

## M2-R3: BUSINESS SYSTEMS

### NOTE:

1. There are **TWO PARTS** in this Module/Paper. **PART ONE** contains **FOUR** questions and **PART TWO** contains **FIVE** questions.
2. **PART ONE** is to be answered in the **TEAR-OFF ANSWER SHEET** only, attached to the question paper, as per the instructions contained therein. **PART ONE** is **NOT** to be answered in the answer book.
3. Maximum time allotted for **PART ONE** is **ONE HOUR**. Answer book for **PART TWO** will be supplied at the table when the answer sheet for **PART ONE** is returned. However, candidates, who complete **PART ONE** earlier than one hour, can collect the answer book for **PART TWO** immediately after handing over the answer sheet for **PART ONE**.

**TOTAL TIME: 3 HOURS**

**TOTAL MARKS: 100**  
**(PART ONE – 40; PART TWO – 60)**

### **PART ONE** **(Answer all the questions)**

1. **Each question below gives a multiple choice of answers. Choose the most appropriate one and enter in the “tear-off” answer sheet attached to the question paper, following instructions therein. (1 x 10)**
  - 1.1 A sales invoice
    - A) Debits customers and credits sales
    - B) Credits customers and debits sales
    - C) Debits finished stock and credits sales
    - D) None of the above
  - 1.2 In a data processing system, if the input data is processed, as the transaction occurs, it is called
    - A) Parallel
    - B) Real time
    - C) Batch
    - D) Virtual
  - 1.3 Check digit is usually added to
    - A) Save As important tool for data validation
    - B) The product code in sales analysis system to ensure that variable information is assigned to the correct item
    - C) General Ledger Code to ensure that correct account head is debited/credited
    - D) All of the above
  - 1.4 In preparing test data the following is not a desirable characteristic
    - A) Every statement should be executed
    - B) Must be comprehensive
    - C) Users do not participate
    - D) None of the above

- 1.5 Value of stock can be done by  
A) LIFO  
B) Standard Cost  
C) Average Cost  
D) Any of the above
- 1.6 Which of the following commands can be used to delete all Files with extension name “.BAK” in the current directory while running a DBMS software?  
A) RUN DEL \*.BAK  
B) RUN ERASE \*.BAK  
C) !DEL \*.BAK  
D) All of the above
- 1.7 The function to remove leading and trailing spaces from a character expression is  
A) TRIP( )  
B) LTRIM( )  
C) RTRIM( )  
D) ALLTRIM( )
- 1.8 Which one of the following is an invalid statement?  
A) A procedure can be entered in a procedure file or in the command File itself.  
B) Each procedure begins with PROCEDURE <procedure name> Command.  
C) A procedure normally ends with RETURN but we can skip the RETURN at the end of the procedure.  
D) None of the above
- 1.9 Which command is used for closing the text file that has been created with SET ALTERNATE TO <file name> Command?  
A) SET ALTERNATE OFF  
B) CLOSE DATABASES  
C) CLOSE ALTERNATE  
D) CLEAR ALL
- 1.10 The MODIFY command is used to  
A) Modify the structure of a database file  
B) Modify a report format file  
C) Add a new field to every record of a database file  
D) None of the above

2. Each statement below is either TRUE or FALSE. Choose the most appropriate one and ENTER in the “tear-off” sheet attached to the question paper, following instructions therein. (1 x 10)

- 2.1 Capital is a liability head.
- 2.2 Leave record, though a function in personnel management does not form part of the payroll system.
- 2.3 A credit purchase transaction increases the liability of a company.
- 2.4 For carrying out historical analysis, previous year consumption is stored in the item master file.
- 2.5 Invoice detail file is a master file in a sales invoicing system.
- 2.6 If RATE is a numeric field, LIST RATE/1.1 is invalid.
- 2.7 Up to 10 database files can be opened in a work area.
- 2.8 A function such as UPPER( ) can be used while indexing a database file with INDEX.
- 2.9 One can create an index tag while defining the structure of the database file.
- 2.10 STORE[20] TO NUM creates a character variable.

3. Match words and phrases in column X with the closest related meaning/ word(s)/phrase(s) in column Y. Enter your selection in the “tear-off” answer sheet attached to the question paper, following instructions therein. (1 x 10)

X		Y	
3.1	Ageing Analysis	A.	Pseudo code
3.2	P & L of operations	B.	Delivery timeliness
3.3	LIFO	C.	Merge in Balance Sheet
3.4	Vendor rating	D.	INPUT
3.5	Aid to programming	E.	Debtor Control
3.6	Created numeric variable	F.	VALID
3.7	@..GET	G.	Inventory Valuation
3.8	.SPR	H.	OTHERWISE
3.9	DO CASE	I.	SELECT
3.10	NO DELETE	J.	BROWSE
		K.	Screen file
		L.	@..SAY..GET

4. Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Enter your choice in the “tear-off” answer sheet attached to the question paper, following instructions therein. (1 x 10)

<b>A.</b>	Operating profit	<b>B.</b>	Payroll	<b>C.</b>	Software
<b>D.</b>	Semantics	<b>E.</b>	Utility Programs	<b>F.</b>	Customer details
<b>G.</b>	Key	<b>H.</b>	Module	<b>I.</b>	Indexed
<b>J.</b>	Zero	<b>K.</b>	Net Profit	<b>L.</b>	GO TO

- 4.1 A portion of a program that performs a specific program function is called \_\_\_\_\_.
- 4.2 \_\_\_\_\_ is the difference between gross profit and operating expenses.
- 4.3 Typically, a computer based provident fund system uses inputs from the computerised \_\_\_\_\_.
- 4.4 A unique identifying value that is found in every record in a file is called a record \_\_\_\_\_.
- 4.5 Routine and mundane tasks such as sorting, copying etc. are done by \_\_\_\_\_.
- 4.6 Study of the meaning of the language structure is called the \_\_\_\_\_ of the language.
- 4.7 A database management system is essentially a specialized type of \_\_\_\_\_ package.
- 4.8 \_\_\_\_\_ file is a master file in a sales invoicing system.
- 4.9 To use the LOCATE command, the database file need not be sorted or \_\_\_\_\_.
- 4.10 \_\_\_\_\_ statement is not desirable in a structured program.

**PART TWO**  
(Answer any **FOUR** questions)

- 5.
- What is meant by data processing?
  - How is database different from a file?
  - What is a sequential file? How do we decide to use a particular file organization for an application?

**(4+4+7)**

- 6.
- What is database? Briefly describe the characteristics of the database.
  - What is RDBMS? Mention any four advantages of the RDBMS.

**(8+7)**

- 7.
- What is a report generator? Explain.
  - Distinguish between Structured Programming and Modular Programming.
  - Distinguish between Sorting and Indexing.

**(5+5+5)**

8. Write SQL commands for a) to f) and write the output of g) on the basis of table MOV.

No.	Name	Type	Rating	Stars	Qty.	Price
1.	Gone with the wind	Drama	G	Gable	4	39.95
2.	Friday the 13 <sup>th</sup>	Horror	R	Jason	2	60.95
3.	Top Gun	Drama	PG	Cruise	7	49.95
4.	Splash	Comedy	PG13	Hanks	3	29.95
5.	Independence Day	Drama	R	Turner	3	19.95
6.	Risk Business	Comedy	R	Cruise	2	44.95
7.	Cocoon	Sci-fi	PG	Ameche	2	31.95
8.	Crocodile Dundee	Comedy	PG13	Harris	2	69.95
9.	101 Dalmatians	Comedy	G	Hoffman	3	59.95
10.	Tootsie	Comedy	PG	Croft	1	29.95

- Find the total value of the movie cassettes available in the library.
- Display a list of all movies with price over 20 and sorted by Price.
- Display all the movies sorted by QTY in decreasing order.
- Display a report listing a movie number, current value and replacement value for each movie in the above table. Calculate the replacement value for all movies as QTY \* Price \* 1.15.
- Count the number of movies where Rating is not "G".
- Insert a new movie in the MOV table. Fill the entire column with some values.
- Give the output of the following SQL statement.
  - Select MAX(Price) from MOV where Price > 30.
  - Select SUM(Price \* QTY) from MOV where QTY < 4.
  - Select COUNT(DISTINCT TYPE).

**(2+2+2+2+2+2+3)**

9. A database table called PERSON contains the fields NAME, BASIC and HRA. Write a computer program to print a report with employee name and total salary for those employees whose total salary is more than 10,000. Total Salary = BASIC + HRA. At the end, the program should also print the total number of employees whose total salary is more than 10,000.

**(15)**

