



B.E./ B.Tech. (Full Time) DEGREE END SEMESTER EXAMINATIONS, APR / MAY 2011

GEOINFORMATICS ENGINEERING BRANCH

3

EIGHTH SEMESTER - (REGULATIONS: 2004)

GI 481 GEOGRAPHIC INFORMATION SYSTEM APPLICATIONS

Time: 3 hours

Max. Marks: 100

Draw neat sketches wherever necessary

Answer ALL questions

Part – A (10 x 2 = 20 mark)

1. List the factors to be considered with reasons for forest fire growth modelling.
2. Along with the layers required list two change detection GIS applications.
3. List GIS attributes of electrical distribution system.
4. List the components and its GIS equivalent features of water distribution system.
5. Define a Location Based Service application and role of GIS in it.
6. State the uses of Automated Vehicle Tracking System and stages where needs alarm to be raised.
7. State the components of FMB used in LIS.
8. List the layers and geo processing analysis used for highway alignment.
9. List the components of disaster management cycle.
10. Name any two GIS applications in health sector along with data required.

Part – B (5 x 16 = 80 mark)

11. (i). Explain components and functionalities of WEB-GIS (8)
(ii). Discuss in details the role of GIS in identifying Ground Water Recharge zones (8)
- 12 a. (i). State the need for forest resource inventory and how you can get support from GIS in this applications. (8)
(ii) Discuss the electrical utility application with GIS as a component (8)

(OR)

- b (i). Explain any one water utility application which uses the GIS (8)
- (ii) State the importance of wetland management and discuss how GIS can help to enhance the application. (8)
- 13 a (i). Discuss the role of GIS in the telecommunication applications (8)
- (ii) Discuss the components of automated vehicle tracking system (8)
- OR
- b (i) Explain the role of GIS in distress calls (8)
- (ii) Explain the functionalities of Global Positioning System (8)
- 14 a (i). Discuss how GIS can improve the functionalities of Land Information System (8)
- (ii). Explain various GIS analysis used for network type data (8)
- OR
- b (i). State the importance of pipe line route alignment application and how GIS can be used to improve the route. (8)
- (ii). Explain the role of GIS in highway alignment applications (8)
- 15 a (i) Discuss the role of GIS on landslide potentiality assessment (8)
- (ii) How GIS can be used for the planning and management of health information system? Discuss. (8)
- OR
- b. (i). Explain the role of GIS in tsunami damage assessment (8)
- (ii). Discuss how GIS can be applied in modeling and predicting the spread of a disease (8)