

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PLAN- SEMESTER– V EXAMINATION – WINTER 2018

Subject Code:1055505

Date:04/12/2018

Subject Name:Geo-Informatics for Planning

Time:10:30 AM TO 12:30 PM

Total Marks: 50

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks

Q1 Match the following extension of files (10 marks)

A	.shp	1	Projection file
B	.DXF	2	Shape file
C	.tif	3	Stores the index of the feature geometry
D	.prj	4	CAD File
E	.dbf	5	Raster Data
F	.gdb	6	Metadata for ArcGIS
G	.mxd	7	Geo-database
H	.xml	8	Map document
I	.shx	9	comma-separated values
J	.csv	10	Stores attribute information

Q2 Fill in the blanks (10 marks)

- a. _____ occurs when particles or large gas molecules present in the atmosphere interact with and cause the electromagnetic radiation to be redirected from its original path
- b. The detail discernible in an image is dependent on the _____ of the sensor and refers to the size of the smallest possible feature that can be detected.
- c. _____ are the smallest units of an image
- d. Images where only large features are visible are said to have _____
- e. In a _____ images, small objects can be detected.
- f. _____ is the science and art of obtaining information about an object, area or phenomenon through the analysis of data acquired by a device that is not in contact with the object, area or phenomenon under investigation.
- g. A _____ integrates hardware, software, and data to capture, store, analyze, manage, and display various forms of geographically referenced information.

- h. _____ is a combination of information, experience and insight that may benefit the individual or the organisation.
- i. _____ is unprocessed facts and figures without any added interpretation or analysis.
- j. Map _____ is a mathematical process of representing the earth's curved surface on a flat map.

Q3 Define the following Geoprocessing tools (5x2=10 marks)

- a. Union
- b. Intersection
- c. Symmetric Difference
- d. Erase
- e. Update
- f. Dissolve
- g. buffer

Q4 Explain any two in detail (any 2) (2x5=10 marks)

- a) Components of a GIS
- b) Attribute query and spatial query with example
- c) Raster and Vector Data

Q5 Explain the components of Aerial Photo-Interpretation in detail (10 marks)