3]
7. Explain what are the biological criteria of correlation in stratigraphy? [Level:2] [CO4]
8. Define uniformitarianism in geology. [Level:1] [CO3]
9. Explain Biofacies. [Level:2] [CO5]
10. Define Period. [Level:1] [CO6]

(Ceiling: 24 Marks)

Part B (Paragraph questions/Problem)

Answer ***all*** questions. Each question carries 6 marks.

11. Describe symmetry elements in crystallography. [Level:2] [CO1]
12. Describe types of biostratigraphic units. [Level:2] [CO6]
13. Explain Hemimorphic class. [Level:2] [CO2]
14. Explain Origin of twinning. [Level:2] [CO2]

15. Explain why are some rock types (like volcanic ash layers or coal seams) considered excellent physical correlation markers? [Level:2] [CO4]

16. Justify the reason behind principle of faunal succession important for biostratigraphy? [Level:5] [CO3]

17. Compare and contrast major mass extinction event. [Level:4] [CO5]

18. Distinguish between Cretaceous - Tertiary and Permian - Triassic extinction event. [Level:4] [CO5]

(Ceiling: 36 Marks)

Part C (Essay questions)

Answer any ***one*** question. The question carries 10 marks.

19. Describe the symmetry elements and forms present in the normal class of the orthorhombic system. [Level:1] [CO2]

20. Explain types of unconformities with neat sketches. [Level:2] [CO5]

(1 × 10 = 10 Marks)

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