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



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

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| **Code :** | **18CE3061** | **Duration :** | **3hrs** |
| **Sub. Name :** | **REMOTE SENSING AND GEOGRAPHICAL INFORMATION SYSTEM** | **Max. marks :** | **100** |

**ANSWER ANY FIVE QUESTIONS (5 x 16 = 80 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Interpret the electromagnetic spectrum and the applications of various bands for specific studies. | CO1 | 10 |
| b. | Elaborate how the resolution gets affected based on the image acquisition platforms. | CO1 | 6 |
|  |  |  |  |  |
| 2. | a. | Recall the characteristics to be considered while selecting sensors/bands for the satellite images used in studies? | CO2 | 8 |
| b. | Enumerate the image processing techniques | CO2 | 8 |
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| 3. | a. | Illustrate the GIS system with the components involved in it? | CO1 | 8 |
|  | b. | Name the GIS processes with examples. | CO5 | 8 |
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| 4. | a. | Explain the reclassification methods and its applications. | CO3 | 10 |
|  | b. | Outline Query analysis with examples. | CO3 | 6 |
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| 5. |  | Apply the various techniques of GIS in the following areas:   1. Landuse/landcover mapping 2. Water quality modeling | CO4 | 16 |
|  |  |  |  |  |
| 6. | a. | Simplify the various features in vector representation with examples. | CO5 | 8 |
|  | b. | Summarize the sources of error? How they are tackled with? | CO4 | 8 |
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| 7. | a. | Appraise the terms: Kriging, inverse distance weighted | CO5 | 6 |
|  | b. | Demonstrate the procedure for the shortest route between two given locations. | CO5 | 10 |
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| **COMPULSORY QUESTION (1 x 20 = 20 Marks)** | | | | |
| 8. | a. | Rephrase the application of GIS in groundwater modelling. | CO6 | 10 |
|  | b. | Illustrate the application of RS and GIS for  i. Site selection for artificial recharge.  ii. Reservoir sedimentation. | CO6 | 10 |