2016

GEOGRAPHY

(Major)

Paper : 4.1

(Forms and Processes in Geomorphology)

Full Marks : 60

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Choose the correct answer : 1×7=7

(a) Which of the following processes is common to river, wind and glacier erosion?

(i) Plucking

(ii) Attrition

(iii) Abrasion

(iv) Deflation

(b) The Tapi River Valley is a

(i) synclinal valley

(ii) rift valley

(iii) strike valley

(iv) fault line valley

(c) The San Andreas Fault is an example of

(i) normal fault

(ii) reverse fault

(iii) strike-slip fault

(iv) overthrust fault

(d) Solifluction process often takes place in

(i) tropical region

(ii) glacial region

(iii) arid region

(iv) peri-glacial region

(e) The piedmont alluvial plain formed at the foot of the Siwaliks is known as

(i) Bhabar

(ii) Tarai

(iii) Khadar

(iv) Bhangar

(f) Sinuosity index is a basis of classifying

(i) channel type

(ii) channel pattern

(iii) drainage pattern

(iv) drainage basin

(g) The annular drainage pattern develops on a

(i) folded structure

(ii) faulted structure

(iii) uniclinal structure

(iv) domal structure

2. Answer in brief of the following : 2×4=8

(a) What is exfoliation?

(b) Define drainage basin and watershed.

(c) What are river terraces?

(d) What is inversion of relief?

3. Write short notes on any *three* of the following : 5×3=15

(a) Drainage pattern

(b) Process of meander formation

(c) Flood as a geomorphic hazard

(d) River long profile

(e) Causes of channel changes with time

4. Answer the following : 10×3=30

(a) Describe the evolution of drainage network and basin according to Horton's model. 10

Or

What is meant by channel pattern? Describe the characteristic features of different channel patterns. 2+8=10

(b) Define mass wasting. Classify mass wasting processes on the basis of speed of movement and describe them. 2+8=10

Or

Explain how different depositional landforms are produced by a river. 10

(c) Describe in detail the mechanical weathering processes and their significance on landform development. 10

Or

State the measures to be adopted before and after floods to reduce its adverse impact on man and society. 10

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