

MA/M.Sc. GEOGRAPHY
FIRST SEMESTER (Repeat)
FUNDAMENTALS OF GEOMORPHOLOGY
MGE-101

(Use separate answer scripts for Objective & Descriptive)

Duration : 3 hrs.

Full Marks : 70

(PART-A : Objective)

Time : 20 min.

Marks : 20

Choose the correct answer from the following:

1×20=20

1. The sea that separates the Arabian peninsula from Africa:
 - a. Mediterranean sea
 - b. Red sea
 - c. Black sea
 - d. Caspian sea
2. The most abundant element of the earth crust is:
 - a. Carbon dioxide
 - b. Oxygen
 - c. Nitrogen
 - d. Ozone
3. Lava is:
 - a. Intensive igneous rock
 - b. Extensive igneous rock
 - c. Metamorphic rock
 - d. Sedimentary rock
4. "Mud from the Nile River had built the Nile Delta into the Mediterranean Sea"- this first was hypothesized by:
 - a. Herodotus
 - b. Aristotle
 - c. Lyell
 - d. Chorley
5. Match the following:

<ol style="list-style-type: none">a. Proclonusb. Universal Oceanc. Base Leveld. Dynamic Geomorphology	<ol style="list-style-type: none">I. Nicolas StenoII. Abraham WernerIII. John Wesley PowellIV. Arthur N. Strahler
--	--

Codes:

<ol style="list-style-type: none">a. Ia IIc IIIId IVbc. Id IIc IIIb IVa	<ol style="list-style-type: none">b. Ic IIa IIIId IVbd. Ia IIb IIIc IVd
--	--
6. Processes that shapes the earth's surface include:
 - a. Solidification
 - b. Weathering
 - c. Erosion and deposition
 - d. All of the above
7. Barkhans are formed due to:
 - a. Wave action
 - b. Wind action
 - c. Wind deposition
 - d. Glacial erosion
8. Weathering is:
 - a. Thaw freezing of water in cracks in rocks.
 - b. The break-up of rocks exposed at the surface.
 - c. The alternate heating and cooling of rocks.
 - d. None of the above.

9. Moraines are formed by:
 a. Winds
 b. Rivers
 c. Glaciers
 d. Sea waves
10. Levee is formed by:
 a. Wind
 b. River
 c. Glacier
 d. Sea wave
11. Glacial theory was put forwarded by:
 a. Charles Lyell
 b. Louis Agassiz
 c. James Hutton
 d. John Playfair
12. Robert Horton put forwarded the Laws of fluvial morphometry in:
 a. 1945
 b. 1830
 c. 1792
 d. 1960
13. Pot holes are formed due to:
 a. Abrasion
 b. Attrition
 c. Solution
 d. Hydraulic action
14. Which is not the mechanical erosion?
 a. Abrasion
 b. Solution
 c. Hydraulic action
 d. Attrition
15. Caverns are the landform of:
 a. Running water
 b. Ground water
 c. Wind
 d. Glacier
16. A sand dune piled up longitudinally as a steep sided ridge is called:
 a. Seifs
 b. Barchans
 c. Bajada
 d. Hammada
17. Which of the following is not the landform of glacier?
 a. Tarn
 b. Nunatak
 c. Crag and tail
 d. Barchans
18. The main and unavoidable challenge for hydropower development in Northeast is:
 a. Tectonic issue.
 b. Ecosystem.
 c. Less employment opportunity for local people.
 d. Electricity transmission to other parts of the country.
19. Assessed hydropower potential is more in the river
 a. Brahmaputra
 b. Ganga
 c. Indus
 d. Central Indian rivers
20. Scope of expansion of Guwahati city is comparatively easy in direction:
 a. East
 b. West
 c. North
 d. South

== ** ==

(PART-B : Descriptive)

Time : 2 hrs. 40 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. "Plate margins are areas of concentrated geologic activity"- Explain onset of plate tectonics and sea floor spreading mechanism. Give diagram in support. 5+5=10
2. Define intensity and magnitude of volcanoes. What do you understand by initial and sequential landforms? Explain the process of volcanism along with suitable diagram. 2+3+5=10
3. "Each one of the new paradigms has been born of a need to comprehend and explain the physical properties and laws associated with landforms"- on this light write about the development of geomorphology through ages. Brief about the concept of catastrophism along with suitable examples. 4+6=10
4. "Geography is an interdisciplinary as well as integrated discipline"- put forward your views in this regard. Discuss the scope of geomorphology. 5+5=10
5. Discuss the possible downstream impacts of hydropower projects in northeastern region? Suggest two options for sustainable hydropower development in the region. 5+5=10
6. Explain the landforms created by the unstratified unsorted debris dropped (deposited) by glaciers. Give diagram in support. 6+4=10
7. Explain the different forms of folding with illustrated figures. 10
8. Write the different forms of landform features associated to fluvial process. 10

== *** ==