

#### NAHATA JOGENDRANATH MONDAL SMRITI MAHAVIDYALAYA

B.A. /B.Sc. NEP-III-Sem (Hons)-Internal Examination, 2025

# GEODSC303T & GEODSC303P – GEOGRAPHY Geotectonics and Geomorphology

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Geotectonics and Geomorphology (Lab)

Time Allotted: 1 Hour

Full Marks: 20

The figures in the margin indicate full marks. Candidates should answer in their own words and adhere to the word limit as practicable.

#### **CATEGORY-A**

## Answer any one question from the following (within 600 words each) $10 \times 1 = 10$

- 1. Explain in detail the processes occurring at convergent, divergent, and transform plate boundaries, and discuss the landforms associated with each type of plate margin. (CO: 1; BT: 4 Analyze)
- 2. Analyze how the theory of plate tectonics explains the formation and distribution of hotspots. (CO:1; BT:5 Evaluate)

#### **CATEGORY-B**

### Answer any ONE question from the following (within 150 words each) $5 \times 1 = 1$

- 3. Compare and contrast the characteristics of oceanic-oceanic and continental-continental convergence. (CO:1; BT:2 Understand)
- 4. Describe the role of mantle convection in plate movement and the development of landforms. (CO:1; BT:2 Understand)
- 5. Explain the formation of mid-ocean ridges and their significance in plate tectonics. (CO:1 BT:3 Apply)
- 6. Describe the physical properties (color, luster, streak, hardness) used to identify bauxite and quartz as mineral samples. Provide their common uses. (CO:1; BT:4 Analyze)
- 7. Explain the megascopic characteristics of hematite and magnetite, and discuss their significance as ore minerals. (CO: 1; BT: 3 Apply)
- 8. How are the island Arcs formed? (CO: 1; BT: 3 Apply)

### **CATEGORY-C**

## Answer any TWO questions from the following (within 50 words each) $2 \times 2.5 = 5$

- 9. What is asthenosphere? (CO:1; BT:1 Remember)
- 10. What is the Ring of Fire, and why is it significant in plate tectonics? (CO:1; BT:1 Remember)
- 11. Mention two tectonic processes responsible for earthquakes. (CO:1; BT:1 Remember)
- 12. What is a transform fault? (CO: 1; BT: 2Understand)
- 13. Name two physical properties that distinguish calcite from gypsum. (CO:1; BT:1 Remember)
- 14. What is the primary mineral composition of feldspar, and why is it significant in igneous rocks? (CO: 1; BT:2 Understand)
- 15. Mention two characteristics that help in the megascopic identification of slate. (CO:1; BT:1 Remember)