**CE2**

**Hall Ticket Number:**

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| **IV/IV B.Tech (Regular) DEGREE EXAMINATION** | | | |
| **January, 2024** | **Common to CB, CS, DS, EC, EE, EI, IT & ME** | | |
| **Seventh Semester** | **Remote Sensing & GIS** | | |
| **Time:** Three Hours | | **Maximum:** 70 Marks | |
| ***Answer question 1 compulsory.*** | | | **(14X1 = 14Marks)** |
| ***Answer one question from each unit.*** | | | **(4X14=56 Marks)** |
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|  |  |  | CO | BL | M |
| 1 | a) | What is the difference between the Satellite and Sensors? | CO1 | L1 | 1M |
|  | b) | Define Flight Planning? | CO1 | L1 | 1M |
|  | c) | Define Fiducial Marks? | CO1 | L1 | 1M |
|  | d) | Difference between active and passive remote sensing. | CO1 | L1 | 1M |
|  | e) | Discuss about Polar Orbiting Satellites | CO2 | L1 | 1M |
|  | f) | Define Swath? | CO2 | L1 | 1M |
|  | g) | What are the sensors carried by IRS-P4, and IRS-P4 is also called as\_\_\_\_\_\_\_\_\_\_\_\_\_? | CO2 | L1 | 1M |
|  | h) | Define Overlay? | CO3 | L1 | 1M |
|  | i) | Define IRNSS? | CO3 | L1 | 1M |
|  | j) | What are the components of GPS? | CO3 | L1 | 1M |
|  | k) | What is digitization? | CO3 | L1 | 1M |
|  | l) | Define NAVSTAR? | CO4 | L1 | 1M |
|  | m) | Differentiate between spatial and aspatial data | CO4 | L1 | 1M |
|  | n) | What are various components of GIS | CO4 | L1 | 1M |
| **Unit-I** | | | | | |
| 2 |  | Discuss about Photogrammetry and Flight Planning. Explain different types of Photographs. | CO1 | L2 | 14M |
| **(OR)** | | | | | |
| 3 | a) | How is scale defined, and what are the criteria for judging vertical exaggeration? | CO1 | L2 | 7M |
|  | b) | Describe the interactions of energy with the Earth's surface. | CO1 | L2 | 7M |
| **Unit-II** | | | | | |
| 4 |  | What does "Visual Image Interpretation" mean? Discuss the numerous aspects of a visual interpretation. | CO2 | L4 | 14M |
| **(OR)** | | | | | |
| 5 |  | Explain the features of the CARTOSAT and IRS series of satellites and sensors. | CO2 | L2 | 14M |
| **Unit-III** | | | | | |
| 6 |  | Define RASTER and VECTOR GIS and illustrate it using drawings. Evaluate its benefits and drawbacks in comparison. | CO3 | L2 | 14M |
| **(OR)** | | | | | |
| 7 |  | Define network analysis and briefly explain about overlay analysis | CO3 | L2 | 14M |
| **Unit-IV** | | | | | |
| 8 |  | How have GPS surveying methods evolved, and what are their uses and limitations in relation to Indian systems (IRNSS, GAGAN)? | CO4 | L2 | 14M |
| **(OR)** | | | | | |
| 9 |  | Define GPS. Outline the benefits and drawbacks of GPS | CO4 | L2 | 14M |

