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SARDAR PATEL UNIVERSITY

S.Y.B.C.A. (THIRD SEMESTER)

US03BCA01 (RELATIONAL DATABASE MANAGEMENT SYSTEM - I)

DATE: 09TH NOVEMBER, 2011 (WEDNESDAY)

Time: 2.30 pm to 5.30 pm

Max. Marks: 70

Q.1 Select appropriate answer from given choice**[10]**

- (1) Which level of three schema architecture defined by user or application program
(a) External level (b) Conceptual level (c) Internal level (d) All of above
- (2) Who defines rules for RDBMS
(a) E-R (b) E.F.CODD (c) DDL (d) None of above
- (3) Which of the following is not SQL*plus command
(a) CONNECT (b) SET LINESIZE (c) REVOKE (4) DESCRIBE
- (4) Which of the following is not a pseudo column
(a) USER (b) DUAL (c) ROWID (d) None of above
- (5) Which of the following is not a type of join
(a) CROSS (b) OUTER (c) EQUI (d) None of above
- (6) Which command will not complete the transaction
(a) CREATE (b) RENAME (c) REVOKE (4) COMMIT
- (7) Which of the following command is not SQL*plus report command
(a) SET HEADSEP (b) SET PAGESIZE (c) SET PAUSE (d) SPOOL
- (8) What is the default CACHE for a sequence
(a) 2 (b) 20 (c) 8 (d) None of above
- (9) Output of LENGTH(ABS(CEIL(-15.16)))
(a) 16 (b) 2 (c) 3 (d) None of above
- (10) Which of the following is not a constraint
(a) DEFAULT (b) NOT NULL (c) CHECK (d) None of above

Q.2 Attempt any SIX**[12]**

- (1) Explain in brief Data Definition Language (DDL).
- (2) Define entity integrity, referential integrity.
- (3) Define SQL. List advantages and disadvantages of SQL.
- (4) Define data constraints. List advantages of using data constraints.
- (5) Explain in brief GROUP BY.
- (6) What is transaction processing command? List transaction processing commands available in Oracle.
- (7) List relational operators, arithmetic operators available in Oracle.
- (8) Define PRIMARY KEY, FOREIGN KEY.

Q.3

- (1) Explain three-schema architecture for a Database Management System. **[5]**
- (2) Explain network data model in detail. **[3]**

OR

- (1) Explain one-to-one and one-to-many relationships with suitable examples. **[5]**
- (2) Explain relational data model in detail. **[3]**

①

Q.4

- (1) List and explain symbols used in E-R diagram with simple example. [5]
(2) Define: entity, attribute, relationship. [3]

OR

- (1) List CODD rules and explain any three of them in detail. [5]
(2) Draw E-R diagram to issue a book from library. [3]

Q.5

- (1) List any four Data Manipulation Language commands and explain any two of them in detail with proper syntax, use, description and example. [5]
(2) Explain any three data types available in Oracle. [3]

OR

- (1) List any four Data Definition Language commands and explain any two of them in detail with proper syntax, use, description and example. [5]
(2) Explain following commands: [3]
(a) EDIT (b) DESCRIBE (c) SPOOL

Q.6

- (1) Define Primary Key. How user can apply foreign key constraint after creating a table, explain with suitable example. [4]
(2) Explain following functions with suitable syntax and example. [4]
(a) ROUND (b) AVG

OR

- (1) Define Unique Key. How user can apply CHECK constraint after creating a table, explain with suitable example. [4]
(2) Explain following functions with suitable syntax and example. [4]
(a) SUBSTR (b) NVL

Q.7

- (1) Define view. Explain characteristics of updatable view. [4]
(2) Write note on SEQUENCE. [4]

OR

- (1) Define sub query. Explain the use of IN, ALL and ANY for sub query with suitable examples. [4]
(2) Define updatable view. Explain advantages and disadvantages of creating a view. [4]

Q.8

- (1) Explain following SQL*plus report commands with suitable syntax, and description. [4]
(a) TTITLE (b) COLUMN (c) SET PAUSE (d) REMARK

- (2) How user can give the privileges to user(s), explain with proper syntax, use, description and example. [4]

OR

- (1) How user can take back the privileges from the user(s), explain with proper syntax, use, description and example. [4]
(2) Explain COMMIT and ROLLBACK commands with proper use, description and example. [4]

Best of Luck

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SARDAR PATEL UNIVERSITY**BCA -3RD SEMESTER****US03BCA02 :OBJECT ORIENTED PROGRAMMING AND C++****11th November,2011****Time:2:30 TO 5:30 pm****Marks : 70****Q-1 Answer the following:****10**

- [1] From the below operator which is "extraction" operator.
 (a) >> (b) <<
 (c) > (d) <
- [2] Inline functions are invoked at the time of _____
 (a) Run time (b) Compile time
 (c) Depends on how it is invoked (d) Both b and c above
- [3] The _____ is an exit-controlled loop.
 (a) switch (b) while
 (c) for (d) do-while
- [4] The default access level assigned to members of a class is _____
 (a) Public (b) Protected
 (c) private (d) none of these
- [5] Which of the following operators below allow to define the member functions of a class outside the class?
 (a) :: (b) ?
 (c) :? (d) %
- [6] The main() function in c++ will return by default _____
 (a) Void (b) Float
 (c) Int (d) Char
- [7] Which one of the following is not a fundamental data type in C++
 (a) Float (b) String
 (c) Int (d) char
- [8] "do-nothing" function are also known as _____
 (a) Friend function (b) Pure virtual function
 (c) Virtual function (d) Function overloading
- [9] Which function is used to move get pointer to a specified location?
 (a) Seekg() (b) Seekp()
 (c) Open() (d) Close()
- [10] A const modifier defaults to _____
 (a) Float (b) Void
 (c) Int (d) None

Q-2 Do as directed. (Attempt any 6)**12**

- (1) Explain Polymorphism.
- (2) How does a main() function in c++ differ from main() in c?
- (3) Explain Pass by value and Pass by reference.
- (4) List out different types of Expressions.
- (5) Define the usage of pointer?
- (6) When will you make a function inline? Why?
- (7) Define "nameless object".
- (8) Explain break and continue.

Q-3	A	Write advantages of Object – Oriented Programming over Procedural programming.	5
	B	Explain memory management operator with example.	3
OR			
Q-3	A	Explain concept of Encapsulation & Inheritance.	5
	B	Explain structure of c++ program.	3
Q-4	A	Explain cout and cin operator in detail.	5
	B	Differentiate between if...else and switch.	3
OR			
Q-4	A	What is an array? Explain declaration, initialization and accessing of integer numbers of one dimensional array.	5
	B	Differentiate between while and do-while loop with example.	3
Q-5	A	What is Class & Object? How to access members of Class? Explain with example.	4
	B	What is Constructor? List out types of Constructor and explain any one with example.	4
OR			
Q-5	A	Explain array of object with suitable example.	4
	B	What is Constructor Overloading? Explain with example.	4
Q-6	A	What is function? Explain definition, declaration and call of function with example.	5
	B	Explain constructor in derived class in detail.	3
OR			
Q-6	A	List out different forms of Inheritance and explain any one with example.	5
	B	Explain destructor in detail.	3
Q-7	A	What is Operator Overloading? How unary operator overloaded? Explain in detail.	5
	B	List out operator that can be overloaded and not can not be overloaded.	3
OR			
Q-7	A	Explain Friend Function with syntax by taking suitable example.	5
	B	Describe operator keyword.	3
Q-8	A	Explain get() & put() function with example.	4
	B	Describe various classes available for file operation.	4
OR			
Q-8	A	Explain how file is open using Constructor.	4
	B	Explain read() and write() functions with syntax.	4

---All the Best---

SARDAR PATEL UNIVERSITY
SYBCA Examination, Third Semester
Monday, 14th November 2011
02.30 p.m to 4.30 p.m
Introduction to Microprocessor-US03EBCA01

Marks: 70

Que.1 Do as Directed.**[10]**

1. 8086 Microprocessor chip is _____ bits processor.
 (A) 8-bits (B) 32-bits
 (C) 16-bits (D) 64-bits
2. Full form of BIU is _____
 (A) Bus Interface Unit (B) Bit Interface Unit
 (C) Byte Interface Unit (D) Bus Internal Unit
3. An assembler translates the assembly language _____ to the binary codes.
 (A) Program (B) Mnemonics
 (C) Code (D) None of these
4. A flag is a one type of _____
 (A) Latch (B) Gate
 (C) Flip-Flop (D) None of these
5. DIV stands for _____
 (A) Division (B) Signed Division
 (C) Unsigned Division (D) None of these
6. Which flags are affected after OR instruction?
 (A) CF, SF, ZF (B) OF, CF, ZF
 (C) PF, SF, ZF (D) CF, OF, ZF
7. ROL stands for Rotate _____ of operand left.
 (A) each Bits (B) each Bytes
 (C) all Bits (D) all Bytes
8. JZ affects _____ flags.
 (A) ZF (B) SF
 (C) NO (D) None of these
9. The SEGMENT directive is used to indicate the _____ of logical segment.
 (A) Start (B) End
 (C) Address (D) None of these
10. An END directive ends the _____
 (A) Segment (B) Program
 (C) Procedure (D) None of these

Que.2 Write a Short Note Questions. [Any 6 out of 8]**[12]**

1. What is Assembler? Explain it in brief.
2. Give a full-form for the following:
 - 1) SI 2) SP
 - 3) SS 4) DS
3. Explain NOT instruction with example.
4. Explain CMP instruction with example.
5. Explain ROR instruction with example.
6. What is the use of LABEL? Explain with example.
7. What is Assembler Directives? List all directives and explain one of them with example.
8. List all arithmetic instruction.

Que.3 Answer the Following Questions. [12]

1. Explain BIU in detail.
2. Explain MUL instruction in detail.
3. What is pipelining? Explain it in brief.
4. Explain LOOPZ instruction with example.

OR

Que.3 Answer the Following Questions. [12]

1. Explain EU in detail.
2. Explain INC & DEC instructions in detail.
3. Write a short note on SHL and SHR with example.
4. Which are the Looping structures? Explain any one in detail.

Que.4 Answer the Following Questions. [12]

1. Explain MOV & CMP instructions in detail with example.
2. Explain the overview of 8086 register set.
3. Explain LOOP instruction with example.

OR

Que.4 Answer the Following Questions. [12]

1. Explain conditional flags in detail.
2. List control structures. Explain any one in detail.
3. Explain structure of assembly program.

Que.5 Answer the Following Questions. [12]

1. Explain AAD -BCD instruction in detail with example.
2. What are the difference between Unconditional and conditional JUMP instructions? Explain with an example.
3. Explain WHILE_DO and REPEAT_UNTIL with example.

OR

Que.5 Answer the Following Questions. [12]

1. Write a note on instruction pointer.
2. Discuss NEG instruction.
3. What are the differences between SUB and SBB instructions?

Que.6 Answer the Following Questions. [12]

1. Explain 8086 internal architecture with diagram.
2. Write a program of Factorial Number 5.

OR

Que.6 Answer the Following Questions. [12]

1. Explain Assembler directives: ASSUME, END, and SEGMENT.
2. Write a program for largest number from given three numbers.

DO YOUR BEST

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No. of Printed Pages: 3

SARDAR PATEL UNIVERSITY

External Examination

SYBCA – (SEMESTER-III)

Date : 08-11-2011

Subject : Financial and Accounting Management

Time : 02:30 p.m to 05:30 p.m Course No: US03FBCA01

Marks : 70

Q.1 Multiple choice questions.

[10]

- i. Immediately, below a journal entry written in the journal, a brief explanation of the transaction is given in the brackets is known as
- | | |
|-----------------|-----------------|
| a) Journalising | b) Narration |
| c) Posting | d) All of above |
- ii. "Debit what comes in and credit what goes out" – is the debit and credit rule of _____ type of account.
- | | |
|------------|-------------|
| a) Capital | b) Personal |
| c) Real | d) Nominal |
- iii. The Sales Book is best described as:
- | | |
|-------------------------------------|------------------------------|
| a) Containing customers' accounts. | b) Containing real accounts. |
| c) Part of the double entry system. | d) A list of credit sales. |
- iv. A Ledger Account is prepared from:
- | | |
|------------|-------------------|
| a) Events | b) Transactions |
| c) Journal | d) Trial Balance. |
- v. The _____ will be added to the capital in the Balance sheet.
- | | |
|-----------------|---------------|
| a) Gross Profit | b) Net Profit |
| c) Net Loss | d) None |
- vi. _____ is the permanent and continuing diminution in the quality, quantity or value of an assets.
- | | |
|--------------|-----------------|
| a) Balance | b) Depreciation |
| c) Liability | d) None |
- vii. The conflict between the shareholder's and management's goals is known as _____.
- | | |
|--------------------|---------------------|
| a) Risk trade off | b) CWM |
| c) Agency Problems | d) all of the above |
- viii. Total assets (TA) include:
- | |
|--|
| a) Fixed assets and current assets |
| b) Current capital |
| c) Current liabilities and fixed liabilities |
| d) None of these. |
- ix. Which group of ratios shows the extent to which the firm is financed with debt?
- | | |
|--------------------------|--------------------|
| a) Liquidity ratios. | b) Debt ratios. |
| c) Profitability ratios. | d) Activity ratios |
- x. The break-even point is where
- | |
|--|
| a) Total sales equals total variable costs. |
| b) Contribution margin equals total fixed costs. |
| c) Total variable costs equal total fixed costs. |
| d) Total sales equals total fixed costs |

Q.2 Shot answer (Attempt any six questions) [12]

- i. Define the term journal.
- ii. Explain three columnar cash book.
- iii. What is Trading Accounts?
- iv. Explain Investment decision.
- v. Define Debt ratio.
- vi. Define CVP analysis.
- vii. What is posting?
- viii. Differentiate between real and financial assets.

Q.3 [A] Write down the rules of Debit and Credit for different types of account with example. [03]

[B] Explain the different types (classification) of accounts with example. [05]

OR

[A] Pass the journal entries for the following transactions: [05]

Date	Particulars	Amount
2004		
Jan 01	Ram started business with cash	50,000
Jan 05	Opened a bank account by depositing cash	20,000
Jan 08	Purchased goods from Regal & Co	8,000
Jan 10	Paid rent by cheque.	2,000
Jan 15	Received commission by cash.	500

[B] Define the following terms: [03]

- i) Debtors.
- ii) Bad Debts.
- iii) Solvent.

Q.4 [A] What is trial balance? State advantages and disadvantages of it. [04]

[B] What is ledger? State its advantages and disadvantages. [04]

OR

Q.4 [A] Explain sales book with example: [03]

[B] Prepare Two Column (Bank and Cash column) Cash Book from the following transactions: [05]

2006 .

- July 1 Cash in hand 20,000, Cash at Bank 27,000
" 3 Goods sold for cash 10,000
" 6 Bought Goods by Cheque 6,000
" 8 Cash deposited into Bank 10,000
" 10 Paid Trade Expenses through Cheque 2,000
" 12 Paid Audit Fee for Cash 1,000
" 18 Withdrew from bank for office expenses 2,000
" 20 Purchased office machine from Mahesh on credit 5,000
" 22 Wages paid 1,000
" 26 Cash Sales 5,000

Q.5 [A] Explain Balance Sheet. Also, write the difference between Balance sheet and Trial balance. [05]

[B] Explain Sum of Year digits method of calculating depreciation. [03]

OR

Q.5 From the following balances prepare Trading and Profit & Loss Account and a balance Sheet on the 31st December, 2001: [08]

	Rs.		Rs.
Debit Balances :		Debit Balances (Contd.) :	
Machinery	3,500	Rent	450
Debtors	2,700	Sundry Expenses	200
Drawings	900	Carriage	150
Purchases	9,500	Credit Balances :	
Wages	5,000	Capital Account	10,000
Bank	1,500	Creditors	1,400
Stock (1 st Jan,2001)	2,000	Sales	14,500

Additional Information

1. Closing stock Rs.600/-
2. Depreciate Machinery by 5% on original cost.
3. Provide Interest on capital @ 10%.

Q.6 [A] Explain dividend decision and liquidity decision. [04]

[B] Describe controller's and treasurer's functions in the Indian context. [04]

OR

Q.6 [A] Explain any four role's of finance manager. [04]

[B] Explain the scope of financial management. [04]

Q.7 [A] Write down the limitations of ratio analysis. [04]

[B] Explain the following Liquidity ratios: [04]

i) Current ratio

ii) Quick ratio

OR

Q.7 [A] Write a short note on user of ratio analysis. [04]

[B] Explain the following Profitability ratios: [04]

i) Gross Profit ratio

ii) Net Profit Margin

Q.8 [A] Write down the limitations of CVP analysis. [03]

[B] Define break even point. How would you compute the BEP? [05]

OR

Q.8 [A] Explain the Cash Break-Even point. [03]

[B] Explain the Fixed and Variable costs under Break-Even analysis. [05]

X = X = X

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