



ST JOSEPH ENGINEERING COLLEGE, MANGALURU

An Autonomous Institution

Fifth Semester B.E. Degree (Autonomous) Examinations

USN:

22AIM564/22CDS564

Duration: 3 Hrs

Maximum Marks: 100

Business Intelligence

Note:

1. Part-A is mandatory.
2. Answer any five full questions from Part-B choosing at least one from each module.
3. Missing data may be suitably assumed.

PART-A

Q.No.	Question				BL	CO	PO	Marks
1	Business intelligence (BI) is a broad category of application programs which includes				L2	1	1	1
	a)	Decision support, Data mining, OLTP	b)	Decision support, Data collection, OLAP				
	c)	Decision Expert, Data mining, OLAP	d)	Decision support, Data mining, OLAP				
2	Which of the following is / are some of the main areas of operation of DSS.				L2	1	1	1
	a)	Transaction processing	b)	Executive Support System				
	c)	Production, finance, and marketing	d)	None of these				
3	Which amongst the following is true with reference to DSS?				L2	2	1	1
	a)	DSS increases the speed and efficiency of decision-making activities	b)	It automates managerial processes				
	c)	It improves interpersonal communication within the organization	d)	All of these				
4	Identify the limitation of a DSS from the following.				L2	2	1	1
	a)	It is a costly system, which makes less accessible to smaller companies	b)	Implementation of a DSS requires large capital amount				
	c)	It is an efficient system for large organizations	d)	None of these				
5	Identify the type of relationship between fact and dimension table in a				L2	3	1	1

Q.No.	Question				BL	CO	PO	Marks
	star schema.							
	a)	One to one	b)	One to many				
	c)	Many to one	d)	Many to many				
6	Fact tables are_____				L2	3	1	1
	a)	Completely normalized	b)	Partially normalized				
	c)	Completely de-normalized	d)	Partially de-normalized				
7	Select the process is not involved in the data mining process				L2	4	1	1
	a)	Data exploration	b)	Data archaeology				
	c)	Knowledge extraction	d)	Data transformation				
8	Identify the correct option regarding data mining.				L2	4	1	1
	a)	It can be referred to as the mining of knowledge from data	b)	It can be defined as the process of extracting information from a large collection of data				
	c)	It involves several other processes like data cleaning, data transformation, and data integration	d)	All of these				
9	The ____ represents facts and rules.				L1	5	1	1
	a)	Knowledge base	b)	Inference engine				
	c)	Operating system	d)	None of these				
10	Improved ____ are key benefits of an Expert System.				L2	5	1	1
	a)	Decision quality	b)	Consistency				
	c)	Reliability	d)	All of these				
11	Write two differences between Decision Support System and Business Intelligence.				L2	1	3	2
12	Write the similarities and differences between individual and group decision making.				L2	2	1	2
13	Write two differences between data warehouse and data mart.				L2	3	3	2
14	Enumerate the data mining software tools used in practice.				L2	4	1	2
15	Discuss the significance of certainty/uncertainty and risk in modelling and decision making.				L2	5	3	2
	PART-B							
	Module-1							
1	a)	What are the qualities of the manager required to provide organizational responses? Explain the actions taken by a manager for organizational responses to a problem.			L2	1	1	8
	b)	By considering an example application case of Moneyball: Analytics in Sports and Movies , analyze and answer the			L3	1	1	8

Q.No.	Question		BL	CO	PO	Marks
		following: i) Problem definition ii) Solution to the problem iii) How is predictive analytics applied in Moneyball? iv) What is the difference between objective and subjective approaches in decision making?				
	OR					
2	a)	With a neat table showing early decision support framework, justify the significance of computerized support for degree of structuredness in the data.	L2	1	1	8
	b)	By considering an example application case of Sabre Helps Its Clients Through Dashboards and Analytics , analyze and answer the following: i) Problem definition ii) Solution to the problem iii) How can analytics be used to transform the traditional reporting? iv) How can interactive reporting assist organizations in decision making.	L3	1	1	8
	Module-2					
3	a)	Discuss the significance of types of decision styles in the process of decision making.	L2	2	1	4
	b)	Describe the activities in the Intelligent phase of the decision making process.	L2	2	3	4
	c)	Discuss the significance of different types of DSS categories in the decision making process.	L2	2	1	8
	OR					
4	a)	Discuss the effect of decision making disciplines and the types of decision makers in different types of organizations.	L2	2	1	4
	b)	What is principle of choice? Describe the types of models used in practice in this process.	L2	2	3	4
	c)	With a neat diagram, describe the components of decision support systems.	L2	2	1	8
	Module-3					
5	a)	What is a data warehouse? Analyze the significance of the various characteristics of a data warehouse.	L2	3	3	8
	b)	By considering an example application case of Data Warehousing Helps MultiCare Save More Lives , analyze and answer the following: i) Problem definition ii) Solutions for the problem iii) What do you think is the role of data warehousing in healthcare systems? iv) How did MultiCare use data warehousing to improve health outcomes?	L3	3	3	8

Q.No.	Question		BL	CO	PO	Marks
	OR					
6	a)	Discuss the significance of different types of charts and graphs in the business reporting context.	L2	3	3	8
	b)	By considering an example application case of Dallas Cowboys Score Big with Tableau and Teknion , analyze and answer the following: i) Problem definition ii) Solutions for the problem iii) How did the Dallas Cowboys use information visualization? iv) What were the challenge, the proposed solution, and the obtained results?.	L3	3	2	8
	Module-4					
7	a)	With a neat diagram, discuss the taxonomy of data mining tasks.	L3	4	3	8
	b)	Discuss the data mining privacy issues and myths in practice.	L2	4	1	8
	OR					
8	a)	By considering the application case Predicting Customer Buying Patterns-The Target Story , analyze and answer the following: i) Problem definition ii) Solution(s) to the problem iii) What do you think about data mining and its implications concerning privacy? What is the threshold between knowledge discovery and privacy infringement? iv) Did Target go too far? Did they do anything illegal? What do you think they should have done? What do you think they should do now (quit these types of practices)?	L3	4	3	8
	b)	Describe the data mining methods in practice.	L2	4	1	8
	Module-5					
9	a)	With a neat diagram, illustrate the general structure of mathematical model for decision support with suitable exams for each variable.	L3	5	3	8
	b)	What is an Expert System (ES)? Discuss the need & features of an ES and compare it with the conventional system.	L2	5	1	8
	OR					
10	a)	Discuss the role of various steps in the development of Expert Systems.	L3	5	3	8
	b)	Describe the classical and newer applications of ES. Mention any 4 other possible areas of ES applications.	L2	5	1	8