

**Section A**

**[40 marks]**

**Answer ALL questions in this section.**

**A1.** For each of the following statements, indicate whether it is TRUE or FALSE. [10]

- (a) The DISTINCT keyword is used to return only distinct (different) values.
- (b) A Foreign key is a unique column.
- (c) String is one of the Access data type.
- (d) You can order by a column that you have not selected.
- (e) The default sort order is descending.
- (f) Single-row functions work on many rows to produce a single result.
- (g) Single-row function can be used at SELECT, WHERE and ORDER BY clause.
- (h) Group functions include nulls in calculations.
- (i) Group functions work across many rows to produce one result.
- (j) You cannot use group functions, if you did not include a GROUP BY clause.

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CDB101 - September 2013 - QP

- A2.** Complete the following statements by writing the most appropriate word in your answer booklet. [12]

SELECT	SAVEPOINT	UPDATE
GRANT	DROP	CREATE
COMMIT	TRUNCATE	DELETE
ROLLBACK	INSERT	REVOKE

- (a) \_\_\_\_\_ is Data retrieval language (DRL).
- (b) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ are Data manipulation language (DML).
- (c) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ are Data definition language (DDL).
- (d) \_\_\_\_\_, \_\_\_\_\_ are Data control language (DCL).
- (e) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ are Transaction control.
- A3.** (a) Explain the meaning of NULL value. [2]
- (b) Explain the objective of 'ORDER BY' clause. [2]
- (c) State the comparison operator to find the row that has null value. [1]
- (d) State the Access function to deal with null value. [1]
- (e) Provide the statement to convert the column Price that has null value to display a zero using the function that stated in part (d). [4]
- A4.** Write the complete SELECT statement to display the column workers name (wname) and their salary (sal) for those who earn more than 2000 per month from the WORKER table. [8]

**Section B**

**[60 marks]**

**Answer ANY TWO questions in this section.**

**B1.**

**[30 marks]**

- (a) (i) State TWO features for a 'Primary key'. [2]
- (ii) Based on the table below, which field is best to be chosen as a Primary key.  
Explain your answer. [2]

ProductID	ProductName	Price
P001	Kitchen Table	\$599
P002	Coffee Table	\$199

- (b) Answer the following questions, based on the table below. The table name is BEVERAGE. Prices are in dollars and cents.

ID	NAME	PRICE
B01	MILO	1
B02	NESCAFE	0.8
B03	ORANGE JUICE	2.5

Drinks that are less than a dollar will be increased in price by 0.10 cents. Write a statement to display the name, current price and new price of those drinks. [8]

Sample Output:

NAME	PRICE	NEW PRICE
NESCAFE	0.8	0.9

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- (c) Answer the following question based on the table below.

**MOVIE**

MovieID	MovieName	MDate	MTime
M11	Mission Impossible	12-Jun-13	23:00
M14	Harry Potter	14-Jun-13	14:00

- (i) Write the SELECT statement to concatenate the columns MovieName, MDate and MTime. Rename the column aliases as Movie's Information. [10]

Movie's Information

Mission Impossible will be shown on 12-Jun-13 at 23:00.

- (ii) Show the Access function and argument that will change the MDate column from the MOVIE table to display in this format '12 of June 2006, Monday'.

Note: You do not need to write the complete SELECT statement. [8]

**B2.**

**[30 marks]**

- (a) Describe the THREE case conversion functions. Give ONE example for each. [9]
- (b) Answer the following question based on the table below.

**Movie**

MovieID	MovieName	MDate	MTime
M11	Mission Impossible	12-Jun-13	23:00
M14	Harry Potter	14-Jun-13	14:00
M18	Spiderman	18-Jun-13	21:00
M20	Lord of the Rings	01-Jul-13	15:00

- (i) Write the SELECT statement to display the MovieName and MTime for those movies will be shown at 21:00 and 23:00 hours using the IN operator. [6]
- (ii) Write the SELECT statement to display the MovieName and MDate for those movies will be show only during June. You have to use the BETWEEN...AND operator. [6]
- (c) (i) State THREE examples of string manipulation functions in Access. [3]
- (ii) What is the Access date function that allows you to add number of day to a date? [1]
- (iii) What is the Access date function that allows you to subtract number of day to a date? [1]
- (iv) Describe the meaning of CDate() and CStr (). [4]

**B3.**

**[30 marks]**

- (a) (i) Define 'Joins'. [1]
- (ii) How many join conditions is needed to join three tables? [1]
- (iii) Write the SELECT statement to join the table EMPLOYEE and DEPT. Display the column Ename and DeptName. The common column for both tables is the DeptNo. [9]
- (b) (i) State FOUR guidelines when constructing a subqueries. [4]
- (ii) List THREE operators that can be used in a single-row subqueries. [3]
- (iii) Write the SELECT statement to find out who has the lowest salary from the EMPLOYEE table. The output will display the Ename and Sal column. [9]
- (c) Write a SQL statement that displays the result of the calculation 'add 5 to 219 and multiply the result by 15'. [3]

**-END OF PAPER-**