2025

GEOGRAPHY

(Major)

Paper : GGY4100104MJ

(Introduction to Physical Geography)

Full Marks : 60

Time : 2½ hours

The figures in the margin indicate full marks for the questions

1. Answer the following as directed : 1×8=8

(a) Who gave the concept that landform is a function of structure, process and time?

(b) Who proposed the concept of 'uniformatarianism'?

(c) The main factor controlling the amount of insolation received at a place is

(i) soil type

(ii) latitude

(iii) ocean salinity

(iv) vegetation cover

(Choose the correct answer)

(d) The term 'Ecology' was first coined by Ernst Haeckel in the year _____.

(Fill in the blank)

(e) Who wrote the book named *Principles of Geomorphology*?

(f) Which factor increases salinity in ocean water?

(g) The opposite concept to uniformitarianism is _____.

(Fill in the blank)

(h) Give an example of an erosional landform of river.

2. Answer any *six* from the following questions : 2×6=12

(a) What do you mean by the term 'Monadnock'?

(b) Why is Physical Geography considered both a natural science and a spatial science?

(c) State two differences between weather and climate.

(d) Distinguish between warm and cold ocean currents.

(e) What is food chain?

(f) Mention two major threats to biodiversity.

(g) Mention two types of geomorphology.

(h) What is 'biosphere'?

(i) What is the relationship between temperature and atmospheric pressure?

(j) Name any two depositional features created by fluvial processes.

3. Answer any *four* from the following questions : 5×4=20

(a) What is insolation? Explain the factors controlling the distribution of insolation on Earth. 2+3=5

(b) Discuss the evolution and major trends in Physical Geography as a study of Earth process systems. 5+5=10

(c) Discuss the fundamental concepts in geomorphology.

(d) Describe the importance of biogeographic studies in conservation and environmental management.

(e) Explain the major factors responsible for the origin and movement of ocean currents.

(f) Discuss the principal fluvial erosional processes and support your answer with appropriate diagrams.

(g) Explain the meaning of ecology and discuss its importance in understanding the relationships between organisms and their environment.

(h) Distinguish between uniformitarianism and catastrophism.

4. Answer any *two* from the following questions : 10×2=20

(a) Describe the ways in which constructive and destructive geomorphic processes shape the Earth's surface. Illustrate your answer with suitable diagrams.

(b) Describe the meaning and scope of geomorphology. 5+5=10

(c) Examine the spatial distribution of ocean temperature and salinity. Also explain the factors affecting these patterns. 5+5=10

(d) Explain the flow of energy in an ecosystem. Discuss the concepts of food chain, food web and ecological pyramid with suitable diagrams. 4+2+2+2=10

(e) Explain the key factors causing the loss of biodiversity and describe the strategies to conserve it. 5+5=10

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