****

**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

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

**End Semester Examination – Nov/Dec - 2016**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Semester :** | **2016-17 ODD** |
| **Code :** | **12CE235** | **Duration :** | **3 hrs** |
| **Sub. Name :** | **Fundamentals of Remote Sensing and GIS** | **Max. marks :** | **100** |

|  |  |  |
| --- | --- | --- |
| **Q. No.** | **Questions** | **Marks** |
| **PART-A(10X1=10 MARKS)** | | |
| 1. | List the application of remote sensing in civil engineering. | (1) |
| 2. | What is EMR? | (1) |
| 3. | Extend the term SAR. | (1) |
| 4. | List the elements of resolutions. | (1) |
| 5. | What is digital image? | (1) |
| 6. | What is Image Enhancement? | (1) |
| 7. | What is thematic map? | (1) |
| 8. | Classify map projections. | (1) |
| 9. | List the types of data model used in GIS. | (1) |
| 10. | List the methods of data input in GIS. | (1) |

|  |  |  |
| --- | --- | --- |
| **PART B(5 X 3= 15 MARKS)** | | |
| 11 | Define the term atmospheric windows. | (3) |
| 12 | Demonstrate about spatial resolution with example. | (3) |
| 13 | What is Digital Image Processing? | (3) |
| 14 | What is Geographic Co-Ordinate System? | (3) |
| 15 | Explain the term digitization. | (3) |

|  |  |  |  |
| --- | --- | --- | --- |
| **PART C(5 X 15= 75 MARKS)** | | | |
| 16. | a. | Summaries the principles of Remote Sensing. | (15) |
| (OR) | | | |
| 17. | a. | Elaborate about EMR and its significance in RS. | (15) |
| 18. | a. | Demonstrate Indian remote sensing programme and its achievements. | (15) |
| (OR) | | | |
| 19. | a. | Describe the details and examples about platforms and sensors. | (15) |
| 20. | a. | Explain image processing techniques with its types and purposes. | (15) |
| (OR) | | | |
| 21. | a. | Discuss in detail about the image classification and analysis of a remotely sensed data. | (15) |
| 22. | a. | Compile and explain the different components of GIS. | (15) |
| (OR) | | | |
| 23. | a. | Explain DBMS, with emphasis on the differentiate types of DBMS used in GIS functioning. | (15) |
| 24. | a. | Illustrate the role of DEM in GIS and RS techniques. | (15) |
| (OR) | | | |
| 25. | a. | Discover the role of GIS and RS in agriculture and forest. | (15) |

ALL THE BEST