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Question Bank

Class: T.Y.B. Sc.IT

Semester: VI

Subject: Introduction to GIS

1. GIS stands for_____
 - a. General Information System
 - b. Geographic Information System
 - c. Geography Information System
 - d. Geographic Information Sharing

2. What do u mean by spatial data?
 - a. Complex values
 - b. Decimal values
 - c. Positional values
 - d. Graphic values

3. Which type of Field use in GIS?
 - a. Continuous only
 - b. Discrete only
 - c. Numeric only
 - d. Continuous or Discrete

4. Example of Discrete field is.
 - a. Elevation
 - b. Road
 - c. Air temperature
 - d. Soil Salinity

5. 'Metadata' is referred as_____.
 - a. It is oceanic data
 - b. It is meteorological data
 - c. It is data about data
 - d. It is contour data

6. Spatial data describe as _____
 - a. characteristics
 - b. locations
 - c. complex value
 - d. simplex value

7. 'Attribute data' describe
 - a. locations
 - b. Decimal values
 - c. Characteristic
 - d. Graphic values

8. What do u mean by 'Temporal accuracy'?
 - a. Data is up to date
 - b. History of data
 - c. Logically structured data
 - d. Horizontal data

9. Which operations data exploration doesn't include?
 - a. Attribute data query
 - b. Spatial data query
 - c. Geographical visualization
 - d. Overlays

10. Which of the following statements is true about GIS SCIENCE?
 - a. Georeferencing
 - b. Data management, including storage and maintenance
 - c. Geometric Transformation
 - d. Geographic Information Analysis

11. Among the following, which do not come under the components of GIS?
 - a. Assembler
 - b. Computer
 - c. software
 - d. People

12. Which is the following term related to GIS?

- a. Ramanujan space
- b. Euclidean space
- c. Pythagorean space
- d. Algebraic space

13. The following is a type of data in GIS _____

- a. Nominal data
- b. Spatial data
- c. Linear data
- d. Attribute data

14. Interval data values are _____

- a. Qualitative
- b. Quantitative
- c. Ratio
- d. Interval

15. Which kind of data use in GIS?

- a. Spatial data
- b. Binary data
- c. Numeric data
- d. Complex data

16. Which type of data include in completeness?

- a. The data which is logically structured
- b. The data set which represents all related features of reality
- c. History of the data including sources
- d. Both horizontal and vertical data

17. Which is a type of GIS modelling

- a. Discrete model
- b. Regression model
- c. Indexing model
- d. Tertiary model

18. What is a map?

- a. It is a miniature representation of some part of the real world
- b. It is a Complex value
- c. It is a topology.
- d. It is a Properties of spatial features that remain invariant under topological mappings

19. Which are the following are type of regular tessellation types?

- a. Circle cell
- b. Pentagonal cell
- c. Triangular cell
- d. Rectangular cell

20. Point is _____

- a. 0-D
- b. 1-D
- c. 2-D
- d. 3-D

21. Line is _____

- a. 0-D
- b. 1-D
- c. 2-D
- d. 3-D

22. Polygon is _____

- a. 0-D
- b. 1-D
- c. 2-D
- d. 3-D

23. In GIS we can always compute the distance between two points according to a given distance function is called as _____

- a. Metric space
- b. Topological space

- c. Boundaries
- d. Interior

24. In which geometric primitives' vector features can be decomposed?

- a. Pointers
- b. Linear
- c. Polygons
- d. Polymers

25. Which of the following formats can be used for GIS output?

- a. XML
- b. GIF
- c. HTML
- d. PDF

26. Characteristics of Database_____.

- a. It allows concurrent use
- b. It doesn't support data integrity
- c. It doesn't allow data management
- d. It cannot be shared.

27. Which of the following statement is false?

- a. Nominal data is qualitative data
- b. Interval data is quantitative data.
- c. Ratio data is quantitative data.
- d. Categorical data is quantitative data

28. Interpolation is possible by

- a. Spatial Autocorrelation
- b. Thematic auto-correction
- c. Spatial auto-correction
- d. Thematic Autocorrelation

29. The size of the area that a single raster cell represents is called as_____.

- a. Vector data
- b. Raster's resolution
- c. Raster data
- d. Vector's resolution

30. Which following attributes are used by vector data model to represent simple Spatial features

- a. Pointers
- b. Linear
- c. Area
- d. Sequential

31. Which geometric object is not used by vector data model to represent spatial features?

- a. Point
- b. Line
- c. Area
- d. Cell

32. What are the types of values include in Nominal data?

- a. Values that provide a name or identifier
- b. Values that can be put in some natural sequence
- c. Values that are quantitative
- d. Value that are in interval

33. Which is the following used by a raster data model uses to represent real-world objects.

- a. Line
- b. Polygon
- c. Pixels
- d. Point

34. Which following feature is not represented by Raster datasets?

- a. surface temperatures
- b. digital elevation
- c. Road
- d. Imagery

35. Which of the following relationship is incorrect?

- a. Point: (0-Simplex)
- b. Line segment: (1-simplex)

- c. Triangle: (3-simplex)
- d. Tetrahedron: (3-simplex)

36. Full form of DEM is_____

- a. Developer Elevation Model
- b. Digital Elevation Model
- c. Design Electric Machine
- d. Digital Electronic Model

37. Which of the following doesn't belong to component of GIS?

- a. Data
- b. Snip tool
- c. People
- d. Software

38. Collection of similar kind of continuous or discrete fields or geographic object is called as

_____.

- e. irregular tessellation
- f. Spatial data layer
- g. join
- h. geographic class

39. What is modelling?

- a. It is the process of producing an abstraction of the real world
- b. It is the process of producing miniature of the real world
- c. It is the process of producing a model of the real world
- d. It is the process of creating prototype of the real world

40. What is relation instance?

- a. One relation instance for each relation.
- b. Domain of each attribute
- c. The set of tuples in a relation at some point in time
- d. geographic class

41. Boundaries are used to determine_____

- a. Smoothness
- b. Crisp edges
- c. Shape
- d. Fuzzy edges

42. In a regular tessellation _____

- a. Cells are of same shape and same size
- b. Cells are of same shape and different size
- c. Cells are of different shape and same size
- d. Cells are of different shape and different size

43. Which is not an example of line features.

- a. Roads
- b. Contour lines
- c. Benchmarks
- d. Streams

44. Examples of geographic fields are _____

- a. air temperature
- b. Light
- c. Sound
- d. Frequency

45. What is a single database instance?

- a. One relation instance for each relation.
- b. Domain of each attribute
- c. The set of tuples in a relation at some point in time
- d. geographic class

46. Which is not an example of area features

- a. Timber stands
- b. land parcels
- c. Streams
- d. water bodies

47. What is a topological space?

- a. We can always compute the distance between two points according to a given distance function
- b. Properties of spatial features that remain invariant under topological mappings
- c. where for every point in the space we can find a neighbourhood around it that fully belongs to that space as well.
- d. where for every point we can determine its three-dimensional coordinates as a triple (x, y, z) of real numbers

48. Vector data analysis include

- a. Buffering
- b. Spatial Features
- c. Legends

d. Proximities Information

49. What is a topological mapping?

- a. Properties of spatial features that remain invariant under topological mappings
- b. It is the process of producing an abstraction of the real world
- c. In which relationships are invariant under a continuous transformation
- d. Graphic values

50. In which of the space where for every point we can determine its three-dimensional coordinates as a triple (x, y, z) of real numbers.

- a. Metric space
- b. Euclidean space
- c. Boundary
- d. Interior

PGIS-UNIT II: Data Management and Processing Systems

1. GIS uses the data from which of the above sources?
 - a) Non- spatial information system
 - b) Spatial information system
 - c) Global information system
 - d) Position information system

2. The _____ that presents the data to the user.
 - a) Client Tier
 - b) Middleware Tier
 - c) Database Tier
 - d) Presentation Tier

3. Identify the file format used to represent Maps in GIS?
 - a) .GIF
 - b) .TIFF
 - c) .JPEG
 - d) .PNG

4. What does .shp stands for?
 - a) shape files
 - b) size files
 - c)structure files
 - d)Single files

5. Spatial databases are also referred as_____
 - a) Geodatabases
 - b) Mono databases
 - c) Concurrent databases
 - d) Temporal Databases

6. What is the required at very place for performing Spatial Analysis.
 - a) Appropriate software
 - b) Maps
 - c) CRS
 - d) User Competencies

7. A is a set of uniform space out cells with associated values. The connected values represent call values, not point values.
- a) Vector
 - b) Raster
 - c) Segment
 - d) Polygon
8. Which of the following statements are correct?
- a) Natural phenomena are usually fields
 - b) Man-made phenomena are not objects
 - c) Natural phenomena are usually properties of dataset
 - d) Natural phenomena are usually data of type spatial
9. _____ is a fundamental component of a GIS that allows for an in-depth study of the topological and geometric properties of a dataset or datasets.
- a) Vector Analysis
 - b) Raster Analysis
 - c) Spatial Analysis
 - d) Non-Spatial Analysis
10. _____ are common vector analysis tools used to address questions of proximity in a GIS and can be used on points, lines, or polygons.
- a) TIN
 - b) Overlays
 - c) Temporal
 - d) Buffering
11. Grass GIS was invented in which year_____.
- a) 1986
 - b) 1990
 - c) 1982
 - d) 1984

Answer: c) 1982

12. Which of the following are GIS packages.
- a) ILWIS
 - b) SAGAS
 - c) ARCCGIS

d) QSGIS

13. A GIS package cannot be developed if _____ is absent.

- a) Data Representation
- b) Data Management
- c) Data Capture and Preparation
- d) Data Outsourcing

14. SDI stands for _____.

- a) Spatial Data Interface
- b) Spatial Data Infrastructure
- c) Spatial Data Interaction
- d) Spatial Data Interconnection

15. TIN stands for_____.

- a) Traffic Internet Network
- b) Triangulated Irregular Network
- c) Temporal Interconnected Network
- d) Temperature Interface Node

16. Which of the following is false?

- a) Tessellations partition the study space into cells
- b) A raster is an irregular tessellation with square cells.
- c) Quad Tree represents cells of unequal size.
- d) Tessellations assign a value to each cell

17. Which of the following belong to the eight spatial relationships?

- a) is Disjoint
- b) Inside, covered by
- c) Is Contain
- d) Is non-overlapping

18. What is the first step of Spatial Data Handling?

- a) Spatial Data capture and preparation
- b) Spatial Data Storage
- c) Spatial Data Maintenance

d) Spatial Data Presentation

19. An _____ is a coordinated series of agreements on technology standards, institutional arrangements, and policies that enable the discovery and use of geospatial information by users and for purposes other than those it was created for."
- a) FDI
 - b) SDI
 - c) MDI
 - d) SID
20. What does SDSS stands for_____.
- a) Spatial Decision Support Systems.
 - b) Spatial Data Support Systems.
 - c) Spatial Data Support Schemas.
 - d) Spatial Decision Semi Systems.
21. In _____ step major concern has been taken because the quality level of different datasets has to be consistent and errors should not be introduced while data presentation.
- a) Data Presentation.
 - b) Data Acquisition.
 - c) Data Verification.
 - d) Data Separation.
22. In a TIN model, the world is represented as a network of:
- a) Triangles
 - b) Circles
 - c) Squares
 - d) Hexagons
23. GIS aids users to make
- a) complex analyses only
 - b) display maps only
 - c) complex analyses and display maps
 - d) Display geographic locations
24. Cartographers requires GIS to
- a) store geographic information
 - b) use geographic information

- c) view geographic information
- d) store, use and view geographic information

25. DBMS stands for_____.

- a) Database Management System
- b) Database Monitoring System
- c) Database Managing System
- d) Database Manufacturing Systems

26. Standards for Geo-databases are_____.

- a) OGC
- b) UNESCO
- c) ISO
- d) ISI

27. Which of the following is true about DBMS?

- a) A DBMS provide user defined declarations
- b) A DBMS support the use of a reference models.
- c) A DBMS includes 'data backup' and 'recovery' functions to ensure data availability at all times
- d) A DBMS is platform independent language.

28. A 'data model' is a language that allows the definition of_____.

- a) The 'structures' that will be not used to store the base data
- b) The 'integrity constraints' that the stored data has to obey at all moments in time
- c) Different data types with attribute values.
- d) Data Redundancy can be eliminated

29. Which of the following statements is true?

- a) A table or relation is itself not a collection of 'tuples' (or records)
- b) Each table is a collection of tuples that are similarly reshaped
- c) An 'attribute' is a named field of a tuple, with which each tuple associates a value, the tuple's 'attribute value'
- d) Table cannot have multiple columns.

30. Which of the following statements is true in connection with a 'tuple'?
- a) The set of tuples in a relation at some point in time is called the 'relational instance' at that moment
 - b) This tuple set is always infinite
 - c) It is not possible to count how many tuples are there.
 - d) Tuples are not referred as rows.
31. In the _____ data model, a database is viewed as a collection of relations, commonly also known as tables. A table or relation is itself a collection of tuples (or records).
- a) Hierarchical
 - b) Relational
 - c) Network
 - d) Object-Oriented
32. _____ is a database that is optimized for storing and querying data that represents objects defined in a geometric space.
- a) Spatial
 - b) Relational
 - c) Temporal
 - d) Object-Oriented
33. _____ is the data or information that identifies the geographic location of features and boundaries on Earth, such as natural or constructed features, oceans.
- a) Geospatial
 - b) Geodatabase
 - c) Georeferencing
 - d) Geotagging

34. _____ works like a filter, it allows records that meet the selection condition to pass, and disallows records that do not meet the condition.
- a) Tuple Selection.
 - b) Tuple Projection.
 - c) Attribute Projection.
 - d) Attribute Separation.
35. What is full form of FDGC?
- a) Federal Geographical Data Committee
 - b) Federal Geographical Data Constitution
 - c) Federal Geographic Data Committee
 - d) Federal Geography Data Committee
36. The fundamental principle which refers to the fact that locations that are closer together are more likely to have similar values than locations that are far apart, is commonly referred to as_____.
- a) Tobler's first law of Geography
 - b) Kepler's first law of Geography
 - c) Anthony's first law of Geography
 - d) Thompson's first law of Geography
37. _____ that provide operations that work on each group of cells of identical values.
- a) Local
 - b) Zonal
 - c) Focal
 - d) Global
38. The _____ operation combines adjacent polygon features in a single feature dataset based on a single predetermined attribute.
- a) Dissolve
 - b) Append
 - c) Select
 - d) Merge
39. _____ map represents spatial patterns.
- a) Schematic Map
 - b) Reference Map
 - c) Thematic Map
 - d) Dot Map

40. _____ generally, refers to the spatial arrangement among geographic objects and may be managed within a geographic information system through the application of rules such as "Adjacent to" or "May not have gaps".
- a) Topography
 - b) Topology
 - c) Proximity
 - d) Connectedness
41. The boundaries and interiors do not intersect is called _____.
- a) Touches
 - b) Equals
 - c) Disjoint
 - d) Contains
42. The boundaries intersect but the interiors do not intersect is called _____.
- a) Touches
 - b) Equals
 - c) Disjoint
 - d) Contains
43. The two objects have the same boundary and interior is called _____.
- a) Touches
 - b) Equals
 - c) Disjoint
 - d) Contains
44. The boundary and interior of one object is completely contained in the interior or the boundary of the other object, their interiors intersect, and the boundary or the interior of one object and the boundary of the other object intersect is called _____.
- a) Touches
 - b) Equals
 - c) Covers
 - d) Contains
45. The interior and boundary of one object is completely contained in the interior of the other object is called _____.
- a) Touches
 - b) Equals

- c) Disjoint
- d) Contains

46. Which form of representation does a paper map use?

- a) analogue
- b) digital
- c) binary
- d) decimal

47. The _____ operation creates an output layer based on a user-defined query that selects particular features from the input layer. The output layer contains only those features that are selected during the query.

- a) Dissolve
- b) Append
- c) Select
- d) Merge

48. The _____ operation creates an output polygon layer by combining the spatial extent of two or more layers.

- a) Dissolve
- b) Append
- c) Select
- d) Merge

49. The _____ operation combines features within a point, line, or polygon layer into a single feature with identical attribute information.

- a) Dissolve
- b) Append
- c) Select
- d) Merge

50. _____ that works with neighbouring cell values.

- a) Local
- b) Zonal

- c) Focal
- d) Global

UNIT III: Spatial Referencing & Positioning

1. Which type of map projection that retains certain accurate directions?
 - a) Central lines
 - b) Azimuthal projection
 - c) Conformal projection
 - d) Conic projection

2. Which type of map projection that preserves local shapes?
 - a) Central lines
 - b) Azimuthal projection
 - c) Conformal projection
 - d) Conic projection

3. Which type of map projection that uses a cone as the projection surface?
 - a) Central lines
 - b) Azimuthal projection
 - c) Conformal projection
 - d) Conic projection

4. Which type of map projection that uses a cylinder as the projection surface?
 - a) Central lines

- b) Cylindrical projection
- c) Conformal projection
- d) Conic projection

5. Datum is used for?

- a) The basis for calculating the geographic coordinates of a location
- b) Calculating mathematical values.
- c) To calculate error in processing
- d) Calculation of geometric objects

6. Following which measurement system for longitude and latitude values such as 42.5° ?

- a) Degree Decimal system
- b) Date time system.
- c) Decimal degrees (DD) system
- d) Degrees-minutes-seconds (DAIS) system

7. Following which is a measuring system for longitude and latitude values such as $42^\circ 30' 00''$?

- a) Degree Decimal system
- b) Date time system.
- c) Decimal degrees (DD) system
- d) Degrees-minutes-seconds (DAIS) system

8. Following which is a model that approximates the Earth. Also called spheroid?

- a) Ellipsoid
- b) Equivalent

- c) Projection
- d) Circular

9. Which type of map projection that maintains consistency of scale for certain distances?

- a) Central lines
- b) Azimuthal projection
- c) Conformal projection
- d) Equidistant projection

10. What is type of map projection that represents areas in correct relative size?

- a) Central lines
- b) Equivalent projection
- c) Conformal projection
- d) Equidistant projection

11. What is a value applied to the origin of a coordinate system to change the x-coordinate readings?

- a) Central lines
- b) False northing
- c) False easting
- d) Equidistant projection

12. What is a value applied to the origin of a coordinate system to change the y-coordinate readings?

- a) Central lines

- b) False northing
- c) False easting
- d) Equidistant projection

13. Which of the following geographic coordinates that are based on a spheroid?

- a) Central lines
- b) Geodetic coordinates
- c) Ellipsoid
- d) Polar coordinates

14. A location reference system for spatial features on the Earth's surface?

- a) Central lines
- b) Geodetic coordinates
- c) Ellipsoid
- d) Polar coordinates

15. A common map projection, which is the basis for the SPC system for many states?

- a) Central lines
- b) Geodetic coordinates
- c) Lambert conformal conic projection
- d) Polar coordinates

16. What we called the angle north or south of the equatorial plane?

- a) Latitude
- b) Geodetic coordinates

c) Lambert conformal conic projection

d) Longitude

17. What we called the angle north or south of the equatorial plane?

a) Latitude

b) Geodetic coordinates

c) Lambert conformal conic projection

d) Longitude

18. A systematic arrangement of parallels and meridians on a plane surface is nothing but?

a) Central lines

b) Map projection

c) Conformal projection

d) Equidistant projection

19. _____ Lines of longitude that measure locations in the E-W direction on the geographic coordinate system.

a) Parallels

b) Map projection

c) Meridians

d) Equidistant projection

20. _____ Lines of latitude that measure locations in the N-S direction on the geographic coordinate system.

- a) Parallels
- b) Map projection
- c) Equidistant projection
- d) Meridians

21. Following which is same as the scale of the reference globe?

- a) Principal scale
- b) Latitude scale
- c) Globe scale
- d) Geodetic Scale

22. A plane coordinate system that is based on a map projection.

- a) Principal coordinates
- b) Geodetic coordinates
- c) Globe coordinates
- d) Projected coordinate system

23. The process of transforming the spatial relationship of features on the Earth's surface to a flat map is called?

- a) Projection
- b) Latitude
- c) Longitude
- d) Azimuthal

24. A land partitioning system used in the United States is _____.

- a) Public Land Survey System (PLSS)
- b) NAD83
- c) NAD27
- d) Datum

25. _____ a reduced model of the Earth, from which map projections are made. Also called a nominal or generating globe.

- a) Reference globe
- b) Earth globe
- c) Geodetic globe
- d) Parallel globe

26. Projection of spatial data from one projected coordinate system to another is called?

- a) Parallel Projection
- b) Azimuthal Projection
- c) Geodetic Projection
- d) Reprojection

27. What is ratio of the local scale to the scale of the reference globe?

- a) Scale factor
- b) Standard factor
- c) Projection factor
- d) Tangent

28. What model that approximates the Earth? Also called ellipsoid.

- a) Geodetic
- b) Spheroid
- c) Projection
- d) Meridian

29. Which line of tangency between the projection surface and the reference globe?

- a) Geodetic
- b) Spheroid
- c) Standard line
- d) Meridian

30. A standard line that follows a parallel is called _____.

- a) Standard meridian
- b) Spheroid
- c) Standard line
- d) Meridian

31. _____ coordinate system that divides the Earth's surface between 84° N and 80° S into 60 zones, with each zone further divided into the northern hemisphere and the southern hemisphere.

- a) UTM (Universal Transverse Mercator)
- b) NAD27
- c) NAD83
- d) TIN

32. Which branch of geometry that provides the methods for creating geospatial data of points, lines, and polygons from survey data?

- a) Z-plane
- b) Data conversion
- c) Coordinate to plane
- d) Coordinate geometry (COGO)

33. What do you mean by Conversion of geospatial data from one format to another?

- a) Z-plane
- b) Data conversion
- c) Coordinate to plane
- d) Coordinate geometry (COGO)

34. What method that uses data from a base station to correct noise errors in GPS data?

- a) Analog correction
- b) Digital correction
- c) Differential correction
- d) Error correction

35. Which of the following is suitable for Digital representations of point, line, and area features from USGS quadrangle maps?

- a) Digitizing
- b) Direct translation
- c) Federal Geographic Data Committee (FGDC)
- d) Digital line graphs (DLGs)

36. The process of converting data from analog to digital format is called_____

- a) Digitizing
- b) Direct translation
- c) Decoding
- d) Encoding

37. A table with a built-in electronic mesh that can sense the position of the cursor and can transmit its x-, y-coordinates to the connected computer is?

- a) Analog table
- b) Digitizing table
- c) Matrix table
- d) Null table

38. _____ Use of a translator or algorithm in a GIS package to directly convert geospatial data from one format to another.

- a) SQL translation
- b) DBMS
- c) Direct translation
- d) Transformation

39. Which option more suitable for Longitude, latitude, and elevation data for point locations made available through a navigational satellite system and a receiver.

- a) GIS Data
- b) Analog Data

- c) Digital Data
- d) Global positioning system (GPS) data

40. Manual digitizing on the computer monitor by using a data source such as a DOQ as the background is nothing but_____.

- a) On-screen digitizing
- b) Scanning
- c) Digitizing
- d) Encoding

41. _____ is digitizing method that converts an analog map into a scanned file in raster format, which can then be converted back to vector format through tracing.

- a) On-screen digitizing
- b) Scanning
- c) Digitizing
- d) Encoding

42. Choose most suitable for Public data formats for transferring geospatial data such as DLGs and DEMs from the USGS.

- a) SSURGO (Soil Survey Geographic)
- b) STATSGO (State Soil Geographic)
- c) Spatial Data Transfer Standard (SDTS)
- d) Vector product format (VPF)

43. A database prepared by the U.S. Census Bureau that contains legal and statistical area boundaries, which can be linked to the census data.

- a) SSURGO (Soil Survey Geographic)
- b) STATSGO (State Soil Geographic)
- c) Spatial Data Transfer Standard (SDTS)
- d) TIGER (Topologically Integrated Geographic Encoding and Referencing)

44. what standard format, structure, and organization for large geographic databases that are based on a geo-relational data model?

- a) Vector product format (VPF)
- b) Spatial Data Format
- c) Spatial Data Transfer Standard (SDTS)
- d) Raster data Format

45. The process of converting raster lines into vector lines through tracing is called as _____

- a) Rasterization
- b) Vectorization
- c) Sampling
- d) Digitizing

46. In GIS application require the possibility of representing the same geographic phenomenon in different way is called as _____.

- a) GIS system
- b) Multi-Representation systems
- c) Transformation systems
- d) Representation systems

47. A process that is often applied to remove redundant or excess vertices from line representation, as obtain from digitizing is _____.

- a) Element editing
- b) Representation systems
- c) Coordinate thinning
- d) Interpolation

48. If the desired output was a polygon layer, we could construct _____ around the point of measurement.

- a) Element editing
- b) Nearest Neighbour interpolation
- c) Coordinate thinning
- d) Thiessen polygons

49. Statistical techniques that can be used to determine values for coefficients that best fit with the measurements.

- a) Regression
- b) Edge effect
- c) Nearest Neighbour interpolation
- d) Thiessen polygons

50. The first step in kriging procedure is to compare successive pairs of point measurements to generate a _____.

- a) Regression
- b) Semi-variogram
- c) Pre interpolation checks
- d) Thiessen polygons

UNIT IV: Spatial Data Analysis

1. In Spatial data Analysis Classification allows the assignment of features to a class on the basis of _____
 - a. Attribute Values
 - b. Field values
 - c. Cell values
 - d. Function values

2. _____function allows the selective search of data.
 - a) Classification
 - b) Generalization
 - c) Retrieval
 - d) Measurement

3. To allow the combination of two or more spatial data layers _____function used
 - a) Mathematical
 - b) Generalization
 - c) Logical
 - d) Overlay

4. _____ is a geometric property of polyline
 - a) Point
 - b) Line
 - c) Length

d) Polygon

5. The _____ data sets are point, Line, polygon
- a) Advanced
 - b) Modern
 - c) Primitives
 - d) Simplified
6. _____ is associated with polygon features
- a) Point size
 - b) Area size
 - c) Line size
 - d) Arcs
7. _____ function forecast unknown values using the known values at nearby locations
- a) Interpolation
 - b) Import
 - c) Neighborhood
 - d) Intersection
8. Determination of slope angle, slope aspect and slope length these are the computations can be performed in the _____ function
- a) Buffer zone
 - b) Topographic
 - c) Cartographic
 - d) Topological
9. The plane tangent to the topography in that location is called as _____
- a) Slope
 - b) Straight line
 - c) Average value
 - d) Tangent
10. Contiguity Function evaluate characteristics of set of connected _____ units
- a) Data
 - b) Spatial
 - c) Vector
 - d) Raster

11. _____ Measurement on spatial features contains counting, distance and area size computations.
- Geographic
 - Graphical
 - Geometric
 - Georeferencing
12. The _____ property of vector feature is always stored in GIS
- Location
 - Point
 - Polygon
 - Topology
13. Geometric measurement used in the GIS is the _____ computation
- Maximal bounding box
 - Minimal bounding box
 - Average bounding box
 - Sum bounding box
14. The interactively defined objects are called as _____
- Deletion objects
 - Interacting objects
 - Selection objects
 - Methodology objects
15. Spatial data is stored in _____ is associated with its attributes data by a foreign key link
- Geodatabase
 - System database
 - Spatial database
 - Applied database
16. The land use areas of which the size is less than 400000 i.e $\text{Area} < 400000$ is under _____ condition
- Mathematical
 - Logical
 - Attribute
 - Composite

17. Combination of composite condition and logical condition is known as _____ condition
- a) Electronic
 - b) Atomic
 - c) Arithmetic
 - d) Nuclear
18. Spatial selection using intersect relationship between _____ and _____
- a) Points and lines
 - b) Points and polygons
 - c) Lines and polygons
 - d) Polygons and Polygons
19. Adjacency means _____ relationship
- a) Meet
 - b) Delete
 - c) Divide
 - d) Logical
20. Relationship between lines and polygons is found out by using Spatial Selection of _____
- a) Union
 - b) Intersection
 - c) Complement
 - d) XOR
21. An overlay method used to determine which points lie within the boundary of polygon is called as _____
- a) Point – in – polygon
 - b) Line - in – polygon
 - c) Polygon – in polygon
 - d) Point - in – line
22. _____ is a technique of purpose fully removing details from an input data set
- a) Modification
 - b) Elimination

- c) Classification
- d) Reduction

23. The input data set have itself been the result of classification is called as _____

- a) Resubmission
- b) Reclassification
- c) Retrieval
- d) Retransmission

24. A _____ value is aspatial value that means that no applicable value is present

- a) NULL
- b) ONE
- c) TWO
- d) THREE

25. Equal frequency technique is also known as _____

- a) Equal classification
- b) Average classification
- c) Quantile classification
- d) Quantile Distribution

26. Spatial overlay operator is also called as _____

- a) Unary operator
- b) Binary operator
- c) Tertiary operator
- d) Logical operator

27. The standard overlay operator for TWO layers of polygon is the _____ operator

- a) Polygon intersection
- b) Polygon distortion
- c) Polygon Combination
- d) Polygon Scaling

28. GLONASS stands for _____

- a) Global Navigation Satellite System
- b) Geographic Navigation Satellite System
- c) Global Navigation Spatial System
- d) Global Navigation Satellite Sources

29. GIS that supports raster processing by using language to express operations on raster's are known as _____

- a) Map data
- b) Map algebra
- c) Mapping
- d) Analysis

30. The raster name and constants that are used in expression are called _____

- a) Operands
- b) Operators
- c) Function
- d) Numerical value

31. _____ returns the remainder of division

- a) Integer division
- b) Mathematical division
- c) Modulo division
- d) Relational division

32. Addition, subtraction, multiplication and division are known as _____

- a) Logical operator
- b) Logical operands
- c) Arithmetic operands
- d) Arithmetic operators

33. To find out the characteristics of vicinity is called as _____

- a) Neighborhood
- b) Adjacency
- c) Connectivity
- d) Buffering

34. Use of geometric distance to define neighborhoods of one or more target location is called _____

- a) Distance Computations

- b) Proximity Computations
- c) Remote Computations
- d) Absent Computations

35. _____ partitions make use of geometric distance of determining neighborhoods

- a) Thiessen polygon
- b) Thiessen point
- c) Thiessen neighborhood
- d) Thiessen operator

36. Which of the following are considered to be main problems facing overlay operations in GIS?

- a) Selecting threshold criteria
- b) Processing overheads
- c) The modifiable area unit problem
- d) Selecting appropriate gateway

37. The target location contains source material that spreads over time is referred as _____.

- a) Diffusion
- b) Opposite
- c) Conclusion
- d) Summary

38. Diffusion computation involves one or more target locations which is referred as _____.

- a) Destination location
- b) Source location
- c) Source way
- d) Destination Way

39. Flow Computation used in _____.

- a) Vector
- b) Raster
- c) Matrix
- d) Discrete

40. _____ is used the calculation of the slop steepness
- Tangent calculation
 - Slope analysis
 - Slope angle calculation
 - Axis calculation
41. _____ is used to portray relief difference and terrain morphology in Hilling and mountainous areas
- Overview shading
 - Top shading
 - Land shading
 - Hill shading
42. For the calculation of the orientation and slops in all degree used _____
- Slope aspect calculation
 - Slope convexity
 - Slope length
 - Slope Concavity
43. Optimal path finding techniques are used when a _____ path between TWO nodes in a network must be found
- Optimal cost
 - Maximum cost
 - Least cost
 - Best cost
44. _____ is used view shade in the direct line-of-sight from a specified target location
- Direct Analysis
 - Visibility Analysis
 - Trace Analysis
 - Indirect Analysis
45. _____ analysis is performed when we want to understand which part of network is 'CONDITIONALLY CONNECTED' to a chosen node on the network
- Need
 - Path

- c) Capacity
- d) Trace

46. GPS stands for _____

- a) Global Positioning System
- b) Government Positioning Satellites
- c) Geographic Pressure Sensors
- d) Global Position System

47. In the network analysis each line a direction of transportation is associated with

- a) Directed Network
- b) Directed analysis
- c) Undirected network
- d) Undirected analysis

48. Which is the type of Model?

- a) Descriptive
- b) Prescribed
- c) Predictors
- d) Statistical

49. Tracing functions on a network are _____

- a) Tracing upstream
- b) Tracing back and forth
- c) Tracing with condition and direction
- d) Tracing with values

50. Descriptive models attempt to answer the _____

- a) What should be?
- b) What likely to be?
- c) What is question?
- d) What is required to be?

UNIT V: Data Visualization

1. _____ is used to representing a real-world feature on two-dimensional surfaces.
 - a) Plan
 - b) Drawing
 - c) Scale
 - d) Map

2. For a map classification, which of the following sets represent are correct?
 - a) Cadastral, thematic
 - b) Thematic, geographic
 - c) Cadastral, geographic
 - d) Geographic, topographic

3. The map, which can explain a particular feature in detail is _____ .
 - a) Cadastral map
 - b) Topographic map
 - c) Thematic map
 - d) Geographic map

4. To represent a large-scale map _____ should be less.
 - a) Number of Scale
 - b) Number of Size
 - c) Number of elements
 - d) Number of features

5. What is the correct way to represent projected meridians in cylindrical projection?
 - a) Mathematical
 - b) Geometrical
 - c) Horizontal
 - d) Vertical

6. In preparation of atlas, which type of map projection is used?
 - a) Cylindrical projection
 - b) UTM projection
 - c) Poly conic projection system

- d) Lambert- Azimuthal equal area projection
7. Elevation data set can be used in which of the following map making effectively?
- a) Thematic
 - b) Topographic
 - c) Cadastral
 - d) Terrain
8. While converting maps from one scale to another, maps may face _____ problem.
- a) Cartographic Generalization
 - b) Cartographic Visualization
 - c) Cartographic Representation
 - d) Cartographic Presentation
9. If the distance on the map is given as 2cm which is equal to 1km on the ground. What will be the scale of the map?
- a) 1: 50000
 - b) 1: 5000
 - c) 1: 100000
 - d) 1: 500
10. _____ is not a method of representation of the scale of the map?
- a) Ratio method
 - b) Verbal method
 - c) Geographical method
 - d) Non-verbal method
11. What Amongst the following is not from Bertin's six categories of visual variables?
- a) Size
 - b) Value
 - c) Orientation
 - d) Co-ordinates
12. A Map in GIS is:
- a) Abstraction of datasets
 - b) Representation of Geographic Reality
 - c) Modelling of geometric attributes
 - d) Abstracting attribute values.

13. A reduced and Simplified representation of Earth can be:
- Abstract
 - Map
 - Orientation
 - Visual Representation
14. Which statement are valid?
- Maps cannot provide Location Information
 - Maps provide more than just Location Information.
 - Maps only provides Location Information.
 - Maps are symmetrical.
15. What is the most efficient and effective to transfer spatial Information?
- DBMS
 - Maps
 - Topography
 - Geography
16. Topographic maps represent Earth Surfaces as:
- Solid Lines
 - Dotted Lines
 - Colours
 - Shading & Contouring
17. Cartographic rules are also known as_____.
- Cartographic Science
 - Cartographic Grammar
 - Cartographic Art
 - Cartographic Theme
18. The design of Topographic maps is mostly based on_____
- Cartography
 - Projections

- c) Conventions
 - d) Exploration
19. According to Conventions in designing Topographic maps, blue color is used to represent _____.
- a) Land Built-up areas
 - b) Landfills
 - c) Water
 - d) Mountain
20. One layer over another layer is called as _____.
- a) Union Operation
 - b) Overlay Operation
 - c) Intersection Operation
 - d) Deduction Operation
21. Maps are the _____ result of GIS Operations.
- a) Final
 - b) Intermediate
 - c) Primary
 - d) Secondary
22. The types of maps a GIS can produce can be
- a. 0d
 - b. 1d
 - c. 4d
 - d. 7d
23. In _____ maps points of equal elevation can be connected together, filling the details related to the elevation by using different colour.
- a) Contour
 - b) Dot
 - c) Thematic
 - d) Topographic
24. Cartographic Visualization process of GIS is _____
- a) Conversion of graphical data from map into spatial data

- b) Translation of spatial data from Database into Graphics
 - c) Conversion of Database into map projections
 - d) Conversion of Database into map Presentation
25. The visualization process varies greatly depending on:
- a) Where in the spatial data handling process it takes place
 - b) The purpose for which it is needed
 - c) How well-structured spatial database is
 - d) Data stored in spatial databases
26. _____ can be created during any phase of the spatial data handling process.
- a) Visualization
 - b) Information
 - c) Representation
 - d) Verification
27. _____ plays an important role in identifying map information
- a) Title
 - b) Legend
 - c) North Arrow
 - d) Map Attributes
28. The environment in which the Visualization Process is executed is/are
- a) Stand-alone personal computer
 - b) Distributed computers
 - c) Cartographic Toolbox
 - d) GIS Displays
29. “How do I say, what to whom?” In this question ‘How’ refers to which of the following?
- a) Cartographic Projections
 - b) Cartographic Techniques
 - c) Cartographic Database
 - d) Cartographic Product

30. "How do I say, what to whom?" In this question 'whom' refers to which of the following?
- Cartographer
 - Database Designer
 - Audience
 - Process Manager
31. _____ represents Map Output.
- Map Dissemination
 - Map Representation
 - Legend
 - Map Information
32. Which amongst the following is not the option for Visualization?
- Animated Maps
 - Multimedia
 - Database
 - Virtual Reality
33. To measure effectiveness of visualization process, a test should be based on _____?
- Spatial Data Characteristics
 - Feedback from Map Users
 - Feedback from Map Designers
 - Characteristics of Process
34. _____ Process to develop visual plan.
- Visual Hierarchy
 - Visual Representation
 - Visual Highlights
 - Visual Assessment
35. The nature of data that is to be represented in Visualization process needs to be of
- Quantitative
 - Temporal
 - Normalized
 - De-Normalized

36. Select the odd one with respect to cartographer's tools in visualization process.
- a) Habits
 - b) Conventions
 - c) Rules
 - d) Traditions
37. What amongst the following referred to 'Visual Data Mining' in Geo-disciplines?
- a) Dealing with Visualization in GIS
 - b) Dealing with data abundance in GIS
 - c) Dealing with spatial data storage in GIS
 - d) Dealing with spatial data retrieval in GIS
38. What is 'DiBiase' in context of GIS Visualization?
- a) Cartographic Rule
 - b) GIS Database
 - c) Map-based Model
 - d) Visual Mining Tool
39. In GIS visualization process, Exploration is defined as:
- a) Public Visual Communication
 - b) Private Visualization Process
 - c) Public Visual Observation
 - d) Private Visual Observation
40. Searching for spatial-temporal patterns is called as.....
- a) Presentation
 - b) Observation
 - c) democratization
 - d) Exploration
41. Which cartographer designed the basic concept of map design in his publication 'semiologie Graphique'?
- a) Bertin
 - b) Morrison
 - c) Stephen
 - d) Zanderbergen

42. What the type of 'nominal' or 'categorical' data is?
- a) Quantitative
 - b) Qualitative
 - c) Ratio
 - d) Normalized
43. Which type of data can be measure along an 'interval' or 'ratio' scale?
- a) Quantitative
 - b) Qualitative
 - c) Ratio
 - d) Normalized
44. If the data is to be classify as 'Hot', 'Warm' and 'cool', which amongst the following type will be applicable?
- a) Nominal
 - b) Ordinal
 - c) Ratio
 - d) Interval
45. If data contains names or categories only, which type of data is correct way to represent it?
- a) Nominal
 - b) Ordinal
 - c) Ratio
 - d) Interval
46. Which amongst the following is not the basic element of a map?
- a) Line Symbols
 - b) Area Symbols
 - c) Point Symbols
 - d) Text Symbols
47. What amongst the following is not a visual variable from Bertin's category?
- a) Size

- b) Area
- c) Shape
- d) Orientation

48. A map using single colour with different shades is called as _____

- a) Single Colour Map
- b) Monochrome Map
- c) Mono shade Map
- d) Monovariant Map

49. What is used as 'Visual Variable Value'?

- a) Color Tints
- b) Hash Pattern
- c) Grid Pattern
- d) Solid Colour

50. Maps that allows you to analyse changes during different time intervals are called as _____.

- a) Dynamic Maps
- b) Static Maps
- c) Temporal Maps
- d) Multimedia Maps