

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 disadvantages 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 calendar. | 04 |
| | (C) Write short note on:Active and Passive Remote Sensor. | 07 |
| OR | | |
| | (c) What do you understand by 'map'? Differentiate between topographic
And thematic map. | 07 |
| Q.3 | (a) What is resolution for sensor in Image? | 03 |
| | (b) What are the seven elements in remote sensing? | 04 |
| | (c) Explain different resolution with their significance. | 07 |
| OR | | |
| Q.3 | (a) Explain platform 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 | | |
| 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) Explain 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
