

**SECTION A**

**[40 Marks]**

**Answer ALL questions in this section.**

- A1.** 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.

- A2.** (a) Write the SQL statements for each of the following questions based on the table below.

Furniture

ID	Description	Price
1001	Sofa	1199
1002	Bed	3999
1003	Dining Set	1999
1004	TV cupboard	888
1005	Coffee Table	555

Display all contents from the Furniture table.

[4]

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- (b) Write the command to display the price column in the format shown below.  
You do not need to write the SELECT statement. [7]

*Required output structure:*

*\$1,199.00*

- A3.** Briefly describe the following terms in the context of database.

- (a) Multi value attribute [2]

- (b) Ternary relationship [2]

- A4.** Draw an Entity Relationship Diagram to represent scenario below: [7]

Student is to provide their student ID and name when they are register to attend the graduation ceremony. The Graduation committee will inform student for the Graduation date, time and venue six months before the ceremony.

- A5.** Answer the following question based on the table below.

TOY

Toy ID	Toy Name	Quantity	Price
T001	Pokemon	8	15
T002	Teddy Bear	5	10
T003	Barbie	10	20

Write a select statement to display all information about the toys that the quantity is more than 5 and price is not higher than 12 dollars. [6]

**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]

Product ID	Product Name	Price
P001	Kitchen Table	\$599
P002	Coffee Table	\$199

- (b) Provide EIGHT benefits of using Database Approach as compare to using File Processing Approach. [8]
- (c) Answer the following question based on the table below.

MOVIE

Movie ID	Movie Name	M Date	M Time
M11	Mission Impossible	12-Jun-06	23:00
M14	Harry Potter	14-Jun-06	14:00

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

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Sample Output:

Movie's Information

Mission Impossible will be shown on 12-Jun-06 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 2009, Monday**'.

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

[8]

**B2.**

**[30 marks]**

- (a) Write an SQL statement to display member\_id, borrow\_date and due\_date from a table called Books\_Borrowing as shown below. Due\_date is calculated as 21 days after the borrow\_date. [7]

Books\_Borrowing

Member_id	Borrowdate_date	Book_tittle
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- (b) Write an SQL statement to calculate the number of rows in the MEMBER table. [4]
- (c) Identify the most appropriate group function name for the following tasks. [4]
- (i) To find the mean of the column values
  - (ii) To total up the number of records in a table
  - (iii) To find the highest value in the column
  - (iv) To add up all the values in a column
- (d) The following table only consists of one column and one row. You are required to write the SQL statement.

**Test**

Hiredate
12-Mar-10

- (i) Display the weekday for the hiredate in the day of the week format (for example, 'Thursday'.) [4]
- (ii) Calculate number of months between today's date and the hiredate. Display the column heading as "Months Worked". [6]
- (e) State FIVE examples of string manipulation functions in Access. [5]

**B3.**

**[30 marks]**

- (a) Answer the following question, based on the below table. The table name is Product.

ProductId	BrandName	Quantity
TV101	Toshiba	5
TV002	Sony	12
TV400	Philips	15
TV851	Samsung	2
TV006	Pioneer	11

Write the SQL statements to accomplish the following tasks.

- (i) Display the ProductID and BrandName for all that have a quantity greater than 10. [5]
- (ii) Display the BrandName and Quantity for all the stock in descending order. [5]
- (iii) Write an SQL statement to display all BrandNames that start with the letter 'S' from product table. Label the BrandName column as "Brands start with S". [5]
- (b) List and describe the TWO types of Functions. [6]
- (c) List the FOUR types of Single-row functions. [4]
- (d) List the FIVE different types of database model. [5]

**-END OF PAPER-**