COMPUTER SCIENCE (INTER PART — II) Time Allowed: 20 Minutes
PAPER — II (Objective Type) Maximum Marks: 15

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink. Cutting or filling two or more circles will result in zero mark in that question.

(MS —ACCESS)

1-1	A primary key that consists of two or more attributes is called :	
	(A) Foreign key (B) Double key (C) Composite key (D) Candidate key	
2	In 2NF, which form of dependency is removed :	
	(A) Transitive (B) Partial (C) Functional (D) Normal	
3	The data in tables is entered in :	
	(A) Design view (B) Normal view (C) Datasheet view (D) Layout view	
4	MS - Access saves database file with extension :	
	(A) .mdb (B) .mbd (C) .msd (D) .maf	
5	In an ER diagram, rectangle shape is used for :	
	(A) Entity (B) Attribute (C) Relationship (D) Key	
6	The process of arranging data in a proper sequence is called :	
	(A) Sorting (B) Storing (C) Summarizing (D) Saving	

C-Language OR Visual Basic

(C-Language)

7	Which is not a logical operator in C :
	(A) || (B) && (C) ! (D) =
8	Which of the following is an invalid variable name :
	(A) Ali (B) abs_786 (C) int (D) _abc
9	Global variables are created in :
	(A) RAM (B) Disk (C) ROM (D) Cache
10	The selection statement is also known as :
	(A) Loop (B) Chosen statement (C) Decision making statement (D) Syntax
11	The statement that terminates loop early :
	(A) Terminate (B) Break (C) Exit (D) End
12	Which of the following function is used to write a string to a file :
	(A) puts( ) (B) putc( ) (C) fputs( ) (D) fgets( )
13	Which of the following is not an input function :
	(A) scanf ( ) (B) getch ( ) (C) getche ( ) (D) input ( )
14	A loop within a loop is called :
	(A) Complex loop (B) Nested loop (C) Composite loop (D) Infinite loop
15	The translated program into machine code is called :
	(A) Source Code (B) Object Code (C) Syntax Code (D) Translated Code

O R

(Visual Basic)

7	Variable name cannot begin with a (n) : (A) Under score (B) Upper case letter (C) Lower case letter (D) Number
8	List of commands such as open, print and exit can be found on : (A) Toolbar (B) Toolbox (C) Menu bar (D) Solution explorer
9	One execution of a loop is known as : (A) Iteration (B) Duration (C) Cycle (D) Test
10	How many bytes are occupied by decimal data type in VB : (A) 12 (B) 8 (C) 16 (D) 1
11	All of the following are logical operators except-------- . (A) NOT (B) NO (C) AND (D) OR
12	Which of the following control is invisible at runtime : (A) Label (B) List box (C) Timer (D) Image
13	Which form property will put text in the title bar of the form : (A) Title (B) Border text (C) Header (D) Caption
14	Which of the following is used for making two-way decision : (A) if (B) if-else (C) Nested if (D) Switch
15	How many possible solutions are there for a problem : (A) One (B) Two (C) Three (D) Multiple

COMPUTER SCIENCE   (INTER PART — II)   Time Allowed : 2.10 hours
PAPER — II (Essay Type)   Maximum Marks : 60

SECTION — I

(MS-ACCESS)

2. Write short answers to any SIX (6) questions: 12

    (i)   Describe information.
    (ii)   What is field?
    (iii) Define primary key.
    (iv) What is cardinality?
    (v)   How entity integrity is achieved in a table?
    (vi) List down all database objects.
    (vii) Name the two table views available in MS Access.
    (viii) Define the purpose of criteria in queries.
    (ix) Differentiate between form and report.

C-Language

3. Write short answers to any SIX (6) questions :   12

    (i)   What is object code?
    (ii)   Name two preprocessor directives.
    (iii) Explain logical errors with example.
    (iv) What is arithmetic underflow?
    (v)   Differentiate between unary and binary operators.
    (vi) How multi line comments are inserted into C-program?
    (vii) Define format specifer.
    (viii) Find the output of the following piece of code :

```
int i = 10;
i * = 10;
printf ("% d ", i );
```

    (ix) Find errors in the following piece of code

```
main ( );
printf ( " Hello' );
```

O R

(Visual Basic)

3. Write short answers to any SIX (6) questions :   12

    (i)   List some advantages of machine language.
    (ii)   What is compiling?
    (iii) Define object code.
    (iv) Name any four major pats of VB IDE.
    (v)   Define object and property.
    (vi) What is event driven programming?
    (vii) Name four form methods.
    (viii) Differentiate between name and caption property.
    (ix) What is an event procedure?

C-Language

4. Write short answers to any SIX (6) questions: 12

    (i)   What is the function of default keyword in switch statement?
    (ii)   Define control structure.
    (iii) Find the errors in the following piece of code

```
Int n=10;
if(n%2==0)
Printf("Even Number")
```

    (iv) Define break statement.
    (v)   What would be the output of the following code?

```
k=0;
while( k <= 5 )
{    printf("%3d %3d",k,10-k );
        k++;   }
```

    (vi) Draw the flow chart of while loop.
    (vii) What is function header?
    (viii) Name two built-in functions in C.
    (ix) Define binary stream.

(Visual Basic)

4. Write short answers to any SIX (6) questions: 12

    (i)   Write the use of NOT operator.

    (ii)   List three uses of array.

    (iii) Define GOTO Statement.

    (iv) Describe loop.

    (v)   What is difference between post test and pretest in Do/Loop?

    (vi) What is an infinite loop?

    (vii) Explain array manipulation.

    (viii) How array differs from variable?

    (ix) Describe focus property.

SECTION — II

(MS ACCESS)

Note : Attempt any ONE question.

    5. Explain all types of database models. 8

    6. What is Query? Explain all types of queries in MS Access. 8

SECTION — III

Note : Attempt any TWO descriptive answers (either from " C-Language" or from " Visual Basic") of the following questions.

(C — Language)

    7. Briefly discuss stepwise approach to write and execute C language program. 8

    8. What is if-else statement? Explain it with the help of flowchart and example. 8

    9. Write a program that displays following output by using loop(s): 8

0	1
1	2
3	8
4	16
5	32
6	64

OR

(Visual Basic)

    7 . What are selection structures in VB? Explain any two with examples. 8

    8 . Explain select-case statement in Visual Basic. 8

    9 . Write a program to find factorial of number input through input box. Display result in Message Box. 8

COMPUTER SCIENCE
PRACTICAL

Time Allowed: 3hours

Section-1 (Part-1)

Note: I. Perform the practical of the following Questions on the Computer.
2. Write down the stepwise procedure of all questions on the Answer Sheet in first **one hour.** Return answer sheet back to examiner even not a single Question is attempted after first hour.
3. The procedure carries **6** Marks for each Question 1 & 2.
4. The performance carries **5** Marks for each Question 1 & 2.

MS-WORD

Q#1 **Prepare the following document in the same format and save it against your Roll Number.** **6**

1. create the following table

INSTITUTE OF BUSINESS ADMINISTRATION			
MS WORD		MS EXCEL	
Theory	Practical	Theory	Practical
66	88	99	87

2 Change the table background color
3. Change the table border color, border style
4. Change columns height and rows width as you like
6 Insert ClipArt with caption in any column
7 Insert two columns for MS-POWERPOINT & MS-ACCESS
8. Autofit table

OR

Prepare the following document in the same format and save It against your Roll Number.

University of Management and Technology

Johar Town Lahore

OFFERS MASTER DEGREE PROGRAMS FOR SPRING SESSION 2016

➢ Computer Science (CS)
➢ Software Engineering (SE)
➢ Information Technology (IT)

. Fee structure: 40000 (per semester)

. Program: Duration:24 Months

. Fee structure: Bachelor's Degree from NEC
Recognized university with no 3rd Division

Q#2 Prepare the following worksheet and save it against your Roll number. Perform as directed   **6**

1. Enter sample data in columns 'Name'. 'Eng', 'Math' and 'Comp' (at-least 3 records)
2. Use formula to calculate 'Marks Obtained' (out of 400) as Eng a Math + Comp and then compute Percentage as (Marks Obtained/400)*100
3. For Remarks' column *apply formula according to* criteria *given* below;
   If Percentage is less than 40 then **'Fail'**
   If Percentage is greater than 60 then **'Pass'**
   And if Percentage is between 40 & 60 (both are inclusive) then 'Probation'

College of Information Technology
Marks Sheet of Student for the Final Examination 2016

Sr. no	Name	Eng/ 150	Math/ 100	Comp/ 150	Marks Obtained	Percentage	Remarks
1.							
2.							
3.							

OR
Prepare the following worksheet and save it against your Roll number. Perform as directed   **6**

1. Enter the sample data in the following table for at-least 5 persons/rows
2. Apply formulas to calculate Basic Necessities, Fuel, Medication, Utility Bills, Total Expenditure & Net Saving according to following criteria:
   - Basic Necessities =35% of the Monthly Income
   - Fuel   = 15% of the Monthly Income
   - Medication   = 20% of the Monthly Income
   - Utility Bills   = 25% of the Monthly Income
3. Calculate Total Expenditure as
   Basic Necessities + Fuel r Medication + Utility Bills
4. Calculate Net Saving as Monthly Income - Total Expenditure

MONTHLY INCOME STATISTICS
Expenditure Statement Work Sheet of June 2016

Sr. no	Monthly Income	Basic Necessities	Fuel	Medication	Utility Bills	Total Expenditure	Net Saving
1.							

Note: Attempt either from C-Language or from Visual Basic.

C-LANGUAGE

Note: Write down the C-Language program (not the procedure) of the selected Question on the provided Answer sheet in allocated time at the start of the practical.   **12**

Q#3 Write a program in C Language that inputs a year such as 1996, 1800, 2010 etc. and displays "Leap Year" if it is leap year otherwise display "Not a Leap Year"
(A Leap year is divisible by 4):

OR

Write a C program that generates the following output:
```
* * * * * * *
* * * * *
* * *
*
```

Q#4 Compile, Debug and Execute the selected program of Q#3 in Turbo C or Borland C editor (IDE).   **10**

VISUAL BASIC

Note: Write down the Visual Basic program (not the procedure) of the selected Question on the provided Answer sheet in allocated time at the start of the practical.   **12**

Q#3 Develop a project that generates the following output:
64 32 16 8 4 2

OR

Develop a project that takes 5 inputs (numbers) from user and find out the largest number from them.

Q#4 Compile, Debug and Execution of the selected program in Visual Studio of Q#3.   **10**

Q#5 Viva Voce   **3+3=6**