2008

M.Sc.

3rd Semester Examination

REMOTE SENSING AND GIS

PAPER—XI

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

Answers each module in separate books.

[Option—III]

Module—I (RG-2105)

(Geoinformatics in Coastal Management)

Answer any *two* questions. 2×10

1. What are the purpose of coastal engineering structures ? How far these structures can stabilize the shoreline ? Explain with examples. 2+8

2. (a) Describe the climatic and physical settings for the coastal mangroves. 4

(b) Write a brief account of the mangrove wetland of the Indian Sundarbans. 6

3. What are the major sources of coastal pollution ? Describe their impacts and management techniques. 3+7

4. Explain the following in short : $2\frac{1}{2} \times 4$

   (i) Sea Surface Temperature (SST).

   (ii) Types of suspended minerals in sea water.

   (iii) RIP current.

   (iv) Capillary waves & long period wave.

Module—II (RG-2106)

(Potential Application areas of RS/GIS in Coastal Management)

Answer any *two* questions. 2×10

5. Explain the major environmental issues of West Bengal coast. How far the application of Remote Sensing and GIS will help to identify, monitor and to manage the coastal environmental problems. 5+5

6. Describe the potential application methods of RS and GIS in identification of CRZ and in monitoring surface waters of CRZ. 5+5

7. Give an account of the application of Remote Sensing with special reference to Fishery. 10

8. Write short notes on any *two* of the following items : 5+5

   (i) Application of Remote Sensing in measurement of Sea Surface Temperature (SST).

   (ii) Application of Remote Sensing in study of suspended mineral in water.

   (iii) Application of Remote Sensing in study of chlorophyll in water.

———