3 (Sem–4/CBCS) GGY HC 1

2024

GEOGRAPHY

(Honours Core)

Paper : GGY–HC–4016

(Environmental Geography and Disaster Management)

Full Marks : 60

Time : Three hours

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

1. Answer the following questions very objectively : 1×7=7

   (a) The term 'environment' etymologically means _____. *(Fill in the blank)*

   (b) Define ecosystem.

   (c) The development that causes least damage to the environment is called _____. *(Fill in the blank)*

(d) Increasing skin cancer and high mutation rate are the result of

(i) acid rain

(ii) CO_2 pollution

(iii) global warming

(iv) ozone depletion

(e) The National Disaster Management Act was enacted in the year

(i) 1986 (ii) 2005

(iii) 1908 (iv) 1980

(Choose the correct option)

(f) The intensity of disaster is weighted in terms of _____. *(Fill in the blank)*

(g) Name the most hospitable biome of the world.

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

(a) Mention the causes of water pollution.

(b) Distinguish between the concept of risk and vulnerability.

(c) What is E-waste?

(d) State the biotic and abiotic components of the environment.

3. Answer the following questions in short: *(any three)* 5×3=15

(a) Discuss the modes of life of the people of tundra environment.

(b) What are the basic principles of sustainable development?

(c) Differentiate between hazard and disaster with suitable examples.

(d) State the consequences of global warming on environment.

(e) Mention various sources of water pollution in a river with examples.

4. Answer the following questions: 10×3=30

(a) Discuss the scope and significance of environmental geography. 5+5=10

Or

What is deforestation? Discuss the causes and consequences of deforestation. 2+(4+4)=10

(b) Discuss the important sections of the Environmental Protection Act, 1986.

Or

What do mean by disaster management? Discuss various stages of disaster management cycle.

2+8=10

(c) Discuss the causes and consequences of flood hazard in Brahmaputra river. Also suggest remedial measures to check the floods in the Brahmaputra river. (4+4)+2=10

Or

Give a comprehensive account of various types of hazards and disaster.

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3 (Sem–4/CBCS) GGY HC 2

2024

GEOGRAPHY

(Honours Core)

Paper : GGY–HC–4026

(Population and Settlement Geography)

Full Marks : 60

Time : Three hours

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

1. Answer the following questions by choosing the most appropriate option given against each question : 1×7=7

   (a) The book, *A Prologue to Population Geography*, was written by

   (A) W. S. Thompson

   (B) Wilbur Zelinsky

   (C) Thomas Robert Malthus

   (D) G. T. Trewartha

(b) Which one of the following is associated with density of population ?

(A) Geographical density

(B) Agricultural density

(C) Arithmetic density

(D) Physiological density

(c) The Registrar General and Census Commissioner of India works under—

(A) Ministry of Statistics and Programme Implementation

(B) Ministry of Human Resource Development

(C) Prime Minister Office (PMO)

(D) Ministry of Home Affairs

(d) Which is the only state to record negative decadal population growth as per 2011 Census ?

(A) Uttarakhand

(B) Kerala

(C) Nagaland

(D) Mizoram

(e) *'Threshold Population'* refers to

(A) Minimum population size required for a service

(B) Maximum population size required for a service

(C) Minimum distance that people travel to use a service

(D) Maximum distance that people travel to use a service

(f) The transition zone between urban and rural areas is known as

(A) Rural-urban Continuum

(B) Urban Fringe

(C) Suburban Areas

(D) Central Business District (CBD)

(g) Settlements located at a distance from river banks or other water bodies are called

(A) Linear Settlement

(B) Circular Settlement

(C) Dry Point Settlement

(D) Wet Point Settlement

2. Answer the following questions in very short : 2×4=8

(a) What do you mean by '*Vital Registration System* (VRS)' ?

(b) What is *'positive check'* as described by Malthus ?

(c) Cite *any two* reasons responsible for unfavourable sex-ratio.

(d) Write *any two* characteristics of rectangular pattern of rural settlement.

3. Answer the following questions in short : ***(any three)*** 5×3=15

(a) Explain how Population Geography is related with Demography.

(b) What are the problems of population census in India ?

(c) Define *'population ageing'*. What are the causes of population ageing ? 2+3=5

(d) Differentiate the characteristics of rural and urban settlements.

(e) Write an account on the impact of Covid–19 pandemic on demographic aspects of India.

4. Answer ***any three*** of the following questions : 10×3=30

(a) Outline the trend of population growth in the world since the beginning of Christian Era and explain the causes of varying population growth rates in different parts of the world. 6+4=10

(b) With reference to global pattern, elaborate the factors affecting distribution and density of population.

(c) Discuss the causes and consequences of rural to urban migration with special reference to India. 5+5=10

(d) Discuss the *Demographic Transition Theory* and its relevance. 7+3=10

(e) Discuss the nature and scope of Settlement Geography. 6+4=10

(f) Highlight the morphology of the urban settlements. In this respect, discuss briefly the Burgess Theory of internal structure of a town. 5+5=10

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2024

GEOGRAPHY

(Honours Core)

Paper : GGY–HC–4036

(Remote Sensing, GIS and GPS)

Full Marks : 60

Time : Three hours

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

1. Answer the following questions objectively : 1×7=7

   (a) What is a sensor ?

   (b) Give the full form of RADAR.

   (c) Name *any four* EMR bands used in remote sensing.

   (d) What is ".shp" ?

   (e) Give an example of WebGIS.

(f) State the minimum number of satellites required to fix precise position on earth.

(g) Name an open source GIS software.

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

(a) What is trilateration in GPS ?

(b) Mention the data types of GIS.

(c) What is FCC ? What is its purpose ?

(d) Mention the major sources of data in GIS.

3. Answer the following questions in short : 5×3=15 ***(any three)***

(a) Illustrate with a suitable diagram the elements of a vertical photograph.

(b) Distinguish between raster and vector representations of real world features.

(c) Elaborate on different sensor resolutions.

(d) Explain the key components of GIS and their interrelations.

(e) State the procedures involved in recording spatial information using a GPS device.

4. Answer ***any three*** of the following questions : 10×3=30

(a) What do you mean by image interpretation ? How would you interpret an aerial photograph of a typical Indian urban area ? 3+7=10

(b) Define image classification. Compare between supervised and unsupervised classification techniques. 3+7=10

(c) Describe the development and progress of the Indian Remote Sensing (IRS) satellite programme.

(d) What is meant by geospatial analysis ? Discuss its application in the site suitability analysis of solid waste disposal plant. 3+7=10

(e) Provide a detailed analysis on the integration of remote sensing and GIS in managing flood hazard.

(f) Describe the basic principles of GPS. Explore various applications of GPS in our day-to-day life. 5+5=10
