# Gandhi Institute of Engineering and Technology University, Odisha, Gunupur
## (GIET University)
B. Tech (Seventh Semester - Regular) Examinations, November – 2024
### 21BAGPC47003 – Remote Sensing & GIS Applications
(Agricultural Engineering)

Time: 3 hrs                      Maximum: 70 Marks

**Answer ALL questions**
**(The figures in the right-hand margin indicate marks)**

**PART – A**            **(2 x 5 = 10 Marks)**

Q.1. Answer *ALL* questions

| | | CO # | Blooms Level |
|---|---|---|---|
| a. | Define GIS. | CO1 | K1 |
| b. | Explain the term passive remote sensing. | CO2 | K1 |
| c. | Define vector data. | CO2 | K1 |
| d. | List the few satellites using for GIS. | CO3 | K1 |
| e. | What is the main purpose of GIS? | CO4 | K1 |

**PART – B**            **(15 x 4 = 60 Marks)**

Answer *All* the questions

| | | Marks | CO # | Blooms Level |
|---|---|---|---|---|
| 2. a. | Define remote sensing and history of remote sensing. | 8 | CO1 | K1 |
| b. | Explain different types of RS. | 7 | CO1 | K2 |
| | (OR) | | | |
| c. | Name and explain about Indian satellites that are using RS. | 8 | CO1 | K1 |
| d. | Explain ideal remote sensing. | 7 | CO1 | K1 |
| 3.a. | Explain various applications of RS. | 8 | CO2 | K3 |
| b. | Explain map overlay analysis. | 7 | CO2 | K2 |
| | (OR) | | | |
| c. | Discuss briefly about vector map overlay with example. | 8 | CO2 | K3 |
| d. | Explain the sources of errors in GIS. | 7 | CO2 | K3 |
| 4.a. | Explain capabilities and functionalities of GIS. | 15 | CO2 | K2 |
| | (OR) | | | |
| c. | Explain data quality and its gauging points. | 10 | CO3 | K3 |
| d. | Explain major applications area of GIS. | 5 | CO3 | K1 |
| 5.a. | What is meant by polygon data? | 8 | CO4 | K1 |
| b. | Explain briefly about any 3 GIS software's. | 7 | CO4 | K2 |
| | (OR) | | | |
| c. | Discuss how closely GIS is related to RS. | 8 | CO4 | K4 |
| d. | Explain the components of GIS. | 7 | CO4 | K2 |

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