

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2019

Course: Analytics in Banking Industry

Program: B. Tech. CSE (BFSI)

Course Code: CSIB 424

Semester: VIII

Time 03 hrs.

Max. Marks: 100

Instructions: All questions are compulsory

SECTION A

S. No.		Marks
Q 1	Algorithm is A. It uses machine-learning techniques. Here program can learn from past experience and adapt themselves to new situations B. Computational procedure that takes some value as input and produces some value as output C. Science of making machines performs tasks that would require intelligence when performed by humans D. None	2
Q 2	Background knowledge referred to A. Additional acquaintance used by a learning algorithm to facilitate the learning process B. A neural network that makes use of a hidden layer C. It is a form of automatic learning. D. None of these	2
Q 3	Classification is A. A subdivision of a set of examples into a number of classes B. A measure of the accuracy, of the classification of a concept that is given by a certain theory C. The task of assigning a classification to a set of examples D. None of these	2
Q 4	Data scrubbing is which of the following: A. A process to upgrade the quality of data before it is moved into a data warehouse B. A process to upgrade the quality of data after it is moved into a data warehouse C. A process to load the data in the data warehouse and to create the necessary indexes D. None	2
Q 5	Cluster is A. Group of similar objects that differ significantly from other objects B. Operations on a database to transform or simplify data in order to prepare it for a machine-learning algorithm C. Symbolic representation of facts or ideas from which information can potentially be extracted D. None of these	2

Q 6	A definition or a concept is----- if it classifies any examples as coming within the concept A. Complete B. Consistent C. Constant D. None of these	2
7	A goal of data mining includes which of the following? A. To explain some observed event or condition B. To confirm that data exists C. To analyze data for expected relationships D. To create a new data warehouse	2
8	An operational system is which of the following? A. A system that is used to run the business in real time and is based on historical data. B. A system that is used to run the business in real time and is based on current data. C. A system that is used to support decision making and is based on current data. D. A system that is used to support decision making and is based on historical data.	2
9	A data warehouse is which of the following? A. Can be updated by end users. B. Contains numerous naming conventions and formats. C. Organized around important subject areas. D. Contains only current data.	2
10	_____ is a subject-oriented, integrated, time-variant, nonvolatile collection of data in support of management decisions. A. Data Mining. B. Data Warehousing. C. Web Mining. D. Text Mining.	2
11	The data Warehouse is_____ A. read only. B. write only. C. read write only. D. none.	2
12	Expansion for DSS in DW is_____ A. Decision Support system. B. Decision Single System. C. Data Storable System. D. Data Support System.	2
13	The data is stored, retrieved & updated in _____. A. OLAP. B. OLTP. C. SMTP. D. FTP.	2

14	_____ defines the structure of the data held in operational databases and used by operational applications. A. User-level metadata. B. Data warehouse metadata. C. Operational metadata. D. Data mining metadata	2
15	_____ consists of formal definitions, such as a COBOL layout or a database schema. A. Classical metadata. B. Transformation metadata. C. Historical metadata. D. Structural metadata.	2
16	_____ databases are owned by particular departments or business groups. A. Informational. B. Operational. C. Both informational and operational. D. Flat.	2
17	Record cannot be updated in _____. A. OLTP B. files C. RDBMS D. data warehouse	2
18	The modern CASE tools belong to _____ category. A. analysis. B. Development C. Coding D. Delivery	2
19	Detail data in single fact table is otherwise known as _____. A. monoatomic data. B. diatomic data. C. atomic data. D. multiatomic data.	2
20	Reconciled data is _____. A. data stored in the various operational systems throughout the organization. B. current data intended to be the single source for all decision support systems. C. data stored in one operational system in the organization. D. data that has been selected and formatted for end-user support applications	2
21	The extract process is _____. A. capturing all of the data contained in various operational systems. B. capturing a subset of the data contained in various operational systems. C. capturing all of the data contained in various decision support systems. D. capturing a subset of the data contained in various decision support systems.	2
22	The type of relationship in star schema is _____. A. many-to-many. B. one-to-one. C. one-to-many. D. many-to-one.	2

23	The decision-making level of an organization that is most concerned with daily operations is the: A. operational level. B. managerial level. C. executive level. D. None of the above.	2
24	An information system that captures and records fundamental business events is a(n): A. transaction processing system. B. executive information system C. decision support system. D. expert system.	2
25	The use of a scanner in a retail store operation typically represents which type of data entry? A. Manual B. Semiautomated C. Fully automated D. None of the above.	2
26	What should be a major characteristic of a DSS? A. Automates decision making. B. Includes a spreadsheet model. C. Responds quickly to the changing needs of decision makers D. All of the above	2
27	In which of Steven Alter's categories of DSS would you place data warehouses? A. Analysis Information systems. B. Accounting and financial models. C. Data analysis systems. D. Suggestion models.	2
28	What type of computerized system records current information and emphasizes data integrity and consistency? A. Data Analysis System. B. File Drawer System C. Transaction Processing System D. None	2
29	What is the most important component of a Decision Support System? A. Architecture and network design. B. Database. C. Mathematical models and analytical tools. D. User interface.	2
30	Business Intelligence and data warehousing is used for _____. A. Forecasting. B. Data Mining. C. Analysis of large volumes of product sales data. D. All of the above.	2
31	Illustrate are the components of Data Warehouse? Discuss the three-tier data warehouse architecture. OR	10

	Explain different OLAP operations and applications.	
32	<p>Design a BI application, which will provide Retail Chain Company with features and performance that meet their objectives. Use any Data mining technique.</p> <p style="text-align: center;">OR</p> <p>Let a set of elements $S = \{2,3,4,10,11,12,20,25,30\}$, using K means clustering algorithm explain what will be the possible clusters of elements if $k = 2$.</p>	10
33	<p>Explain how to plan a BI project? How to prioritizing and validating BI requirements?</p> <p style="text-align: center;">OR</p> <p>Write a short note on the following</p> <ol style="list-style-type: none"> a. Project resource of a BI project b. Risk management and mitigation 	10
34	<p>Explain Top-Down Induction of Decision Tree. Examine the components of the Top-Down Induction of Decision Trees Procedure.</p> <p style="text-align: center;">OR</p> <p>Write a short note on</p> <ol style="list-style-type: none"> a. Best practices for BI design b. Drill up and drill down approach 	10