

2018

GEOGRAPHY

GGY : 404

ENVIRONMENTAL GEOMORPHOLOGY

Full Marks: 80

Time: 3 Hours

The figures in the margin indicates full marks for the questions

1. Multiple choice questions (Answer all) 1x10=10

- 1) Oceanic Crust is _____ than continental crust
 - a) Less dense
 - b) More dense
 - c) Less hot
 - d) More hot

- 2) The Himalaya Mountains were formed because of a
 - a) Hot spot
 - b) Divergent boundary
 - c) Transform boundary
 - d) Convergent boundary

- 3) The process that continually adds to new crust is
 - a) Subduction
 - b) Earthquake
 - c) Sea – floor spreading
 - d) Convection

- 4) What can cause a tsunami?
 - a) Landslide
 - b) Underwater earthquake
 - c) Volcanic eruption
 - d) All of the above

P.T.O

- 5) What is the most active tsunami area?
 a) Pacific ocean
 b) Caribbean sea
 c) Indian ocean
 d) North Atlantic Ocean
- 6) What is deforestation?
 a) The removal of trees
 b) The planting of trees
 c) The type of mass movement caused by trees
 d) When forests are covered in mud
- 7) Sheet erosion is caused by
 a) Wind
 b) Glaciers
 c) Heavy rains
 d) Fast running rivers
- 8) When the rate of flow of water doubles, the carrying capacity of water increases by _____
 a) 4 times
 b) 32 times
 c) 64 times
 d) 100 times
- 9) How did salt end up in our Oceans?
 a) Salt was always present in Oceans
 b) Acid rain falls into the Ocean. It contains Salts
 c) Volcanoes let out salt when they erupt
 d) Over millions of years, rains, rivers and streams have washed over rocks carrying away salt into the Ocean.
- 10) Tropics is dominated by.....
 (a) Biological Weathering
 (b) Chemical Weathering
 (c) Mechanical Weathering
 (d) Both (a) & (c)

2

2. Answer in brief (any four) 2x4=8
 1) What is the difference between hazard and risk?
 2) Define the term 'Environmental Geomorphology'.
 3) What is the engine that drives plate tectonics?
 4) What is the difference between 'magma' and 'lava'?
 5) What is seismograph?
 6) Differentiate between Regolith and Laterite.
 7) What is Bio-Chemical weathering?
3. Answer in brief (any four) 5x4=20
 1) What are the criteria based on which mass wasting is classified? Explain the classification.
 2) Explain the concept of Geo system.
 3) What is angle of repose? What are the factors that affect the angle of repose?
 4) Briefly explain Climatic characteristics of Tropics?
 5) What is the special Nature of Tropical Geomorphology.
 6) What are the types of volcanic hazards?
4. Answer in brief (any two) 9x2=18
 1) Provide two kinds of evidence that support the theory of plate tectonics 9
 2) What is Ocean salinity? What are the major constituents of Ocean salinity? What is the source of salts found in Oceans? What are excess volatiles? 2+3+2+2
 3) Explain the problem of soil erosion in India with the help of map. 9
 4) What is Tropics? Differentiate tropics with temperate region of the world .9
5. Answer in brief (any two) 12x2=24
 1) Explain with suitable diagrams the measures adopted to mitigate effects of mass wasting. 12

3

P.T.O

- 2) How was the watershed management programme developed in India?
What are the projects and programmes adopted by India for successful watershed management? Give examples of local efforts taken for watershed management? 4+4+4
- 3) "Anthropogenic activity is dominating the tropics leading to the imbalance state of the Tropics". Justify the statement. 12
- 4) What are the processes for soil formation? Explain the different types of soil profiles and their characters. 5+7

★★★★★