

TYBScIT SEM VI

Business Intelligence

Sample Question

- 1) Open system crossed its boundaries in both directions by flows of materials and information, When such flows are lacking, the system is said to be -----.
 - a. Closed
 - b. Open
 - c. Input
 - d. output
- 2) A system receives a set of input flows and returns a set of output flows through a ----- process regulated by internal conditions and external conditions.
 - a. Transformation
 - b. Extraction
 - c. Collection
 - d. Testing
- 3) The -----of a system are assessed using measurable performance indicators that can be classified into different categories.
 - a. Time and money
 - b. effectiveness and efficiency
 - c. effective and time
 - d. effective and money
- 4) Systems that are able to modify their own output flows based on feedback are called -----
 - a. Open cycle system
 - b. Closed cycle system
 - c. DSS
 - d. KM
- 5) The two main classes of evaluation metrics are : -----
 - a. Time and money
 - b. effectiveness and efficiency
 - c. effective and time
 - d. effective and money
- 6) -----measurements express the level of conformity of a given system to the objectives for which it was designed.
 - a. Efficiency
 - b. Effectiveness
 - c. Time
 - d. Decision
- 7) -----measurements are associated with the quality of the transformation process.
 - a. Efficiency
 - b. Effectiveness
 - c. Time
 - d. Decision
- 8) ----- metrics indicate whether the right action is being carried out or not.

- a. Efficiency
 - b. Effectiveness
 - c. Time
 - d. Decision
- 9) -----metrics show whether the action is being carried out in the best possible way or not.
- a. Efficiency
 - b. Effectiveness
 - c. Time
 - d. Decision
- 10)----- is a choice from multiple alternatives, usually made with a fair degree of rationality.
- a. Data
 - b. Information
 - c. Time
 - d. Decision
- 11) the decision selected must be put into practice and then -----to determine if it has enabled the planned objectives to be achieved.
- a. Find
 - b. Verified
 - c. Validated
 - d. Transformed
- 12) When the best alternative has been selected by the decision maker, it is transformed into actions by means of an -----.
- a. implementation plan.
 - b. Design plan
 - c. Test plan
 - d. Intelligence phase
- 13) Decisions can be classified in terms of two main dimensions, according to their -----
- a. Class
 - b. Type
 - c. nature and scope.
 - d. effectiveness
- 14) A decision is structured if it is based on a well-defined and recurring decision-making procedure.
- a. Data
 - b. Information
 - c. Time
 - d. Decision
- 15) Decisions are strategic when they affect the entire organization or at least a substantial part of it for a long period of time.
- a. Data
 - b. Information
 - c. Time
 - d. Decision
- 16)-----decisions affect only parts of an enterprise and are usually restricted to a single department.

- a. Operational
- b. Tactical
- c. Rational
- d. a political-organizational

17) -----decisions refer to specific activities carried out within an organization and have a modest impact on the future.

- a. Operational
- b. Tactical
- c. Rational
- d. a political-organizational

18) When a ---- approach is followed, a decision maker considers major factors, such as economic, technical, legal, ethical, procedural and political.

- a. Operational
- b. Tactical
- c. Rational
- d. a political-organizational

19) When a ----- approach is pursued, a decision maker proceeds in a more instinctual and less systematic way.

- a. Operational
- b. Tactical
- c. Rational
- d. a political-organizational

20) ----- refers to a decision-making process for which multiple performance indicators can be reduced to a single criterion, which therefore naturally lends itself to an optimization model.

- a. Bounded rationality
- b. absolute rationality'
- c. nationality
- d. atonality

21) ----- occurs whenever it is not possible to meaningfully reduce multiple criteria into a single objective

- a. Bounded rationality
- b. absolute rationality'
- c. nationality
- d. atonality

22) Decision support systems combine data and ----models to help decision makers in their work.

- a. Operational
- b. mathematical
- c. Tactical
- d. Rational

23) A DSS must be ----- and adaptable in order to incorporate the changes required to reflect modifications in the environment or in the decision-making process.

- a. Operational

- b. flexible
 - c. Tactical
 - d. Rational
- 24) -----includes a database designed to contain the data required by the decision-making processes to which the DSS is addressed.
- a. model management module
 - b. data management module
 - c. knowledge management module
 - d. RAD model
- 25) The -----provides end users with a collection of mathematical models derived from operations research, statistics and financial analysis.
- a. model management module
 - b. data management module
 - c. knowledge management module
 - d. RAD model
- 26) The ----- is also interconnected with the company knowledge management integrated system.
- a. model management module
 - b. data management module
 - c. knowledge management module
 - d. RAD model
- 27) -----analysis environments have facilitated and standardized the access to passive business intelligence functions
- a. One Dimensional
 - b. Multidimensional
 - c. Structural
 - d. unstructural
- 28) The main purpose of the -----phase is to understand the needs and opportunities, sometimes characterized by weak signals, and to translate them into a project and later into a successful DSS.
- a. analysis
 - b. Planning
 - c. Design
 - d. coding
- 29) In the -----phase, it is necessary to define in detail the functions of the DSS to be developed, by further developing and elaborating the preliminary conclusions achieved during the feasibility study.
- a. analysis
 - b. Planning
 - c. Design
 - d. coding
- 30) The most significant of these is based on the use of -----where, instead of implementing the system as a whole, the approach is to identify a sequence of autonomous subsystems, of

limited capabilities, and develop these subsystems step by step until the final stage is reached corresponding to the fully developed DSS.

- a. Rapid prototyping development
 - b. RAD
 - c. Development
 - d. design
- 31) -----is an expert in all the aspects involved in the development of a DSS such as information system architectures, decision-making processes, mathematical models and solution methods.
- a. system integrator
 - b. designer
 - c. programmer
 - d. engineer
- 32) In a -----model some input information represents random events and is therefore characterized by a probability distribution
- a. Stochastic
 - b. Deterministic
 - c. Static
 - d. Dynamic
- 33) A model is called -----when all input data are supposed to be known a priori and with certainty.
- a. Stochastic
 - b. Deterministic
 - c. Static
 - d. Dynamic
- 34) ----models consider a given system and the related decision-making process within one single temporal stage.
- a. Stochastic
 - b. Deterministic
 - c. Static
 - d. Dynamic
- 35) ----models consider a given system through several temporal stages, corresponding to a sequence of decisions.
- a. Stochastic
 - b. Deterministic
 - c. Static
 - d. Dynamic
- 36) ----at hand must be correctly identified in in the development of mathematical models for decision making
- a. Time
 - b. Problem
 - c. Decision
 - d. noise
- 37) -----is some records may contain missing values corresponding to one or more attributes,

- a. Completeness
 - b. Incompleteness.
 - c. Correctness
 - d. data
- 38) ---- is Data may contain erroneous or anomalous values, which are usually referred to as outliers.
- a. Time
 - b. Problem
 - c. Decision
 - d. noise
- 39) Sometimes data contain discrepancies due to changes in the coding system used for their representation, and therefore may appear -----
- a. Completeness
 - b. Incompleteness.
 - c. Correctness
 - d. inconsistent.
- 40) Means discard all records for which the values of one or more attributes are missing.
- a. Inspection.
 - b. Identification
 - c. Elimination.
 - d. Substitution.
- 41) -----means , one may opt for an inspection of each missing value, carried out by experts in the application domain, in order to obtain recommendations on possible substitute values.
- a. Inspection.
 - b. Identification
 - c. Elimination.
 - d. Substitution.
- 42) ----- means As a third possibility, a conventional value might be used to encode and identify missing values, making it unnecessary to remove entire records from the given dataset.
- a. Inspection.
 - b. Identification
 - c. Elimination.
 - d. Substitution.
- 43) -----Several criteria exist for the automatic replacement of missing data, although most of them appear somehow arbitrary.
- a. Inspection.
 - b. Identification
 - c. Elimination.
 - d. Substitution.
- 44) ---refers to a random perturbation within the values of a numerical attribute, usually resulting in noticeable anomalies.
- a. Time
 - b. Problem
 - c. Decision

- d. noise
- 45) The aim of -----techniques is to replace the values of an attribute with values obtained through an appropriate transformation.
- a. Inspection.
 - b. Identification
 - c. Elimination.
 - d. standardization
- 46) -----may also consist of the creation of new variables that summarize within themselves the relevant information contained in a subset of the original attributes.
- a. Identification
 - b. Attribute extraction
 - c. Elimination.
 - d. standardization
- 47) ---methods select the relevant attributes before moving on to the subsequent learning phase, and are therefore independent of the specific algorithm being used.
- a. Embedded
 - b. Filter
 - c. Transfer
 - d. trim
- 48) For the ----- methods, the attribute selection process lies inside the learning algorithm, so that the selection of the optimal set of attributes is directly made during the phase of model generation.
- a. Embedded
 - b. Filter
 - c. Transfer
 - d. trim
- 49) During the ---phase, the classification algorithm is applied to the training set , in order to derive classification rules that allow the corresponding target class y to be attached to each observation x .
- a. Training
 - b. Test
 - c. Prediction
 - d. collection
- 50) In the ---- phase, the rules generated during the training phase are used to classify the observations of D not included in the training set, for which the target class value is already known.
- a. Training
 - b. Test
 - c. Prediction
 - d. collection
- 51) The ----- phase represents the actual use of the classification model to assign the target class to new observations that will be recorded in the future

- 52) The aim of ---- models is to subdivide the records of a dataset into homogeneous groups of observations
- Stochastic
 - Deterministic
 - Static
 - clustering
- 53) -----clustering algorithm is used to analyze datasets containing categorical attributes.
- Flexible
 - Time
 - Effective
 - Efficient
- 54) -----methods develop a subdivision of the given dataset into a predetermined number K of non-empty subsets.
- Partition
 - Hierarchical
 - density-based
 - Grid
- 55) -----methods carry out multiple subdivisions into subsets, based on a tree structure
- Partition
 - Hierarchical
 - density-based
 - Grid
- 56) -----methods derive clusters from the number of observations locally falling in a neighborhood of each observation.
- Partition
 - Hierarchical
 - density-based
 - Grid
- 57) ----- methods first derive a discretization of the space of the observations, obtaining a grid structure consisting of cells.
- Partition
 - Hierarchical
 - density-based
 - Grid
- 58) Structure mining is used to understand the structure of web using different links on different pages.
- Web
 - Content
 - Structure
 - usage

- 59) Analyses aimed at -----mining are certainly the most relevant from a relational marketing standpoint, since they explore the paths followed by navigators and their behaviors during a visit to a company website
- Web
 - Content
 - Structure
 - usage
- 60) -----sales activities take place at one or more sites managed by a company supplying some products or services, where customers go to make their purchases.
- Residential
 - Mobile
 - Telephone
 - Customer-orientated
- 61) ----- sales, agents of the supplying company go to the customers' homes or offices to promote their products and services and collect orders.
- Residential
 - Mobile
 - Telephone
 - Customer-orientated
- 62) -----e sales are carried out through a series of contacts by telephone with prospective customers
- 63) Sales network sizing is a matter of working out the optimal number of agents that should operate within the selected structure, and depends on several factors.
- Type
 - cost
 - Sizing
 - time
- 64) Designing a -----means grouping together the geographical areas into which a given region has been divided and assigning each territory to an agent.
- sales territory
 - model
 - sales
 - none of the above
- 65) The purpose of -----activities is to measure the effectiveness and efficiency of individuals employed in the sales network, in order to design appropriate remuneration and incentive schemes.
- assessment and control
 - assessment and design
 - Design and control
 - Test and control
- 66) ---design involves allocating sales coverage units to individual agents so as to minimize a weighted sum of two terms, representing respectively the total distance between areas belonging to the same territory and the imbalance of sales opportunities for the agents.
- Sales territory
 - model

- c. sales
 - d. structure
- 67) The major purpose of an integrated logistic process is to minimize a function expressing the total -----
- a. Time
 - b. Cost
 - c. Size
 - d. people
- 68) The term -----refers to the possibility that a portion of the demand due in a given period may be satisfied in a subsequent period, incurring an additional penalty cost.
- a. Log
 - b. Backlog
 - c. Front log
 - d. None of the above
- 69) The purpose of -----is to compare the operating performance of a set of units
- a. data envelopment analysis (DEA)
 - b. DSS
 - c. KM
 - d. AI
- 70) The-----, also known as production function, expresses the relationship between the inputs utilized and the outputs produced.
- a. efficient frontier
 - b. efficiency matrix
 - c. effective frontier
 - d. effective matrix
- 71) (CCR) model stands for -----Model.
- a. Charnes–Cooper–Rhodes
 - b. Chalmes-Cooper-Rhodes
 - c. Charmes-Coper-Rodes
 - d. Carnes-Cooper-Rhodes
- 72) The analysis of cross-efficiency is based on the definition of the efficiency matrix,
- a. efficient frontier
 - b. efficiency matrix
 - c. effective frontier
 - d. effective matrix
- 73) The -----of a DMU are defined as the product of the inputs used by the unit and the corresponding optimal weights.
- a. virtual inputs
 - b. virtual outputs
 - c. parameter
 - d. reference parameter
- 74) -----are given by the product of the outputs of the unit and the associated optimal weights.
- a. virtual inputs
 - b. virtual outputs
 - c. parameter

- d. reference parameter
- 75) -----can be define as general mental ability for reasoning, problem solving and learning.
- a. Intelligence
 - b. Knowledge
 - c. Information
 - d. Data
- 76) _____ measures asymmetry about the mean of the probability distribution of a random variable.
- a. skewness
 - b. covariance
 - c. variance
 - d. Kurtosis
- 77) _____ shows all individual data points.
- a. Box-plot
 - b. scatter plot
 - c. line plot
 - d. pie chart
- 78) Which of the following is false?
- A. data visualization include the ability to absorb information quickly
 - B. Data visualization is another form of visual art
 - C. Data visualization decrease the insights and take solwer decisions
 - D. None Of the above
- 79) Which of the following plots are often used for checking randomness in time series?
- A. Autocausation
 - B. Autorank
 - C. Autocorrelation
 - D. None of the above
- 80) Which one of the following is most basic and commonly used techniques?
- A. Line charts
 - B. Scatter plots
 - C. Population pyramids

D. Area charts

81) Which of the following lists names of variables in a data.frame?

- A. par()
- B. names()
- C. barchart()
- D. quantile()

82) Point out the wrong statement.

- a) Merging concerns combining datasets on the same observations to produce a result with more variables
- b) Data visualization is the organization of information according to preset specifications
- c) Subsetting can be used to select and exclude variables and observations
- d) All of the mentioned

83) Which of the following is characteristic of Processed Data?

- a) Data is not ready for analysis
- b) All steps should be noted
- c) Hard to use for data analysis
- d) None of the mentioned

84) Which of the following is not a step in data analysis?

- a) Obtain the data
- b) Clean the data
- c) EDA
- d) None of the mentioned

85) _____ provides an web service interface that provides resizable compute capacity in the AWS cloud.

- a)EC2
- B)S3
- C)ES2
- D)EC3

86) Height is example of _____.

- a) Continuous Data
- b) Discrete Data
- c) Ordinal data
- d) Quantative Data

87) What is true about Data Visualization?

- a) Data Visualization is used to communicate information clearly and efficiently to users by the usage of information graphics such as tables and charts.
- b) Data Visualization helps users in analyzing a large amount of data in a simpler way.
- c) Data Visualization makes complex data more accessible, understandable, and usable.
- d) All of the above

88) Data can be visualized using?

- a) A. graphs
- b) B. charts
- c) C. maps
- d) D. All of the above

89) Data visualization is also an element of the broader _____.

- a) A. deliver presentation architecture
- b) B. data presentation architecture
- c) C. dataset presentation architecture
- d) D. data process architecture

90) A multi-disciplinary field that uses scientific methods, processes, algorithms and systems to extract knowledge from data is called

- A) Data Science
- B) Machine learning
- C) Computer Science
- D) Statistical Research

91) For _____ observation, researcher specifies in detail what is to be observed and how measurements are to be recorded)

- A) Exploratory

- B) Functional
- C) Structured
- D) Unstructured

92) _____ is the process which involves extracting data from various source systems.

- A) Data analysis
- B) Data transformation
- C) Data Extraction
- D) Data warehouse

93) Data from entire population or sample is summarized with mean, standard deviation in

- A) Descriptive Statistics
- B) Inferential Statistics
- C) Predictive Analytics
- D) Enhanced Data Analysis

94) Data Curation process:

- A) Preserving
- B) Sharing
- C) Discovering
- D) All

95) _____ visualizes the distribution of data over a continuous interval or certain time period)

- A) Box plot
- B) Pie chart
- C) Histogram
- D) Bar chart

96) Which of the following statement will import pandas?

- A) import pandas as pd
- B) import panda as py

- C) import pandas as pd
- D) all of the mentioned

97) Which of the following graph can be used for simple summarization of data?

- A) Scatterplot
- B) Overlaying
- C) Barplot
- D) Bargraph

98) Phenomenon under data analysis used for gaining a better understanding of data is called

- A) Exploratory Data Analysis
- B) Explore Data Analysis
- C) Exploratory Data Analytics
- D) Enhanced Data Analysis

99) _____ data is difficult to manipulate and typically needs to be processed in some way before it can be used in standard data analysis software.

- a) Structured data
- b) Unstructured data
- c) Summarized data
- d) Frequency data

100) Data that summarize all observations in a category are called _____ data.

- a) frequency
- b) summarized
- c) raw
- d) none of the mentioned