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



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **14CE3044** | 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. | Describe the electromagnetic spectrum with neat sketch for remote sensing data. | CO1 | 10 |
| b. | Compose a brief note on the three forms of interaction that can take place when energy strikes upon the surface. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Explain the atmospheric interaction with electromagnetic radiation. | CO1 | 10 |
| b. | Explain energy interaction with earth surface materials. | CO1 | 10 |
|  |  |  |  |  |
| 3. | a. | Explain the platform and sensors available at present for acquisition of satellite imageries. | CO1 | 10 |
|  | b. | Explain sun synchronous and geo synchronous. | CO1 | 10 |
| (OR) | | | | |
| 4. | a. | Explain the characteristics of Landsat satellite and their sensors. | CO1 | 10 |
|  | b. | Describe the various types of resolutions and scale of satellite imageries. | CO1 | 10 |
|  |  |  |  |  |
| 5. | a. | Explain the digital image processing of satellite imageries for data interpretation. | CO1 | 10 |
|  | b. | Demonstrate the detailed procedure for visual interpretation of satellite image and explain interpretation key characteristics. | CO2 | 10 |
| (OR) | | | | |
| 6. | a. | Compose a short note on image enhancement. | CO2 | 10 |
|  | b. | Compile a brief note on image filtering. | CO2 | 10 |
|  |  |  |  |  |
| 7. | a. | Describe the fundamental projection classification of maps. | CO2 | 10 |
|  | b. | Compare the characteristics of spatial and non-spatial data. | CO2 | 10 |
| (OR) | | | | |  |  |  |  |
| 8. | a. | Describe the various features of vector overlay processing. | CO2 | 10 |
|  | b. | Discuss the overlay analysis in GIS. | CO2 | 10 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | Demonstrate the components of GIS. | CO3 | 10 |
|  | b. | Compile a short note on application of RS and GIS technique in Civil Engineering. | CO3 | 10 |