Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov/Dec – 2018**

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| **Code :** | **17CE3065** | **Duration :** | **3hrs** |
| **Sub. Name :** | **REMOTE SENSING AND GIS** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain Electromagnetic Spectrum and articulate the Energy Source and its characteristics with neat sketch? | CO1 | 12 |
| b. | List the components of ideal remote sensing with a neat sketch. | CO1 | 8 |
| (OR) | | | | |
| 2. |  | Sketch in detail and discuss the Atmospheric interactions with Electro Magnetic Radiation. | CO1 | 20 |
| 3. | a. | Summarize the Image interpretation elements. | CO2 | 8 |
| b. | Deduce the different types of platform with examples? | CO2 | 12 |
| (OR) | | | | |
| 4. | a. | Differentiate active sensor and passive sensor and discuss about the Meteorological satellites designed for them. | CO3 | 10 |
| b. | Highlight the key elements for terrain evaluation. | CO3 | 10 |
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| 5. | a. | Elaborate image rectification and restoration. | CO2 | 10 |
| b. | Memorize the image enhancement techniques applied for satellite imageries. | CO6 | 10 |
| (OR) | | | | |
| 6. | a. | Annotate about the components of GIS and theoretical models of GIS operation. | CO1 | 12 |
| b. | Infer the different types of Map Projection. | CO5 | 8 |
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| 7. | a. | Device the classification of data input to a Geographic Information System. | CO3 | 12 |
| b. | Express the detailed application of Spatial and Non- spatial data for environmental applications. | CO4 | 8 |
| (OR) | | | | |
| 8. | a. | Distinguish the important functions of Data base management system? | CO5 | 10 |
| b. | Compare the traditional advantages and disadvantages of raster versus vector spatial data structures? | CO3 | 10 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | Outline the concept of Spectral Reflectance of Water bodies. | CO1 | 15 |
| b. | Categorize the techniques adopted for Land use and Land Cover change detection analysis and explain in detail for Watershed? | CO6 | 5 |