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(CBCS)

(6th Semester)

GEOGRAPHY

NINTH PAPER

(Geomorphology)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

(SECTION : A—OBJECTIVE)

(Marks : 10)

Tick (✓) the correct answer in the brackets provided :

1×10=10

1. The author who is considered as the 'father of modern geomorphological thought' is

- (a) William Morris Davis ()
- (b) James Hutton ()
- (c) Alexander von Humboldt ()
- (d) W. D. Thornbury ()

2. Exogenetic geomorphic processes are influenced mostly by

- (a) vegetation ()
- (b) climate ()
- (c) slope ()
- (d) None of the above ()

3. Which among the following does not determine the shape and size of a fold?

- (a) Intensity of the compressive force ()
- (b) Direction of the compressive force ()
- (c) Amount of moisture in the earth ()
- (d) Nature of the rocks ()

4. Diastrophism means

- (a) horizontal movement of the earth's surface ()
- (b) vertical movement of the earth's surface ()
- (c) slow movement of the earth's surface ()
- (d) All of the above ()

5. Carbonation is a process which is associated with

- (a) biological weathering ()
- (b) physical weathering ()
- (c) chemical weathering ()
- (d) erosion ()

6. The steepest angle at which a sloping surface formed of loose material is stable is the

- (a) angle of repose ()
- (b) angle of elevation ()
- (c) angle of depression ()
- (d) angle of incidence ()

7. Cryoplanation terraces are the landform features associated with

- (a) fluvial landforms ()
- (b) aeolian landforms ()
- (c) coastal landforms ()
- (d) periglacial landforms ()

8. Rift valley is formed due to

- (a) folding ()
- (b) faulting ()
- (c) warping ()
- (d) All of the above ()

9. Blind valley is a characteristic feature found in

- (a) fluvial landforms ()
- (b) glacial landforms ()
- (c) karst landforms ()
- (d) periglacial landforms ()

10. Which among the following is considered as the most powerful agent of marine erosion?

- (a) Tides ()
- (b) Waves ()
- (c) Wind ()
- (d) Currents ()

(SECTION : B—SHORT ANSWER)

(Marks : 15)

Answer the following in not more than 5 sentences each :

3×5=15

UNIT—I

1. Explain the statement “Present is the key to the past.”

OR

2. Write short notes on the modern trends in geomorphology.

UNIT—II

3. Differentiate between endogenetic forces and exogenetic forces.

OR

4. How does folding take place?

UNIT—III

5. Define mass wasting and mention its broad types.

OR

6. Give a brief account of the Trios of Davis.

UNIT—IV

7. Distinguish between a waterfall and a cascade.

OR

8. What do you understand by periglacial landforms?

UNIT—V

9. Why are desert dunes migratory?

OR

10. What are sea beaches?

(**SECTION : C—DESCRIPTIVE**)

(Marks : 50)

Answer the following questions :

10×5=50

UNIT—I

1. Describe the nature and scope of Geomorphology. 10

OR

2. Elucidate the statement “An appreciation of the world climates is necessary to a proper understanding of the varying importance of the different geomorphic processes.” 10

UNIT—II

3. What is plate tectonics? How far is its knowledge helpful in understanding the occurrence of earthquakes in the world? 2+8=10

OR

4. Define diastrophism. What are the two types of diastrophism? Explain them in brief. 2+8=10

UNIT—III

5. Define weathering. Briefly explain the different kinds of weathering. 2+8=10

OR

6. Highlight the contrasting views of Davis and Penck about the cycle of erosion. 10

UNIT—IV

7. What is glacier? Explain the depositional landforms found in glaciated regions. 2+8=10

OR

8. With the help of suitable diagrams wherever possible, explain the different landforms formed in the upper course of a river. 10

UNIT—V

9. What do you understand by aeolian process? Explain the different types of erosional landforms formed due to aeolian action. 2+8=10

OR

10. Explain the action of water in the formation of Karst topography in limestone regions and name the different landforms found in Karst topography. 5+5=10

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(CBCS)

(6th Semester)

GEOGRAPHY

TENTH PAPER

(Remote Sensing and GIS)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

(SECTION : A—OBJECTIVE)

(Marks : 10)

Tick (✓) the correct answer in the brackets provided :

1×10=10

1. Overlap is usually _____ in percentage.

- (a) 60 ()
- (b) less than 40 ()
- (c) about 3 ()
- (d) 5-10 ()

2. Allowable tilt tolerance is usually _____ from the perpendicular line to the camera axis in vertical photo.

- (a) 33° ()
- (b) 30° ()
- (c) 3° ()
- (d) 1° ()

- 3.** Which among the following is the first Indian remote sensing satellite?
- (a) INSAT-1A ()
 - (b) INSAT-1B ()
 - (c) IRS-1A ()
 - (d) IRS-1B ()
- 4.** Landsat-1 was launched on
- (a) July 23, 1962 ()
 - (b) July 23, 1972 ()
 - (c) July 23, 1982 ()
 - (d) July 23, 1992 ()
- 5.** In which of the following, fundamental parameters of remote sensing like size, shape, tone, texture, site, association, shadow and pattern are used?
- (a) Image interpretation ()
 - (b) Image classification ()
 - (c) Image correction ()
 - (d) Image compression ()
- 6.** 'Pixel' is the smallest unit of
- (a) an analogue image ()
 - (b) a photograph ()
 - (c) a photographic film ()
 - (d) a digital image ()
- 7.** Which of the following does not come under the components of GIS?
- (a) Software ()
 - (b) Hardware ()
 - (c) Compiler ()
 - (d) User ()
- 8.** The term 'GIS' was coined by
- (a) Roger Tomlinson ()
 - (b) Albert Einstein ()
 - (c) Evelyn Pruitt ()
 - (d) Gaspard Felix ()

9. Which one of the following is an advantage of GIS?

- (a) Maintaining geospatial data ()
- (b) Data sharing ()
- (c) Accurate data information ()
- (d) Presence of data retrieval service ()

10. In GIS urban planning, analysis, linking spatial data and attribute data leads to formation of

- (a) administration ()
- (b) topology ()
- (c) jurisdiction ()
- (d) land cover ()

(SECTION : B—SHORT NOTE)

(Marks : 15)

Write short notes on the following :

3×5=15

UNIT—I

1. Principal point

OR

2. Crab distortion

UNIT—II

3. Active sensors

OR

4. Spaceborne platforms

UNIT—III

5. Unsupervised classification

OR

6. Georeferencing

UNIT—IV

7. Spatial data

OR

8. Attribute data

UNIT—V

9. Meaning of urban sprawl

OR

10. Need for urban planning

(SECTION : C—DESCRIPTIVE)

(Marks : 50)

Answer the following questions :

10×5=50

UNIT—I

1. Define aerial photography. What are the different types of aerial photography?

4+6=10

OR

2. Outline the historical development of aerial photography in detail.

10

UNIT—II

3. Explain the principles and components of satellite remote sensing.

5+5=10

OR

4. Describe how electromagnetic radiation interacts with the atmosphere. What is atmospheric window?

8+2=10

UNIT—III

5. Explain the importance of radiometric and geometric correction in image processing and data analysis.

5+5=10

OR

6. What is filtering? What are the different spatial filtering techniques used in image processing?

2+8=10

UNIT—IV

7. What is GIS? What are its components?

4+6=10

OR

8. Differentiate between raster and vector data. What are the advantages and disadvantages of raster and vector data?

2+2+3+3=10

UNIT—V

9. Discuss the importance of RS and GIS in land use/land cover mapping and planning.

10

OR

10. Explain the importance of RS and GIS in forest monitoring.

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(CBCS)

(6th Semester)

GEOGRAPHY

TWELFTH(A) PAPER

(Urban Geography)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

(SECTION : A—OBJECTIVE)

(Marks : 10)

Tick (✓) the correct answer in the brackets provided :

1×10=10

- 1.** “Urban geography includes the site revolution pattern and classification of towns.” This statement was given by

- (a) Kohu ()
- (b) G. Taylor ()
- (c) D. Stamp ()
- (d) Dickinson ()

- 2.** Which one is the early approach to study urban geography?

- (a) Urban morphology ()
- (b) Positivism approach ()
- (c) Behavioural approach ()
- (d) Humanistic approach ()

- 3.** Which is the modern approach to study urban geography?
- (a) Site and situation ()
 - (b) Positivism ()
 - (c) Urban morphology ()
 - (d) None of the above ()
- 4.** The first human settlements are estimated to begun at the year of
- (a) 12000 BC ()
 - (b) 10000 BC ()
 - (c) 8000 BC ()
 - (d) 5000 BC ()
- 5.** What phenomenon led the growth of urbanization in developed countries?
- (a) Industrial revolution ()
 - (b) Agricultural revolution ()
 - (c) Technological development ()
 - (d) None of the above ()
- 6.** Who has classified cities on the basis of their functions?
- (a) Griffith Taylor ()
 - (b) Lewis Mumford ()
 - (c) C. D. Harris ()
 - (d) Homer Hoyt ()
- 7.** Who proposed 'multiple nuclei theory' of urban land use?
- (a) Harris and Ullman ()
 - (b) Mattila and Thompson ()
 - (c) Moses and Scott ()
 - (d) Harris and Nelson ()

8. Who proposed the rank size rule?

- (a) Linsky ()
- (b) G. K. Zipf ()
- (c) Mark Jefferson ()
- (d) F. Auerbach ()

9. Aizawl city is a _____ city.

- (a) class I ()
- (b) class II ()
- (c) class III ()
- (d) class IV ()

10. How many urban centres are notified by the Census of India in Mizoram?

- (a) 22 ()
- (b) 23 ()
- (c) 30 ()
- (d) 32 ()

(SECTION : B—SHORT ANSWER)

(Marks : 15)

Answer the following questions :

3×5=15

UNIT—I

1. Define urban geography.

OR

2. What are the different criteria of urban areas as given by Census of 2011?

UNIT—II

3. What are the characteristics of urbanization in developing countries?

OR

4. Highlight the pattern of urbanization in India.

UNIT—III

5. What are the bases of classification of town?

OR

6. Define metropolis.

UNIT—IV

7. Write the concept of centrality.

OR

8. Write the concept of primate city.

UNIT—V

9. Highlight three problems of urbanization.

OR

10. Write a note on slum in Aizawl city.

(SECTION : C—DESCRIPTIVE)

(Marks : 50)

Answer the following questions :

10×5=50

UNIT—I

1. Describe the scope of urban geography.

10

OR

2. Discuss the negative and positive impacts of urbanization.

5+5=10

UNIT—II

3. What are the urbanization patterns of developed countries? 10

OR

4. Define urbanization. Mention its causes in detail. 2+8=10

UNIT—III

5. Give an account of Ashok Mitra's functional classification of Indian towns. 10

OR

6. Describe Harris' method in the functional classification of towns. 10

UNIT—IV

7. Explain in detail the concept of rank-size rule. 10

OR

8. Describe the marketing principles of Christaller's central place theory. In what ground the theory was criticized? 5+5=10

UNIT—V

9. Discuss the problems of housing and water scarcity in Aizawl city. 5+5=10

OR

10. Discuss the major modes of transportation in Delhi. 10

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(CBCS)

(6th Semester)

GEOGRAPHY

TWELFTH (B) PAPER

(Political Geography)

Full Marks : 75

Time : 3 hours

(SECTION : A—OBJECTIVE)

(Marks : 10)

The figures in the margin indicate full marks for the questions

Tick (✓) the correct answer in the brackets provided :

1×10=10

1. Who is called the father of political geography?

- (a) Mackinder ()
- (b) Ratzel ()
- (c) Spykman ()
- (d) A. T. Mahan ()

2. Which of the following is not true about a State?

- (a) It always has a social or cultural base ()
- (b) It has a territorial base ()
- (c) It claims internal sovereignty ()
- (d) It claims sovereignty in external relations ()

- 3.** The geographical pivot of history was presented by
- (a) Kjellén ()
 - (b) Haushofer ()
 - (c) Mackinder ()
 - (d) A. T. Mahan ()
- 4.** Rimland does not include which one of the following countries/regions?
- (a) Russia ()
 - (b) South-East Asia ()
 - (c) India ()
 - (d) Siberia ()
- 5.** Indo-Pak Border comes under which category of boundaries?
- (a) Subsequent boundary ()
 - (b) Antecedent boundary ()
 - (c) Superimposed boundary ()
 - (d) Consequent boundary ()
- 6.** Which one of the following factors is not affecting the voting behaviour?
- (a) Religion ()
 - (b) Caste ()
 - (c) High level of literacy ()
 - (d) Size of land holdings ()
- 7.** The sharing of Cauvery River has been the source of a serious conflict between the two Indian States of
- (a) Tamil Nadu and Karnataka ()
 - (b) Tamil Nadu and Kerala ()
 - (c) Maharashtra and Gujarat ()
 - (d) Maharashtra and Karnataka ()

8. The Indus Water Treaty between India and Pakistan was signed in the year
- (a) 1950 ()
 - (b) 1940 ()
 - (c) 1960 ()
 - (d) 1970 ()
9. The National Policy on Resettlement and Rehabilitation of Project Affected Families was formulated in
- (a) 2001 ()
 - (b) 2003 ()
 - (c) 2002 ()
 - (d) 2004 ()
10. The first Special Economic Zone (SEZ) in India is located in
- (a) Kandla, Gujarat ()
 - (b) Noida, Uttar Pradesh ()
 - (c) Chennai, Tamil Nadu ()
 - (d) Visakhapatnam, Andhra Pradesh ()

(SECTION : B—SHORT NOTE)

(Marks : 15)

Write short notes on the following :

3×5=15

UNIT—I

1. The characteristics of a State

OR

2. The difference between Nation and State

UNIT—II

3. The types of boundaries

OR

4. The definition of frontiers

UNIT—III

5. Gerrymandering

OR

6. The significance of electoral geography

UNIT—IV

7. Krishna water disputes

OR

8. The conflicts over forest in India

UNIT—V

9. The issues with displacement in Mizoram

OR

10. The disadvantages of special economic design

(SECTION : C—DESCRIPTIVE)

(Marks : 50)

UNIT—I

1. Describe the nature, scope and development of political geography. 10

OR

2. “Geography and politics are the two sides of the same coin.” Discuss.

UNIT—II

3. “Rimland is more significant than the Heartland.” Elaborate the relevance of this statement. 10

OR

4. Give an account of the salient features of core and periphery.

UNIT—III

5. What is electoral geography? Discuss the various approaches in electoral geography. 2+8=10

OR

6. Examine the processes for geographic influences on voting pattern. 10

UNIT—IV

- 7.** Discuss the major inter-State water disputes in India. 10

OR

- 8.** Discuss the issues related to mineral-based resource conflicts in India.

UNIT—V

- 9.** Analyze the issues concerning displacement consequent to building of Tehri Dam. 10

OR

- 10.** Discuss the impacts created by Special Economic Zones on their surroundings.

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