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## Fifth Semester B.E. Degree Examination, Dec.2018/Jan.2019 Remote Sensing and GIS

Time: 3 hrs. Max. Marks: 80

## Note: Answer any FIVE full questions, choosing ONE full question from each module. Module-1 Define Remote Sensing. Explain the process of remote sensing with neat sketch. (08 Marks) Describe the Electromagnetic spectrum with a neat sketch. (08 Marks) a. Explain the energy interactions with earth surface features (soil, water and vegetation) with a 2 (06 Marks) b. Define Visual Interpretation. Enumerate different types of elements considered during visual interpretation process. (10 Marks) Module-2 Explain different types of IRS series satellites used in remote sensing. 3 (08 Marks) Explain different types of sensors used in remote sensing. b. (08 Marks) OR Explain different types of sensor resolutions in remote sensing. (08 Marks) Illustrate Radiometric and Geometric corrections in digital image processing. (08 Marks) Module-3 Define GIS. Describe the key components of GIS software. 5 a. (08 Marks) Describe different types of Data types used in GIS data models. (08 Marks) OR Explain different types of coordinate systems used in GIS. (08 Marks) 6 Describe different types of map projections used in GIS. (08 Marks) Module-4 Explain topological model of vector data overlay concept. (08 Marks) b. Explain the creation of shape file in vector data model. (08 Marks) Describe Raster data GIS models with sketch. (08 Marks) Explain advantages and disadvantages of Raster data. (08 Marks) Module-5 Explain the role of Remote sensing in monitor of land use changes. (08 Marks) Explain the application of Remote Sensing and GIS in water resources management. b. (08 Marks)

Explain the applications of RS and GIS for natural resources management system. (08 Marks) 10 Describe the application of RS and GIS in the field of Urban planning. (08 Marks)