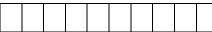
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Reg. No





GIET UNIVERSITY, GUNUPUR – 765022

B. Tech (Fifth Semester - Regular) Examinations, December - 2022

BOECV5050 - Remote Sensing and GIS

(Civil Engineering)

Time: 3 hRS Maximum: 70 Marks **Answer ALL Questions** The figures in the right hand margin indicate marks. **PART – A: (Multiple Choice Questions)** $(1 \times 10 = 10 \text{ Marks})$ [CO#] [PO#] Q.1. Answer ALL questions CO₁ PO1 The geographic element of vector data structures are (i) paint (iii) Area (iv) All of these CO₁ PO2 b. Small area in vector data represented by (i) Point data (ii) Areal data (iii) Line data (iv) Continuous data c. Line in polygon is a method of_____ overlay CO₁ PO2 (i) Vector (ii) Raster (iii) Both (iv) None CO₂ PO₁ d. In raster overlay a point is represented by (i) String of cells (ii) Group of cells (iii) Single cell (iv) All of these CO₂ PO1 e. Micro-station geographies is related to (i) GIS (ii) RS (iii) Both (iv) None CO2 PO1 f. Which is not a GIS software (i) Geometica (ii) Arc GIS (iv) ILWIS (iii) Adobe CO₃ PO2 g. How many types of RS is in use (i) 1 (ii) 2 (iii) 3 (iv) 4 CO4 h. RS data is collected PO2 (i) Without touching the object (ii) Without seeing the object (iii) By seeing the object (iv) By touching the object CO₄ PO₂ i. What is the source of energy for active sensors (ii) flash light (i) sun (iii) Own Electromagnetic waves (iv) All of these CO4 PO₁ j. A river in vector data is represented by (i) Point (ii) Line (iii) Polygon (iv) None

PART – B: (Short Answer Questions)		$(2 \times 10 = 20 \text{ Marks})$		
Q.2.	Answer ALL questions		[CO#]	[PO#]
a.	Name some RS satellites		CO1	PO1
b.	What are the types of RS		CO2	PO1
c.	What is aerial RS		CO1	PO2
d.	What is passive system of collecting data		CO2	PO1
e.	What are the components of GIS		CO3	PO2
f.	What are the data structures in GIS		CO3	PO2
g.	What is vector overlay analysis		CO3	PO2
h.	Name any 2 capabilities of GIS		CO4	PO1
i.	What are the types in geometica software		CO4	PO1
j.	What is raster data		CO4	PO1
PART – C: (Long Answer Questions)		$(10 \times 4 = 40 \text{ Marks})$		
Answe	er ALL questions	Marks	[CO#]	[PO#]
3. a.	What is meant by ideal remote sensing	5	CO1	PO1
b.	Explain the working procedure of RS	5	CO2	PO1
	(or)			
c.	What are the applications of RS in civil engg	10	CO2	PO1
4. a.	Discuss briefly about vector map overlay with example	5	CO3	PO2
b.	Explain the sources of errors in GIS	5	CO3	PO2
	(or)			
c.	Explain data quality and its gauging points	10	CO4	PO1
5. a.	Explain major applications area of GIS	5	CO4	PO1
b.	What is meant by polygon data	5	CO4	PO1
	(or)			
c.	Explain vector data and raster data with neat sketches	10	CO2	PO1
6. a.	Write short notes on	10	CO1	PO2
	i. Line and string data			
	ii. Pixels			
	iii. Grid cells			
	iv. Point data			
	(or)			
b.	Discuss how closely GIS is related to RS	5	CO3	PO2
c.	Explain the components of GIS	5	CO3	PO2