# GUJARAT TECHNOLOGICAL UNIVERSITY
## BE - SEMESTER–V (NEW) EXAMINATION – WINTER 2021

**Subject Code:3150617**        **Date:15/12/2021**

**Subject Name:Remote Sensing and GIS**

**Time:02:30 PM TO 05:00 PM**       **Total Marks: 70**

**Instructions:**
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
    Simple and non-programmable scientific calculators are allowed

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|---|---|---|---|
| Q.1 | (a) | Define Remote Sensing. | 03 |
| | (b) | What are the dis advantages of Remote sensing? | 04 |
| | (c) | Explain concept of remote sensing. | 07 |
| Q.2 | (a) | What are the atmospheric window? | 03 |
| | (b) | Explain the concept of orbital calender. | 04 |
| | (C) | Write short note on:Active and Passive Remote Senser. | 07 |

**OR**

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|---|---|---|---|
| | (c ) | What do you understand by 'map'? Differentiate between topographic And themetic map. | 07 |
| Q.3 | (a) | What is resolution for sensor in Image? | 03 |
| | (b) | What are the seven elements in remote sensing? | 04 |
| | (c) | Explaindifferent resolution with their significance. | 07 |

**OR**

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|---|---|---|---|
| Q.3 | (a) | Explain plateform of remote sensing, | 03 |
| | (b) | Explain image interpretation strategies. | 04 |
| | (c) | Give brief idea about GSLV and PSLV | 07 |
| Q.4 | (a) | What do you understand by GIS? | 03 |
| | (b) | Explain various components of GIS? | 04 |
| | (c) | Explain 'vector data model' and 'raster data model' in GIS. | 07 |

**OR**

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|---|---|---|---|
| Q.4 | (a) | Define Meta data,Attribute data, spacial data. | 03 |
| | (b) | What are the advantages of GIS over map . | 04 |
| | (c) | Explain input data for GIS and GIS products. | 07 |
| Q.5 | (a) | Define data encoding. | 03 |
| | (b) | Eplain Georeferencing coordinate system. | 04 |

| | (c) | Explain Error in GIS data and managing the errors. | 07 |

**OR**

| Q.5 | (a) | Explain surface modelling in GIS. | 03 |
| | (b) | Describe features of important GIS software packages. | 04 |
| | (c) | Write about the function of DBMS. | 07 |

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