



MALLA REDDY UNIVERSITY

School of Engineering

Subject Name: DataBase Management System(AIML/CSE/DS/CS)

Subject Code: MR20-1CS0101

Question Bank

UNIT-I

1. Describe the Structure of Database Management system with a neat diagram.
2. Differentiate between File System and Database Management System.
3. What is Data Model? List out various Data Model and explain with suitable example.
4. a) Define Database Management System (DBMS). List out the advantages of DBMS.
b) List out various applications of Database Management Systems.
5. a) What is meant by Data Abstraction? Describe various levels of Data Abstraction.
b) Define Data Independence. Describe Physical Data Independence and Logical Data Independence with a neat diagram.

UNIT-II

1. a) Illustrate various types of attributes with notations.
b) What is meant by Mapping Cardinality? List and explain types of Cardinality Ratios.
2. Construct an Entity Relationship diagram for a University database. Assume your own entities (Minimum of 5 entities), attributes and relations.
3. a) What is Relational Algebra? List out various types of Relational operations and explain with an example.
b) What is Relational Calculus? Describe types of Relational Calculus with suitable example.
4. Translate Entity Relationship diagram into a collection of tables with associated constraints to a relational database schema.
5. Define view. Write the syntax for creating updating and destroying a view with suitable example for Simple and Complex Views.

UNIT-III

1. Identify and list various Data definition Language (DDL) commands. Create a table by specifying key and referential constraints in Structured Query Language.
2. List various Integrity Constraints. Explain the constraints with suitable example.

3. Identify and list various Data Manipulation Language (DML) commands. Explain DML commands with suitable example.
4. Make use of Structured Query Language in solving the following with proper example
 - i) Sub queries & Correlated Queries
 - ii) Joins
 - iii) Aggregate functions
5. List and explain various commands on Transaction Control Language and Data Control language.

UNIT-IV

1. Define Schema Refinement. Analyze the problems caused by redundancy.
2. Define Functional Dependency. List and explain various Functional Dependencies.
3. Define normalization. Interpret the data by applying various normalization techniques such as 1Normal Form (1NF), 2NF and 3NF to reduce redundancy in database tables.
4. What is the relationship exists between 3Normal Form (3NF) and Boyce Codd Normal Form (BCNF). Distinguish between 3NF and BCNF. Consider any one relation schema which is 2NF and convert into BCNF.
5. Define Decomposition. Describe various types of Decomposition with suitable example.

UNIT-V

1. List out the ACID properties. Describe the transaction states with a neat diagram.
2. Describe Lock based concurrency control with suitable example.
3. Define Serializability. Explain Conflict Serializability and View Serializability with an example.
4. Describe concurrency control with Time stamp based locking protocols.
5. Explain concurrency control with optimistic methods.



Question Bank

Unit I

1. Explain about features of Object Oriented Programming compared with the procedure oriented programming.
2. Explain Polymorphism and Method Overriding with an example.
3. Explain how to create a class, Constructor, Objects and Instance variables with suitable examples.
4. Explain list Comprehension in Python with an example.
5. Explain Linear and Non-linear data structures with examples.

Unit II

1. Implement Singly linked list using Python with example.
2. Implement doubly linked list using python and explain.
3. Implement Circular Singly linked list using Python with example.
4. Demonstrate Stack ADT with a program.
5. Implement Queue data structure using python program.

Unit III

1. Why searching is important. Explain Binary search with a program.
2. Illustrate Linear search using a python program.
3. Write a Python program to sort a list of elements using the bubble sort algorithm
4. Write a Python program to sort a list of elements using the Selection sort algorithm
5. Write a Python program to sort a list of elements using the Merge sort algorithm
6. Write a Python program to sort a list of elements using the Quick sort algorithm

Unit IV

1. What is Binary Search tree? How to perform search and insert operation in BST?
2. Explain Balanced Binary Search Tree (BST) using an array (given) elements where array elements are sorted in ascending order with program.
3. Write a Python program to delete a node with the given key in a given Binary search tree (BST).
4. Write a Python program to convert a given array elements to a height balanced Binary Search Tree (BST).
5. Explain In-order, Pre-order and post-order Tree traversal techniques with example

Unit V

1. What is Graph Data Structure? Explain with an example.
2. Distinguish between Breadth First and Depth First Searching Algorithms.

3. Write a Python program to implement Breadth First Search.
4. Write a program to implement Depth First Search.
5. How to find Shortest Path in Directed Acyclic Graph? Explain with an example.



MALLA REDDY UNIVERSITY

School of Engineering

Question Bank

Subject Code: **MR20-1CS0105**

Subject Name : **Web Design and Development**

Unit - I

1. Write any five differences between static and dynamic websites?
2. What are the advantages of using HTML5?
3. Define web hosting and its types.
4. Write a HTML program to create a time table?
5. Explain some of the common lists to design a web page.
6. How do you validate a form in HTML with suitable example program?

Unit – II

1. Explain the different types of selectors in CSS with suitable example.
2. How to add CSS in HTML pages to format the document according to information in the style sheet with types?
3. To discuss the CSS background property is used to define the background effects on element and there are 5 CSS background properties that affect the HTML elements
4. What is the color property in CSS is used to set the color of HTML elements
5. Write short notes on CSS three types of gradients?

Unit – III

1. What is the difference between JavaScript and Java?
2. What is JavaScript? List some features of JavaScript.
3. What are the different data types present in JavaScript?
4. Write short notes on :
 - a. Type Conversion
 - b. Operators
5. What are the pop-up boxes available in JavaScript?

Unit – IV

1. Briefly explain the Conditional statements are in JavaScript.
2. What are the different types of looping statements available in JavaScript?
3. Define a named function in JavaScript and explain the functions parameters?
4. Write short notes on :

- a. Call()
 - b. Apply()
 - c. Array
5. Briefly explain about arrays in JavaScript.

Unit – V

1. What is Bootstrap? Explain the Responsive Web Design.
2. Define Bootstrap grid and explain the types of bootstrap grid classes.
3. What is the difference between Bootstrap 3 and Bootstrap 4?
4. How would you implement a carousel in bootstrap?
5. What is bootstrap pagination and how are they classified?



MALLA REDDY UNIVERSITY

School of Engineering

Financial Accounting and Management (AIML/DS/CS)

Subject Code: MR20-1BM0162

Question Bank

UNIT-I

1. What do you mean by Financial Accounting? Explain its Functions, Objectives, Scope, Nature and Applications
2. Discuss About the Accounting Principles
 - A) Accounting Concepts
 - B) Accounting Conventions
3. What are the various steps of Accounting Cycle? Explain
4. Write a short note on
 - A) GAAP
 - B) IASB
 - C) IFRS
5. Explain Branches of Accounting and Accounting Equation.

UNIT-II

6. Journalize the following transactions of Gautam & Co, post the same in relevant ledger account.

2020	
June 1	Karthik commenced business with Rs.20,000.
June 2	Paid into bank Rs.5,000.
June 3	Purchased Plant worth Rs.10,000 from Modi & Co.
June 6	Goods worth Rs.4,000 sold to Anbu
June 8	Sold goods worth Rs.2,000 for cash.
June 10	Goods returned by Anbu Rs.50.
June 15	Paid rent Rs.250.
June 18	Withdrawn from bank for office use Rs. 2,500.
June 20	Paid Salaries Rs.1,800.
June 25	Withdrawn for personal use Rs.250.
June 26	Goods returned to Anwar Rs.100.
June 27	Paid for office furniture Rs.1,500 by cheque.
June 28	Received Rs.3,900 cash from Anbu and discount allowed Rs.50.

June 29	Paid Anwar on account Rs.4,800 and discount allowed by him Rs.100.
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7. Journalize the following transactions of Sunanda & Co.

2019		Rs.
June 1	Started business with a capital of	60,000
June 2	Paid into bank	30,000
June 4	Purchased goods from Kamal on credit	10,000
June 6	Paid to Shiram	4,920
June 6	Discount allowed by him	80
June 8	Cash Sales	20,000
June 12	Sold to Hameed	5,000
June 15	Purchased goods from Bharat on credit	7,500
June 18	Paid Salaries	4,000
June 20	Received from Prem	2,480
June 20	Allowed him discount	20
June 25	Withdrew from bank for office use	5,000
June 28	Withdraw for personal use	1,000
June 31	Paid Hira by cheque	3,000

8. From the following information, draw up a Trial Balance in the books of Ashutosh Enterprises as on 31st March 2020.

Transactions	Rs.	Transactions	Rs.
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Capital	1,50,000	Sales	1,05,400
Furniture	40,000	Sundry Creditor	5,000
Cash in	7,000	Rent	2,000
Hand Cash	8,500	Stationary	16,000
at Bank	4,800	Outstanding	10,000
Electricity	500	expenses Fixed	6,000
exp. Carriage	2,400	Deposits Discount	1,050
Inward	8,000	paid Opening	3,200
Office	1,60,000	Stock Discount	1,200
Equipment	11,400	Received Postage	750
Sundry Debtors		& Telegram	
Machinery			
Salaries			

9. What is Double Entry System? Explain its Golden Rules, Advantages and Disadvantages

10. Discuss about the Revenue and Capital Expenses of Financial Statements.

UNIT-III

11. From the following balances of Mr. Raghava ascertain the Gross profit by preparing a **Trading Account** for year ended 31-3-2016.

Stock	Rs. 15,000
Sales	Rs. 28,000
Purchase returns	Rs. 400
Carriage inward	Rs. 500
Wages	Rs. 5,000
Sales Returns	Rs. 1,000
Manufacturing expenses	Rs. 200
Octroi	Rs. 600
Fuel	Rs. 800
Electricity	Rs. 600
Purchases	Rs. 10,000
Closing stock	Rs. 9,000

12. From the following Ledger balance of M/s. Rupali & Co. Prepare a **Trading** and a **Profit and Loss** Account for the period ended 31-12-2017.

Stock 1-1-2017	5,000
Purchases	60,000
Returns outward	5,000
Sales	1,05,000
Returns inward	5,000

Direct Wages	2,000
Indirect wages	1,000
Carriage	500
Carriage outward	1,000
Distribution expenses	500
Office Rent	3,000
Repairs	1,000
Import Duty	1500
Coal & Gas	1,500
Office Lighting	2,000
Closing Stock	20,000

13. From the following Trial Balance prepare the **Final accounts** of Mrs. Garima as on 31-3-2018.

Trial Balance of Mrs. Garima as on 31-3-2018.

Particulars	Amount Rs.	Particulars	Amount Rs.
Cash in hand	800	Sales	69,400
Goodwill	40,000	10 % loan 1-1-2003	51,000
Purchases	68,000	reserve for Bad Debts	500
Cash at bank	1,200	Creditors	8,000
Direct wages	2,000	Capital	90,000
Opening stock	35,000	Bills payable	2,000
Interest on loan	2,500		
Insurance	900		
Carriage on sales	900		
Carriage on purchases	400		
Commission	500		
Fittings	5,000		
Bad debts	200		
Buildings	25,000		
Plant and Machinery	10,000		
Postage & Telegram	500		
Debtors	25,000		
Salaries	3,000		
	2,20,900		2,20,900

Adjustments:

1. Stock as on 31-3-2018 Rs. 75,000
2. Provide 5% for doubtful debts
3. Provide depreciation 10% on fittings, 10% on Plant and Machinery and 5% on buildings
4. Mrs. Laxmi has taken Rs. 500 worth of stock for her domestic use
5. Stock worth Rs. 10,000 was destroyed in a fire accident for which the insurance company agreed to reimburse Rs. 2,000

14. Prepare Trading, Profit and Loss account and Balance Sheet as on 31-12-2015 from the following Trial Balance of Natasha

	Debit (Rs)		Credit (Rs)
Cash on hand	3,000	Capital	50,000
Purchases	40,000	Sales	72,000
Returns	500	Returns	300

Wages	5,000	Creditors	4,000
Salaries	3,200	Bills payable	3,700
Stock 1-1-2015	22,000		
Carriage inwards	800		
Carriage outwards	1,200		
Buildings	25,000		
Machinery	15,000		
Insurance	700		
Debtors	8,000		
Bills Receivable	5,600		
	1,30,000		1,30,000

Trial Balance as 31-12-2015

Make the following adjustments:

1. Closing stock Rs. 26,000
2. Outstanding salaries Rs. 550
3. Write off bad debts Rs. 600 and provision @ 5% has to be made on debtors
4. Machinery and Buildings are to be depreciated by 700 and 1,200 respectively.
5. Prepaid insurance Rs. 200

15. What is Computerized Accounting System (Tally-ERP)? Explain its Applications, Types, Importance, Advantages and Disadvantages.

UNIT-IV

16. What do you mean by Management? Explain the Concept, Nature, Process and Functions of Management

17. What do you understand by School of Management Thought? Explain the 14 principles of Management by Henry Fayol

18. Discuss about the Taylor's Scientific Theory

19. What is Leadership? Explain its Concept, Characteristics and Social Responsibilities of Management

20. Explain the Elton Mayo's Human Relations Theory

UNIT-V

21. What is Organization? Explain Features and Structure of Organization

22. Difference between Centralization and Decentralization

23. Write a short note on

A) Departmentation B) Span of Control

24. What is Organization Design? Explain about Line, Staff and Functional Organization

25. Write a short note on

A) Matrix Organization B) Project Organization Committee

C) Form of Organization D) Group Dynamics

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