CVM UNIVERSITY

M.Sc. (GEOINFORMATICS) Semester-I Examination-2021

Monday, 22nd February – 2021

2:00 PM to 4:00 PM

101400101: PRINCIPLES OF GEOGRAPHICAL INFORMATION SYSTEM

Total Marks: 60

Note: (1) Attempt all questions.

(2) Figures to the right indicate marks.

Q. 1 (a)   Answer the following multiple choice questions.   (08)

(1)   In the world of GIS, another term for the property of connectivity is
(a) proximity (b) neighborhood   (c) topology (d) boolean identity

(2)   Degree of correspondence between data and the real world can be known as
(a) Accuracy   (b) Lineage   (c) Precision   (d) Time

(3)   Which of the following is not a type of map projection?
(a) Conic   (b) Cylindrical   (c) Geographic   (d) Azimuthal

(4)   Distance north or south of equator is also known as the
(a) perpendicular   (b) latitude   (c) longitude   (d) horizon

(5)   Which of the following is the largest scale map?
(a) 1 : 8,000   (b) 1 : 24,000 (c) 1 : 50,000   (d) 1 : 63,360

(6)   Which type of data set is not used in GIS related software's?
(a) Vertex   (b) Point   (c) Poly line   (d) polygon

(7)   What is not key of spatial data quality?
(a) Temporal accuracy   (b) Positional accuracy
(c) Geodatabases   (d) Logical consistency

(8)   Which of the following is not an example of spatial data?
(a) Times of particular events
(b) Polygons showing the area occupied by a particular land use or variable
(c) Points showing location of discrete objects
(d) Lines showing the route of linear objects

(b)   Answer the following (True or False)   (08)

(1)   Data can be shared in the process of GIS.

(2)   TINs are sets of lines of equal value across a surface.

(3)   Features in GIS are stored and presented as pairs of coordinates.

(4)   Clipping query finds all objects in the map that intersect region R.

(5)   The original sources for the data and the processing steps it has undergone is called as Lineage.

(6)   Map is a two-dimensional representation of a particular place.

(7)   Small-scale maps cover small areas, but can include a higher level of detail.

(8)   RMSE stands for Random measure square error.

Q.2		**Attempt any six of the following.**	(12)
	(1)	Differentiate cartography map and GIS map.	
	(2)	Explain in detail Geographical Coordinate System.	
	(3)	What is required to check how good is your data? List out components of the same.	
	(4)	Write a note on overlay operations for vector data.	
	(5)	Explain Map Scale in detail.	
	(6)	List down basic cartographic standards.	
	(7)	List down applications of GIS.	
	(8)	Define Mobile GIS, Web GIS	

Q. 3	What is Projection? Write a detail note on Projection.	(08)

OR

Q. 3	(a) List out topological rules for coverage also explain various types of topology.	(08)
	(b) Write a note on Datum.	

Q. 4	List out spatial analysis operations and explain any four with examples.	(08)

OR

Q. 4	Write a note on data Classification.	(08)

Q. 5	What is Map? Discuss factors affecting Map usability. Explain Map elements in detail.	(08)

OR

Q. 5	List down GIS packages. Explain Open Source Desktop GIS packages in detail.	(08)

Q. 6	Explain how GIS is helpful in Disaster Management and Utility Management.	(08)

OR

Q. 6	Write a note on Technological Trends in GIS.	(08)