

10. Geography I Paper (Geo.311)

Exam 2066

Time: 3 hrs

Full Marks: 100

Attempt ALL the questions.

Group 'A' (Geography)

50

1. What do you understand by isostasy? Discuss the views of Airy and Pratt in this connection. 10

OR

Discuss the theory of plate tectonics. Explain different types of Plate margins.

2. Give short account on any FOUR of the followings. 4x6=24
- Differentiate permafrost and active layer.
 - Processes of physical weathering.
 - Rejuvenation
 - Exeirogenetic movements
 - Meaning and scope of Geomorphology
 - Superimposed drainage
3. Write short notes on any FOUR of the following. 4x4=16
- Resequent stream
 - Penaplain
 - Block mountain
 - Polje
 - Talus
 - Attrition

Group 'B' (Climatology)

50

4. Explain the necessary condition and forms of condensation. 10

OR

Represent diagrammatically and explain the global distribution patterns of pressure system.

5. Give short answers on any FOUR of the followings. 4x5=20
- Differentiate between radiations and isolation.
 - Differentiate between weather and climate.
 - 'Green house effect' of atmosphere.
 - Scope of climatology.
 - Why does the sky usually appear blue?
 - Basic pre-requisites of air mass source region.

6. Write short notes on any FUR of the followings.

4×5=20

- Taiga
- Evapo-transpiration
- Difference between Af and Am climates.
- Ozone
- Coriolis effect
- Dew point

Exam 2067

Time: 3 hrs

Full Marks: 100

Attempt ALL the questions.

Group 'A' (Geomorphology)

50

1. Explain clearly with the help of diagrams the concept of the cycle of erosion of Davis. What are the main criticism of this concept? 10

OR

What is diastrophism? Give a brief account of the different types of foldings.

2. Give short notes on any FOUR of the followings. 4×6=24

- Sea-floor spreading
 - Primarrumpf and endrumpf
 - Iostatic adjustment
 - Formation of deltas
 - 'Root hypothesis' of G. Airy
 - Types of moraines
3. Write short notes on any FOUR of the following. 4×4=16
- Polycyclic landscape
 - Salutation
 - Plucking
 - Roches moutonnees
 - Subductin zone
 - Solidluclion

Group 'B' (Climatology)

50

4. Describe the factors that determine the distribution and controls of solar radiation. 10

OR

What climate data are needed to classify a climate using Keoppen's scheme? Explain his approach. 10

5. Give short answers on any FOUR of the following. 4×5=20

- Distinguish between windward and leeward sides.
- Volcanic dust theory regarding climate change.
- Seasonal march of temperature
- Distinguish between cloud and fog
- Climate change impacts
- Condensation nuclei

6. Write short notes on any FOUR of the following. 4×5=20

- Sublimation
- Acid rain
- Isotherms
- Savanna
- Climatology
- Horse latitude

Exam 2068

Time: 3 hrs

Full Marks: 100

Attempt ALL the questions.

Group 'A' (Geomorphology)

50

1. Explain Penck's concept the erosion cycle with the help of a diagram. 50

OR

The same Physical process and laws that operate today, operated throughout geological times, not necessarily always with the same intensity as now. Explain.

2. Give short answer on any FOUR of the following. 4×6=24

- King's concept of parallel retreat of the slopes
- Level of compensation
- Diastrophic movements
- Asthenosphere
- nature levees and flood plains
- Formation and characteristics of Eskers

3. Write short notes on any FOUR of the following. 4×4=16
- | | |
|------------------------------|-----------------|
| a) Monadnock | b) Normal fault |
| c) Constructive plate margin | d) Exfoliation |
| e) Antecedent drainage | f) Alluvial fan |

Group 'B' (Climatology) 50

4. Describe the basic elements and controls of weather and climate. 10
- OR

Sow diagrammatically and explain the 'global heat budget'.

5. Give short answers to any FOUR of the followings. 4×5=20

- Difference between convection and advection.
- Composition and character found in the troposphere.
- Importance of hygroscopic nuclei.
- Distinguish between windward and leeward sides.
- Distinguish between cold and warm types of occluded front.
- Distinguish between steppe and desert.

6. Write short notes on any FOUR of the following. 4×5=20

- | | |
|-----------------------|--------------------|
| a) Sea level rise | b) Tropical region |
| c) Anticyclone | d) Katabatic winds |
| e) Wet adiabatic rate | f) Ozone |

Exam 2069

Time: 3 hrs

Full Marks: 100

Attempt ALL the questions.

Group 'A' (Geomorphology) 50

1. Describe the central idea of plate tectonics and the large-scale geological features associated with plate boundaries. 10

OR

Discuss major landforms resulting from glaciated erosion with the help of illustration.

2. Give short answer on any FOUR. 4×6=24

- Distinguish between antecedent drainage and superimposed drainage.
- Distinguish between normal and reverse faults.
- Distinguish between nature levees and flood plains.
- Why all rivers do not form deltas?
- Causes and consequences of interruption of a normal cycle of erosion.
- Factors influencing weathering.

3. Write short notes on any FOUR. 4×4=16

- | | |
|-----------------|--------------|
| a) Talus | b) Barchans |
| c) Peneplain | d) Polje |
| e) Solifluction | f) Saltation |

Group 'B' (Climatology) 50

4. Show diagrammatically and explain the global heat balance. 10

OR

Why climatic data are needed to classify a climate using the Koeppen's scheme? Explain his approach.

5. Give short answer to any FOUR. [4×6=24]

- Differentiate between insolation and radiation.
- Distinguish between cloud and fog
- Distinguish between windward and leeward sides
- Distinguish between cold and warm types of occluded front
- Shifting of wind belts
- Basic pre-requisite of air mass sources regions

6. Give short answers to any FOUR. 4×6=24

- | | |
|----------------------------------|--------------------|
| a) Seasonal march of temperature | b) Sublimation |
| c) Condensation nuclei | d) Coriolis effect |
| e) Isotherm | f) Sea level rise |

Geography (311/301) I Paper

Use separate answer book for each group

[311] Attempt all the questions.

Group "A" (Geomorphology)

[50]

1. Describe with diagrams the topological features resulting from compression.

OR

[10]

Describe the process of wind erosion under arid conditions and discuss the chief topographical features produced by them.

2. Give short answer on any four:

[4×6=24]

- Chemical weathering
- Polycyclic landscape
- Drainage basin
- Glaciofluvial deposit
- Nature levees and flood plains
- Permafrost and the active layer

3. Write short notes on any four:

[4×4=16]

- Piedmont glaciers
- subduction zone
- Karst region
- Suspension
- Lithospheric plate
- Dendritic drainage pattern

Group "B" (climatology)

[50]

4. Represent diagrammatically and explain the global distribution pattern of the pressure system.

[10]

OR

What do you mean by evapo-transpiration? Describe briefly the factors affecting the rate of evaporation.

5. Give short answers to any four:

[4×5=20]

- Impact of continental drift on climatic change.
- composition and character found in troposphere.
- Accelerated soil erosion.
- Origin of valley and mountain breezes.
- Distinguish between short wave I and 'long wave' radiant energy.
- Reason of red appearance of the sky during sunrise and sunset.

6. Write short notes on any four:

[4×5=20]

- Adiabatic temperature change
- Dew point.
- Air mass source region.
- Meso-thermal
- Frost free season
- Global warming

[301] Attempt all the questions:

Group "A" (Geomorphology)

[50]

1. Critically explain the continental drift theory of Wegener.

[10]

OR

Define weathering. Explain different types of weathering processes.

2. Write short answers to any four of the following: [4×6=24]
- Normal fault
 - Mode of formation of Yardangs
 - Consequent and Resequent river
 - Difference between Rift and Ramp valley
 - Differentiate between fold and block mountain
 - Application of geomorphology
3. Write short notes on any four, of the followings: [4×4=16]
- Level of compensation
 - Hanging valley
 - Scope of geomorphology
 - Causes of mass wasting
 - Tear fault
 - Gully erosion
4. Define air mass and explain its characteristics. [10]
- OR
- What do you mean by Solar Radiation? Explain the factors that determines the distribution of solar Radiation.
5. Write short answers to any four of the following: [4×5=20]
- Land and sea breezes
 - Horizontal distribution of temperature
 - Differentiate between weather and climate
 - Differentiate between warm and cold front
 - Inversion of temperature
 - Differentiate between orographic and Convectonal Rainfall
6. Write short notes on any four of the following: [4×5=20]
- Global warming
 - Anticyclone
 - Troposphere
 - Jet stream
 - Typhoon
 - Cold wave

11. Sociology/Anthropology I Paper (311) (Introduction to Sociology/Anthropology)

Exam 2066

Time: 3 hrs

Full Marks: 100

Attempt any TWO questions from Group 'A' and SIX from Group 'B'.

Group 'A'

2×20=40

- "Society is a dynamic process." Elaborate this statement.
- Discuss the role of family, community and state in the process of socialization of human population.
- Discuss the nature and scope of sociology and anthropology.

Group 'B'

6×10=60

- Define family and discuss its importance.
- What do you understand by the mode of production? Differentiate between feudal and capitalist mode of production.
- Discuss why household can be regarded as an economic unit of society.