

M.A./M.Sc. 4th Semester Examination, 2010

GEOGRAPHY

PAPER—GR-2404

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

Write the answers to questions of each Group in separate books

[Special Paper]

UNIT—XLIII

(Coastal Ecology & Hazards)

GROUP—A

1. Answer any *one* question : 8 x 1

(a) Discuss the geo-hydrological and tectonic effects of 'y' and 'o' state of Sea level change following Fisher, 1980.

- (b) Explain the adaptation and reproduction techniques of dune building plants in an environment of continuous sand accumulation.

GROUP—B

2. Answer any *two* questions : 4 × 2

- (a) Describe in brief the standard methods to monitor the attributes of waves at on shore region.
- (b) Bring out the effects of tropical storms on estuarine coast with special reference to 'Aila' of May, 2009.
- (c) Assess the ecological benefits of '*Mangals*'.
- (d) Critically examine the effectiveness of artificial seaweeds to protect coastal erosion.

GROUP—C

3. Answer any *two* questions : 2 × 2

- (a) Discuss the limitations of Bruun's model in estimating the intensity of coastal erosion in connection with sea level rise.

- (b) Discuss the natural process of controlling rabbit population on coastal dune.
- (c) Enumerate cross-dune productivity.
- (d) Assess the importance of coastal study in India.

[Special Paper]

UNIT—XLIV

(Coastal Management -IV)

GROUP—A

1. Answer any *one* question from the following : 8 × 1
- (a) Explain the concept and techniques of Integrated Coastal Zone Management.
 - (b) Enumerate the major environmental issues of West Bengal coast mentioning the necessity of their monitoring.

GROUP—B

2. Answer any *two* questions from the following : 4 × 2
- (a) Discuss the ecologic significance of CRZ-I in India.

- (b) Identify the method of monitoring surface water in Coastal Regulatory Zone.
- (c) Explain the scope for application of Remote Sensing in the fishery sector of coastal region.
- (d) Briefly discuss the methods for application of Integrated Coastal Zone Management Techniques.

GROUP—C

3. Answer any *two* questions from the following : 2×2

- (a) What is CRZ-IV?
- (b) Highlight the role of capacity building in Integrated Coastal Zone Management.
- (c) Identify the negative aspects of seawall structures in shoreline protection management.
- (d) Assess the impact of tourism-recreation on the coastal environment of Mondermoni.

[Special Paper]

UNIT — XLIII

(*Theoretical Bases of Regional Planning*)

GROUP — A

Answer any *one* question : 8 × 1

1. Critically analyse the dependency theory as put forward by Friedman.
2. Bring out the problems of regional disparities in India with possible measures of reduction in levels of such disparities.

GROUP — B

Answer any *two* questions : 4 × 2

3. Discuss the concept of Cumulative Causation Model of Gunnar Myrdal.
4. Specify the major environmental issues related to deprivation in Paschim Medinipur.
5. Differentiate balanced growth from unbalanced growth.
6. Explain the Basic Needs Approach as proposed by E.A.J. Johnson.

GROUP—C

Answer any *two* questions : 2 × 2

7. State the shortcomings of Pirroux's Growth Pole Theory as a model of balanced regional development.
8. State the concept of agro-polititan development.
9. How does market economy influence development ?
10. State the features of Loschian Economic Landscape.

[Special Paper]

UNIT—XLIV

(*Planning for Regional Development*)

GROUP—A

1. Answer any *one* of the following : 8 × 1
 - (a) Identify the destructure characteristics of developed and under-developed economics.
 - (b) Discuss the common goals of regional planning for economic development.

GROUP—B

2. Answer any *two* from the following : 4 × 2

(a) Highlight the basic objectives of any one urban infrastructural development programmes in India.

(b) How does economy of scale in industrial operation promote regional development ?

(c) Why is agriculturally potential land considered as an important component of the economic development in regional perspectives.

(d) Examine the role of rural roads in promoting the regional economic development. Give examples.

GROUP—C

3. Answer any *two* from the following : 2 × 2

(a) What are the different tiers of Panchayat System ?

- (b) What are the different measures of regional development ?
- (c) What is meant by micro-level planning.
- (d) Distinguish between intra-and inter-regional planning ?

Option — 3

[Special Paper]

UNIT — XLIII

(Advanced Remote Sensing)

GROUP — A

1. Answer any *one* question : 8 x 1

- (a) Discuss the principles and area of application of microwave remote sensing.
- (b) Explain the role of RS and GIS in microwatershed delineation and management.

GROUP—B

2. Answer any *two* from the following : 4 × 2
- (a) What are the characteristics of a good ground control point.
 - (b) Assess the importance of 8-14 μm range in remote sensing?
 - (c) Mention the different techniques of data enhancement.
 - (d) What are the basic assumptions made for vegetation indices.

GROUP—C

3. Answer any *two* from the following : 2 × 2
- (a) What is Formal data structure in GIS.
 - (b) Name two important operations of GIS for spatial data analysis.
 - (c) Examine the relevance of GTV.
 - (d) What is LIDAR ?
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