

2019

GEOGRAPHY

( Major )

Paper : 6.1

( **Environment and Development** )

Full Marks : 60

Time : 3 hours

*The figures in the margin indicate full marks  
for the questions*

1. Answer the following as directed : 1×7=7

(a) Who wrote the book, *Geography : A Modern Synthesis*?

(i) Peter Haggett

(ii) C. Park

(iii) A. Goudie

(iv) E. Huntington

( Choose the correct option )

(b) What is CFC?

(c) Define aerosols.

- (d) When was Montreal Protocol adopted?  
 (i) 1992  
 (ii) 1987  
 (iii) 1997  
 (iv) 1986

( Choose the correct option )

- (e) What do you mean by 'economic man'?  
 (f) What are pollutants?  
 (g) Who coined the term 'biodiversity'?

2. Write very short answers of the following :

2×4=8

- (a) State biotic and abiotic components of an ecosystem.  
 (b) Define the term 'environmental degradation'.  
 (c) Distinguish between 'hazards' and 'disaster'.  
 (d) What are trophic levels?

3. Answer any *three* questions from the following :

5×3=15

- (a) How do you differentiate between desertification and deforestation?

- (b) In what ways, population, resource and development are interrelated?

- (c) Explain briefly the deterministic approach in man-environment relationship.

- (d) Discuss briefly the impact of technology on environment with suitable examples.

- (e) What is sustainable development? What are the steps taken by the United Nations at the Earth Summit, Rio de Janeiro (1992) for controlling the greenhouse gas emissions?

4. Answer any *three* questions from the following :

10×3=30

- (a) State the causes and effects of air pollution in an urban environment with special reference to Delhi metropolitan city.

- (b) "Indian biodiversity is under serious threat." Justify the statement.



(c) The Sumerian civilization was developed on the banks of

- (i) Indus-Ganges
- (ii) Hwang Ho-Yangtze Kiang
- (iii) Nile-Congo
- (iv) Euphrates-Tigris

(Choose the correct one)

(d) The concept of Lebensraum was proposed by

- (i) Vidal de la Blache
- (ii) Jean Brunhes
- (iii) F. Ratzel
- (iv) Carl Ritter

(Choose the correct one)

(e) Name the book of Social Geography written by M. Taher.

(f) Mention one element of Anatomy of the political area.

(g) Who is regarded as the Father of Political Geography?

2. Answer the following questions briefly :  $2 \times 4 = 8$

- (a) Define Political Geography.
- (b) What is 'genre de vie'?
- (c) What is social space?
- (d) What is nation-state? Give an example.

3. Answer the following questions (any three) :

$5 \times 3 = 15$

(a) Find the distinctions between frontiers and boundaries.

(b) Write five characteristics of state.

(c) Explain the process of urbanization.

(d) Write an account on the inter-State boundary dispute between Assam and Nagaland.

(e) Write a short note on colonialism.

4. Define Social Geography. Explain its nature and scope.

$2 + 8 = 10$

Or

What are the characteristics of tribal society?

Explain the economic structure and social

life of a tribal society.

$3 + 7 = 10$

5. Explain the power analysis approach and functional approach of Political Geography.

$5 + 5 = 10$

Or

Discuss the international boundary problems of India with special reference to China and Pakistan.

10

6. "New scientific methods have, on the one hand, affected the natural environment, and on the other, the human society itself." Justify the statement in the light of 'influence of society on environment'. 10

Or

What is social change? Explain the different causes of social change. 2+8=10

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2019

GEOGRAPHY

( Major )

Paper : 6·3

( Regional Geography of North-East India with Special Focus on Assam )

Full Marks : 60

Time : 3 hours

*The figures in the margin indicate full marks for the questions*

1. Answer the following as directed : 1×7=7

- (a) As per the forest policy of India, forest cover should be \_\_\_\_\_% in the hilly area.  
(Fill in the blank)
- (b) Name the State of N. E. India having highest share of forest cover.
- (c) Name the States of N. E. India that share boundary with Myanmar.
- (d) Name two National Parks of Meghalaya.



(e) As per the 2011 Census, \_\_\_\_\_% of population in Assam resides in the urban areas of the State.

(Fill in the blank)

(f) Name the State of N. E. India with lowest population along with its population density.

(g) Name a river of Southern Assam, which is tributary of the Barak river.

2. Answer the following questions briefly :  $2 \times 4 = 8$

(a) Mention the major vegetation types of N. E. India.

(b) State the major problems associated with the growth of transport sector in N. E. India.

(c) Name two important tourist destinations located in western part of Assam.

(d) Mention the biodiversity hot spot zone of North-East India.

3. Answer any *three* of the following questions :

$5 \times 3 = 15$

(a) Discuss briefly the locational issues and associated strategic significance of N. E. India.

(b) State the main characteristics of climate of N. E. India.

(c) Give an outline of the influence of relief on drainage system of N. E. India.

(d) Illustrate the influence of physiography on the distribution of population in N. E. India.

(e) Write briefly on National Waterway II.

4. State the locational significance of N. E. India. Discuss its influence on economy and strategic issues of the region.  $4+6=10$

Or

Discuss the climatic characteristics of N. E. India and highlight its influence on the natural vegetation of the region.  $4+6=10$

5. Discuss the population characteristics of N. E. India. How is it different in the rest of India?  $7+3=10$

Or

Illustrate the trend of industrial development in N. E. India and discuss its problems and prospects.  $6+4=10$

6. Discuss the potentiality and problems associated with the development of tourism in Assam. 10

Or

Illustrate the state of biodiversity in N. E. India and discuss the problems associated with its conservation. 5+5=10

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2019

GEOGRAPHY

( Major )

Paper : 6·4

( Principles and Applications of Remote Sensing, GIS and GPS )

Full Marks : 60

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Answer the following as directed : 1×7=7

- (a) What is pixel?
- (b) LISS is a sensor. Give the full form of LISS.
- (c) What is the wavelength of visible range of the EMR?
- (d) ERDAS IMAGINE is
  - (i) an American satellite
  - (ii) a satellite image
  - (iii) a GIS software
  - (iv) an India-made GPS

(Choose the correct answer)



- (e) GPS is a technology based on a set of
- (i) 16 satellites placed in 4 planes
  - (ii) 24 satellites placed in 6 planes
  - (iii) 36 satellites placed in 12 planes
  - (iv) 12 satellites placed in 3 planes
- (Choose the correct answer)

- (f) What is an FCC image?
- (g) What do you mean by the term 'Geoinformatics'?

2. Answer the following questions briefly :  $2 \times 4 = 8$

- (a) Give examples of any two polar orbiting satellites.
- (b) Mention any two components of GIS.
- (c) Distinguish between active and passive sensors.
- (d) Distinguish between GIS and GPS.

3. Answer any three of the following questions :  $5 \times 3 = 15$

- (a) State the different elements of vertical photographs with suitable diagram.
- (b) Citing appropriate examples, describe the various types and nature of geographical data.

- (c) Explain the functions of GIS with suitable diagrams.
- (d) Give an account of development of aerial remote sensing in India.
- (e) Describe the steps involved in space data acquisition through satellite remote sensing.

4. What types of data are provided by GPS? Explain how these data can be obtained by GPS.  $2+8=10$

Or

Describe the procedures involved in GPS survey and mapping an area with some point features.  $5+5=10$

5. Explain the characteristics of Electro-Magnetic Radiation (EMR) with reference to the remote sensing bands.  $5+5=10$

Or

What are sensors? Explain the spatial and temporal resolutions of sensors citing examples from Indian Remote Sensing Satellites.  $2+4+4=10$

6. Distinguish between raster and vector data structures in GIS platform with neat diagrams. 5+5=10

Or

Explain how GIS can be applied in assessing forest cover changes in a region. 10

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