

**M.Sc. 3rd Semester Examination, 2015**

**REMOTE SENSING AND GIS**

**PAPER – RSG-303 (Opt.-2 (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*

**Write the answers to questions of each Group  
in separate books**

**Option-2 : (*Geoinformatics in Coastal  
Management*)**

*( Turn Over )*

GROUP – A

( *Theoretical Consideration* )

[ *Marks : 20* ]

Answer any two questions : 10 × 2

1. Critically discuss the role of Spatial Information Technology for geomorphological and landuse/land cover analyses in preparation of coastal zone management plans. 10
2. Discuss elaborately on mangroves and its importance in coastal environment stating the role of societal aspects and morpho-dynamics. 10
3. (a) Classify deltas and coasts based on geomorphology and tide dominance.  
(b) Discuss briefly on type of sensors used in Remote Sensing for oceanographic studies. 5 + 5
4. What is coastal morphodynamics ? Classify coasts on the basis of processes and sediment characteristics. 5 + 5

( 3 )

GROUP – B

( *Potential Application Areas of RS/GIS in Coastal Management* )

[ Marks : 20 ]

Answer any two questions : 10 × 2

1. Elucidate the importance of Application of Remote Sensing and GIS techniques in coastal zone management. 10
2. Identify the major environmental issues of Indian coasts and explain their characteristics with special reference to coastal urbanization and tsunami hazards. 5 + 5
3. What is meant by Satellite Oceanography? Mention the different areas of R.S application in coastal studies. How potential fishing zones can be determined through RS analysis? 3 + 3 + 4
4. Write short notes (any two): 5 × 2
  - (i) Measurement of SST

( 4 )

- (ii) Study of suspended mineral in water
  - (iii) Coastal Regulatory Zones in India
  - (iv) Coastal LULC of the deltaic areas of W.B. and Orissa States.
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