

M.Sc. 3rd Semester Examination, 2012

REMOTE SENSING AND GIS

PAPER—RSG-303(Gr.- A + B)

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

GROUP—A

[Marks : 20]

Answer any two from the following :

- 1. (a) Explain the necessity of construction of Guard wall with diagram.**
- (b) Explain the effect before and after making the Guard wall.**

3 + 7

(Turn Over)

2. Explain the Beach process and human interference with special reference of RIP current. 10
3. Discuss the characteristics of Coastal Biogeography with special reference to mangroves. 10
4. Short notes on (any two) : 5 + 5
- (i) Corrosion or solution
 - (ii) Coastal Sand Dunes
 - (iii) Effects of land reclamation
 - (iv) Gravity waves or wind generated waves
 - (v) Tide dominated coast.

(*Geoinformatics in Coastal Management*)

GROUP – B

[Marks ::20]

Answer any *two* questions from the following:

5. Identify and explain atleast two major environmental issues of West Bengal coast mentioning with their problems and management. 10

6. (a) How does the application of Remote Sensing and GIS help to study the chlorophyll content of coastal waters ?
- (b) What is the significance of such study in Coastal Management ? 6 + 4
7. (a) Give a brief account of the biogeographical characters of the Indian Sundarban with special reference to mangrove vegetation. 60 (11)
- (b) Do you think the mangrove forests protect coastal erosion at the seaface ? 6 + 4
8. Write brief notes on the following (any two) : 5 × 2
- (i) What is CRZ ?
- (ii) Digital shoreline change mapping technique.
- (iii) Hyperspectral Remote Sensing data in landscape ecological mapping of the coastal belt.
- (iv) Study of suspended mineral in coastal water.
- (v) Application of RS/GIS in fishery study.