# 2024

# M.Sc.

# **Second Semester**

CORE - 08

# **GEOLOGY**

Course Code: MGLC 2.41 (Geomorphology & Oceanography)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

#### UNIT\_I

- 1. Explain the King's model of landscape development with illustrations. 14
- 2. Write notes on the following:

 $7 \times 2 = 14$ 

- (a) Geomorphic processes
- (b) Merits and demerits of Davis model

### **UNIT-II**

3. Give an account on the basin asymmetry factor and stream length gradient index of a drainage basin.

7×2=14

14

- 4. Write notes on the following:
  - (a) Mountain-front sinuosity
  - (b) Tectonic geomorphology

#### **UNIT-III**

- 5. Discuss on the applications of geomorphology in mineral exploration. 14
- 6. Write notes on the following:

 $7 \times 2 = 14$ 

- (a) Hydrogeology and geomorphology
- (b) Role of geomorphology in hazard management

# UNIT-IV

7. Explain the factors controlling deposition and distribution of o		oceanic
	sediments.	14
8.	Write notes on the following: <ul><li>(a) Law of the sea</li><li>(b) Ocean floor morphology</li></ul>	7×2=14
UNIT-V		
9.	Define El Nino. Discuss the causes and effects of El Nino.	2+12=14
10.	Write notes on the following: <ul><li>(a) Oceanic conveyor belt</li><li>(b) Thermocline and pycnocline</li></ul>	7×2=14