Roll No._____ To be filled in by the candidate   (NEW PATTERN)   Paper Code. | 8 | 8 | 3 | 1 |

Sessions; 2012-2014&2013-2015

Computer Science (Objective Type)

Time: 20 Minutes   **Marks: 17**

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A,B,C & D to each question are given.Which answer you consider correct, fill the corresponding circle A,B,C or D given in front of each question with Marker or pen ink on the answer sheet provided.

MS-ACCESS

1.1. Storage and retrieval of data is related to:
  (A) Data Capturing   (B) Data manipulation
  (C) Managing output result   (D) Data finding

2. Insert command is used to insert:
  (A) New table   (B) New record   (C) View   (D) Query

3. A row of a relation is called a(n):
  (A) Attribute   (B) Entity   (C) Tuple   (D) Field

4. An entity related to itself in an ERD model refers to:
  (A) recursive relationship   (B) One to many relationship
  (C) Many to many relationship   (D) One to one relationship

5. In 3NF, which form of dependency is removed:
  (A) Functional   (B) Non-functional   (C) Associative   (D) Transitive

6. To find four character name that starts with H,the criteria is specified as:
  (A) H*4   (B) H?4   (C) H???   (D) H# # # #

7. Which autoform displays one record at a time?
  (A) Tabular   (B) Columnar   (C) Datasheet   (D) Justified

C-Language

8. B was developed in the year:
  (A) 1969-70   (B) 1965-75   (C) 1972-1988   (D) 1989-1994

9. Which of the following are valid variable names?
  (A) Long   (B) Integer   (C) Not long enough (D) Both B and C

10. An ampersand(&) before the name of the variable name, denotes:
  (A) Actual value   (B) Variable name   (C) Address   (D) Data type

11. Format specifier is started with the symbol:
  (A) ?   (B) %   (C) &   (D) #

12. Another term for a computer making a decision is:
  (A) Sequential   (B) selection   (C) repetition   (D) Iteration

13. Which of the following are valid case statements in a switch?
  (A) Casel: (B) Case x<4   (C) Case 'ab':   (D) Case 1.5;

14. How many types of loop structure are available in C language?
  (A) 4   (B) 3   (C) 2   (D) 6

15. This means to increase a value by one:
  (A) Modulus   (B) Increment   (C) Decrement   (D) None

16. Formal arguments are also called:
  (A) Actual arguments (B) Dummy arguments   (C) Original arguments (D) Referenced arguments

17. Which mode opens only an existing file for both reading and writing:
  (A) "w"   (B) "r+"   (C) "w+"   (D) "a+"

OR   Visual Basic

8. Visual basic is a:
  (A) Front end   (B) Back end   (C) Both "A" and "B" (D) None

9. The output of the compiler is called:
  (A) The program   (B) Source code   (C) Linked code   (D) Object code

10. The naming prefix for a label control is:
  (A) lab   (B) lbe   (C) lbl   (D) l

11. The property that changes text color is:
  (A) Back color   (B) Fore color   (C) Font color   (D) Text color

12. Variable and constant names cannot contain a(n):
  (A) Number   (B) Period   (C) Letter   (D) Underscore

13. Which data type is used to handle a yes or No response:
  (A) Boolean   (B) Short   (C) Integer   (D) Date

14. All of the following are relational expressions except:
  (A) < >   (B) &   (C) =   (D) >=

15. How many conditions are required to write an if...then...Else statement?
  (A) 0   (B) 1   (C) 2   (D) 3

16. The keyword that makes the end of a Do structure is:
  (A) END DO   (B) Loop   (C) Exit DO   (D) GODO

17. The increment in a for....Next loop can be:
  (A) Positive only   (B) Negative only   (C) Both A and B   (D) None

| Roll No. _____ To be filled in by the candidate | (NEW PATTERN) | Subject Code | 6 | 0 | 8 | 3 |

Computer Science (Essay Type)

Time: 3:10 Hours

Marks: 83

Section -I

MS-ACCESS

2. Write short answers of any eight parts from the following. 2 x 8 =16

i. What is data?

ii. What is field?

iii. Define Data Set.

iv. What are the properties of a relation?

v. What is foreign key?

vi. Define entity, give examples also.

vii. Define Modulaty.

viii. Define functional dependency with example.

ix. What is the use of MS-ACCESS?

x. What is query?

xi. What is the use of Data Sheet view?

xii. Define List box.

C-Language

3. Write short answers of any eight parts from the following. 2 x 8 =16

i. Who is a programmer?

ii. What is an assembler?

iii. What is structured programming language?

iv. Define expression.

v. Why are comments used in C program?

vi. Write the given statement in C language.
$$Z=(3*y)(a^2+b^2)$$

vii. Trace the error
```
integer x=15;
Printf("%d",x);
```

viii. Write the use of scanf function.

ix. Define escape sequence.

x. What is the use of format specifier in C-language?

xi. Trace the output
```
Printf("Book\t Reading \n");
Printf("is a\t very good");
Printf("Habbit");
```

xii. Trace the output
```
float f=3.14159;
Printf("f=%5.1f",f);
```

4. Write short answers of any six parts from the following. 2 x 6 =12

i. Describe selection structure.

ii. Describe switch( ) statement.

iii. Trace the output
```
void main() {
int p,q,r;
p=10;
q=3;
if (p%q==3)
r=0
else
r=1
Printf("%d",r);
getch( );  }
```

iv. Trace the error.
```
void main( );{
int R;
r=25;
if(R>0)
printf("Good")
getch( );}
```

v. What is counter variable?

vi. Trace the output
```
void main( ){
int a:
for (a=1; a<=100; a=a+3)
Printf("%d\n",a);
getch( );}
```

vii. What is function definition?

viii. What is the use of formal parameter?

ix. What do you mean by binary stream?

OR   Visual Basic

3. Write short answers of any six parts from the following.   2 x 8 =16

i. Why is it important to identify a problem?

ii. What is object code?

iii. Why source code cannot be executed directly?

iv. What is concatenation of string?

v. Define the USE of option explicit.

vi. Describe the use of message box.

vii. Write any two parameters of input box.

viii. What is goto statement?

ix. Write the general form or syntax of Nested if.

x. When should an if block is used instead of case block?

xi. What is the purpose of case else?

xii. Briefly describe the working of Nested if.

4. Write short answers of any six parts from the following.   2 x 6 =12

i. Define if...then Else structure.

ii. Define Do-Until loop.

iii. What is the concept of sub keyword?

iv. What is alignment Statement in visual basic?

v. What is keydown event?

vi. Define relational operator.

vii. Define comments in Visual Basic.

viii. What is local variable?

ix. Define logical error.

Section -II
MS-ACCESS

Note: Attempt only one question from the following.   8x1=8

5. What are components of a logical model?Explain in detail.   08

6. Describe different data types used in MS-ACCESS.   08

Section -III

Note:Attempt any two questions either from "C-language" or "Visual Basic".

C-language

7. Define language processor or translator?Discuss different types of language processors?   08

8. Write a program which inputs a number and tells whether it is even or odd?   08

9. Explain the working of while loop with flow chart and syntax.   08

Visual Basic

7. Define flowchart.Discuss different flowchart symbols used in visual basic.   08

8. Write a program in visual basic which inputs three numbers from user and tells maximum number from them.   08

9. Explain the working of Do Until Loop.   08

Section-IV (Practical)   5x3=15

Note: Answer any three parts from the following.

10(A). Explain the procedure for creating simple query.

B. How is auto report used to generate a report?

C. Write a program that subtract two numbers and show result on screen in C-language or using Visual Basic.

D. Write a program that inputs a number from the user and display a table of that number using for loop in C-language or using For-Next loop in visual basic.

E. Write a program in C-language that inputs two numbers in main function,passes these numbers to function. The function displays the maximum number or using Visual Basic.

Roll No._____ *To be filled in by the candidate*   **(OLD PATTERN)**   Paper Code | 4 | 8 | 3 | 1

Session;2011-2013

Computer Science (Objective Type)

Time: 20 Minutes   **Marks: 15**

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A,B,C & D to each question are given.Which answer you consider correct, fill the corresponding circle A,B,C or D given in front of each question with Marker or pen ink on the answer sheet provided.

MS-ACCESS

1.1. Which of the following type of file requires largest processing time?
- (A) Sequential file
- (B) Random file
- (C) Indexed sequential file
- (D) Direct access file

2. Create comand is used to create a:
- (A) table
- (B) view
- (C) report
- (D) query

3. Relationship defines the logical connection between:
- (A) Fields
- (B) Records
- (C) Entities
- (D) None

4. In relational database, a table is also called a:
- (A) Tuple
- (B) Relation
- (C) File
- (D) Schema

5. Extension of MS-Access database is:
- (A) .mdb
- (B) .msdb
- (C) .madb
- (D) none

6. A single piece of information is called:
- (A) Field
- (B) Record
- (C) Entity
- (D) Attribute

C-Language

7. Pre-processor directives are commands for:
- (A) Micro-processor
- (B) Language processor
- (C) C-processor
- (D) C-compiler

8. Which of the following has lowest precedence?
- (A) !
- (B) +
- (C) =
- (D) ==

9. The format specifier % is used for:
- (A) integer
- (B) Unsigned integer
- (C) Unsigned float
- (D) Unsigned long integer

10. If statement inside another if statement is called:
- (A) Branched if
- (B) conditional operator
- (C) Nested if
- (D) Relational operator

11. Which of the following is used for making two way decision?
- (A) If-else
- (B) if-else-if
- (C) Nested if
- (D) Switch

12. The statement that terminate loop:
- (A) Terminate
- (B) Break
- (C) Exit
- (D) end

13. Semicolon is placed at the end of condition in:
- (A) For loop
- (B) While loop
- (C) do-while loop
- (D) nested loop

14. Formal arguments are also called:
- (A) Actual arguments
- (B) Dummy arguments
- (C) original arguments
- (D) referenced arguments

15. A file is stored in:
- (A) RAM
- (B) ROM
- (C) Harddisk
- (D) Cache

OR   Visual Basic

16. The lowest level at language is:
- (A) C
- (B) C++
- (C) Assembly
- (D) Java

17. Visual Basic is a product of:
- (A) Sun system
- (B) IBM
- (C) Microsoft
- (D) Hewlett

18. The icon on the toolbox representes:
- (A) Program executable
- (B) VB controls
- (C) Shortcut to menu item
- (D) properties

19. Forms and controls are organized as:
- (A) Properties
- (B) methods
- (C) Objects
- (D) Events

20. Bytes occupied by integers in VB:
- (A) 4
- (B) 8
- (C) 2
- (D) 6

21. You can enter data in a control only when it has:
- (A) Tab order
- (B) Focus
- (C) Mask
- (D) Control

22. Symbol of string concatination is:
- (A) ++
- (B) - -
- (C) &
- (D) and

23. Statement that indicates the end of decision structure:
- (A) Next
- (B) End if
- (C) End
- (D) Else

24. A control array can be added in:
- (A) view mode
- (B) Debug window
- (C) Design mode
- (D) Print mode

Roll No. _____ To be filled in by the candidate | (OLD PATTERN) Session; 2011-2013 | Subject Code | 4 | 8 | 3

Computer Science (Essay Type)

Time: 2:10 Hours

Marks: 60

Section -I
MS-ACCESS

2. Write short answers of any six parts from the following.

2 x 6 =12

i. Define the term data manipulation.

ii. Explain data independence.

iii. What is database key?

iv. Who is end user?

v. Define the term attribute.

vi. What is referential integrity?

vii. Name four database objects.

viii. What is degree of a relation?

ix. Write two advantages of using forms.

C-Language

3. Write short answers of any six parts from the following.

2 x 6 =12

i. Define low-level language.

ii. Differentiate between Assembly language and High level language.

iii. Describe the term "machine independence".

iv. What is variable initialization?

v. Define identifiers in C language.

vi. Describe "getche" function.

vii. Explain "clrscr" function.

viii. List some important function for input.

ix. Trace out the error.

```
Void main ( );
{
Printf("%S",Pak);
getch( );
}
```

4. Write short answers of any six parts from the following.

2 x 6 =12

i. What is the use of logical "OR" operator?

ii. How a file is closed?

iii. Define Binary stream

iv. Write down the syntax of conditional operator.

v. Define local variable.

vi. List some benefits of using functions.

vii. What happens if break statement is missed in case block?

viii. List two difference between while and do while loop

ix. Write the expression for: a is either equal to 0 or greater than 0.

OR   Visual Basic

3. Write short answers of any six parts from the following.

$2 \times 6 = 12$

i. What is compiling?

ii. What is .NET platform?

iii. What is VBA?

iv. What is difference between a project file and a form file?

v. What is the purpose of name property of a control?

vi. What are three steps for creating VB projects?

vii. Describe some events of VB for a form.

viii. What is the use of keypress and keydown?

ix. How are events procedure named?

4. Write short answers of any six parts from the following.

$2 \times 6 = 12$

i. Which statement is used to terminate the for and while loop?

ii. How many times does the following loop execute?

```
a=0
DO
Print(a)
until(a<1)
```

iii. What is iteration?

iv. Define array with its syntax.

v. Define combo box.

vi. What is the use of horizontal scroll bar?

vii. What is the function of "F5" key?

viii. Define common Dialog Box.

ix. Define procedure.

Section -II

MS-ACCESS

Note: Attempt only one question from the following.

5. Explain different components of logical model in detail. $8x1=8$

6. Discuss different types of queries in detail.   08

08

Section -III

Note:Attempt any two questions either from "C-language" or "Visual Basic".

$8x2=16$

C-language

7. Describe the characteristic of High-level programming language.

8. What is if-else-if?Explain its working.   08

9. Write a program to display the sum of first ten natural numbers using loop.   08

08

Visual Basic

7. Explain in detail, the components or elements of IDE.

8. What is extented if-then-else structure?Explain it.   08

9. Write a program to display the table of any number using loop.   08

08

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Roll No._____*To be filled in by the candidate*

| Paper Code | 8 | 8 | 3 | 7 |

Sessions; 2012-2014,2013-2015&2014-2016

Computer Science (Objective Type)

Time: 20 Minutes **Marks: 17**

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A,B,C & D to each question are given.Which answer you consider correct, fill the corresponding circle A,B,C or D given in front of each question with Marker or pen ink on the answer sheet provided.

MS-ACCESS

1.1. The category of data that describes an entity is called:
  (A) Attribute   (B) Data item   (C) Record   (D) Tuple

2. Which of the following is used to associate entities with one another:
  (A) Entity   (B) Attribute   (C) Identifier   (D) Relationship

3. A relation that contains minimal redundancy and allow easy use is called:
  (A) Clean   (B) Simple
  (C) Complex   (D) Well structured

4. Each set of related items in a table is called:
  (A) Table   (B) Record   (C) Field   (D) Query

5. Which data type is default type in Access?
  (A) Memo   (B) Number   (C) Text   (D) Auto number

6. A form within another form is called:
  (A) Subform   (B) Main form   (C) Multiform   (D) Outer form

7. The manipulated and processed data is:
  (A) Object   (B) Data   (C) Figure   (D) Information

C-Language

8. In if statement, false is represented by:
  (A) o   (B) 1   (C) 2   (D) 3

9. Which programming structure makes a comparison?
  (A) Relation   (B) Decision   (C) Sequence   (D) Repetition

10. One execution of a loop is known as:
  (A) Cycle   (B) Duration   (C) Iteration   (D) Test

11. How many types of loop structure are in C:
  (A) 4   (B) 3   (C) 2   (D) 6

12. Local variables are called:
  (A) Normal   (B) Automatic   (C) Global   (D) None

13. Which of the following functions is used to write a character to a file?
  (A) fputc()   (B) putc()   (C) fputs()   (D) fgets()

14. All of the following are logical operators except:
  (A) NOT   (B) AND   (C) OR   (D) =

15. The value of C expression 5/9*2 is:
  (A) 0.27   (B) 1.11   (C) 0   (D) 2

16. Which of the following format specifiers is used for string:
  (A) %f   (B) %d   (C) %c   (D) %s

17. Which of the following escape sequence is used to begin new line in C:
  (A) \a   (B) \n   (C) \t   (D) \m

OR   Visual Basic

8. The expression 0 mod 4 has a value equal to:
  (A) 0   (B) 1   (C) 2   (D) 4

9. The default message box style is:
  (A) Yes No   (B) OK only   (C) Yes No cancel   (D) Retry cancel

10. All of the following are relational operators except:
  (A) >=   (B) <=   (C) #   (D) <>

11. In if statement, false is represented by:
  (A) 1   (B) 0   (C) 2   (D) 3

12. Each element in a control array is identified by:
  (A) Tab Index   (B) Index   (C) List Index   (D) Subscript

13. One execution of a loop is known as:
  (A) Iteration   (B) cycle   (C) Test   (D) Duration

14. The term used to refer a program error is called:
  (A) Short circuit   (B) Crash   (C) Down   (D) Bug

15. Visual Basic is a product of:
  (A) Sun system   (B) Hewlett   (C) Microsoft   (D) IBM

16. List of commands such as open, print and exit can be found on:
  (A) Solution explorer   (B) Toolbar   (C) Toolbox   (D) Menu bar

17. Methods characterized on object's:
  (A) Style   (B) behaviour   (C) value   (D) Appearance

Roll No. _____ *To be filled in by the candidate*

Sessions; 2012-2014&2013-2015&2014-2016

| Subject Code | 6 | 0 | 8 | 3 |

Computer Science (Essay Type)

Time: 3:10 Hours

Marks: 83

Section -I
MS-ACCESS

2. Write short answers of any eight parts from the following.   2 x 8 =16

i. List at least two advantages of DBMS.

ii. State the purpose of Query Language.

iii. Define Data integrity.

iv. State the use of Index in FMS.

v. Define composite key.

vi. How a relation is formed in database?

vii. Define Modality with the help of figure.

viii. What do you mean by entity integrity?

ix. List advantages of RDBMS.

x. What is Microsoft ACCESS?

xi. Create a query in design view.

xii. Define combo box.

C-Language

3. Write short answers of any eight parts from the following.   2 x 8 =16

i. What do you mean by bug?

ii. What is difference between machine language and high level language?

iii. State the purpose of Body of Function.

iv. Define keywords.

v. What do you mean by assignment operator?

vi. Define character constant.

vii. Find the error in the following code.

```
# include (conio.h);
# include (stdio.h);
void main ( )
  {
   Printf("OK");
  }
```

viii. Find the output of following code.

```
int a,b,c;
a=b=c=6;
a=4;
b=a;
c=2;
Printf("%d%d%d",a,b,c);
```

ix. Find the output of the following code.

```
Printf("Pakistan\n is an \n Islamic\n country");
```

x. Find the error in the following code

```
Main( );
 {
 Printf(OK)
 }
```

xi. List some input functions in C-language.

xii. Describe getch( ) function.

4. Write short answers of any six parts from the following.   2 x 6 =12

i. Write down the output of following code.

```
Char ch='a';
  switch(ch)
  {
  case 'a':
      Printf("A");
  case 'b':
      Printf("B");
```

ii. What is the error in the following code?

```
int x=10,y=20;
if (x>10&y<30)
    printf("%d",x+y);
```

iii. What is the use of if-else statement?

iv. Why break statement is used in switch statement?

v. Write down the syntax of do-while loop.

vi. What is the output of following code?

```
int x=10;
for(x=8;x>=1;x--)
printf("%d\n",x%z)
```

vii. What are the two types of functions in C language?

viii. What are local variables?

ix. Which function is used to close a file in C language?

OR   Visual Basic

3. Write short answers of any eight parts from the following.   2 x 8 =16

i. List three uses of logic flow diagram.   ii. What is VBA?

iii. State the purpose of naming controls.   iv. Define object events.

v. What is constant?   vi. Name different form events.

vii. What do you mean by unload?   viii. Define explicit declaration.

ix. Describe currency variables.   x. Define symbolic constant.

xi. What is message box?   xii. State the term comments.

4. Write short answers of any six parts from the following.   2 x 6 =12

i. Explain the use of input box.   ii. What are relational operators?

iii. What is the syntax of WHILE.....WEND loop?   iv. What is a counter controlled loop?

v. What is the use of option buttons?   vi. What are function parameters?

vii. What are Named constants in VB?   viii. What is Nested-If statement?

ix. Define control array?

Section -II
MS-ACCESS

Note: Attempt only one question from the following.   8x1=8

5. What is data modeling?What are the ingredients of data modeling?   08

6. Explain different data types available in MS-Access.   08

Section -III

Note:Attempt any two questions either from "C-language" or "Visual Basic".

C-language

7. How many types of operators are available in C?Describe briefly.   08

8. Write a program that inputs a character from user and checks whether it is vowel or consonent using   08
switch statement?

9. What is "While loop"?Write its syntax.Explain its working with example.   08

Visual Basic

7. Define the process of analyzing a problem in detail.   08

8. Write a program in VB that inputs a character from user and checks whether it is vowel or consonent?   08

9. What is While-Wend loop?Write its syntax.Explain its working with example.   08

Section-IV (Practical)   ·5x3=15

Note: Answer any three parts from the following.

10(A). Write a procedure for sorting using menu.

B. Write a procedure for running switchboard in MS Access.

C. Write a program that accepts two numbers and exchange their values in C-language or in visual basic.

D. Write a program that accepts two numbers from user and displays whether numbers are equal or not by
using function in C-language or in Visual Basic.

E. Write a program that inputs a number from user and displays its table in C-language or in Visual Basic.

Roll No._____*To be filled in by the candidate* | Paper Code | 4 | 8 | 3 | 1 |

Session; 2015-2017

Computer Science (Objective Type)

Time: 20 Minutes   **Marks: 15**

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A,B,C & D to each question are given.Which answer you consider correct, fill the corresponding circle A,B,C or D given in front of each question with Marker or pen ink on the answer sheet provided.

MS-ACCESS

1.1. A database is an organized collection of_____related data:

(A) Physically   (B) loosely   (C) random   (D) logically

2. A primary key that consists of more than one attributes is called:

(A) Foreign key   (B) Composite key   (C) Primary key   (D) Control key

3. In an E-R diagram, a rectangle represents a(n):

(A) Entity   (B) Attribute   (C) Relationship   (D) Field

4. The output of the query is in the form of a:

(A) Form   (B) Report   (C) Table   (D) Query

5. Which data type is the default data type in MS-Access:

(A) Text   (B) Memo   (C) Auto number   (D) Number

6. A form within another form is called:

(A) Main-form   (B) Multi-form   (C) Sub-form   (D) Simple-form

C-Language

7. A program's syntax error is detected by:

(A) Debugger   (B) Loader   (C) Linker   (D) Compiler

8. For A=4 and B=4 which expression evaluates as true?

(A) A>=B   (B) A!=B   (C) A<B   (D) A>B

9. Which escape sequence can be used to begin a new line in C-language?

(A) \a   (B) \n   (C) \t   (D) \b

10. Graphical representation of a program is called:

(A) Logical chart   (B) Binary chart   (C) Flow chart   (D) E-R chart

11. In If-statement,true is represented by:

(A) 0   (B) 1   (C) 2   (D) 3

12. The statement causes a loop to terminate early:

(A) Exit   (B) Terminate   (C) End   (D) Break

13. How many types of loop structures are present in C?

(A) 1   (B) 2   (C) 3   (D) 4

14. Global variables are created in:

(A) Cache   (B) ROM   (C) Register   (D) RAM

15. Which mode opens only an existing file for both reading and writing?

(A) "w"   (B) "w+"   (C) "r+"   (D) "a+"

OR   Visual Basic

7. The set of rules for writing a program in any programing language is called:

(A) Bug   (B) Debug   (C) A program   (D) Syntax

8. Visual Basic is a product of:

(A) Microsoft   (B) IBM   (C) Sun-System   (D) Hewlett

9. The naming pre-fix for a Text box control is:

(A) lab   (B) txt   (C) xtx   (D) lbl

10. Which of the following is a valid VB data type?

(A) Array   (B) Char   (C) Boolean   (D) Int

11. The expression 3MOD5 has a value equal to:

(A) 0   (B) 3   (C) 5   (D) 8

12. All of the following are relational operators EXCEPT:

(A) <>   (B) =   (C) >=   (D) &

13. Which of the following returns the true if A=25 and B=35?

(A) A+B   (B) A>=B   (C) A< >B   (D) A=B

14. The keyword that marks the end of a WHILE structure:

(A) END   (B) LOOP   (C) SKIP   (D) WEND

15. Sentinel controlled loops are also known as:

(A) Next loops   (B) Conditional loops   (C) Counter loops   (D) Nested loops

Roll No. _____*To be filled in by the candidate*

Session; 2015-2017

Computer Science (Essay Type)

Time: 2:10 Hours

Marks: 60

Section -I

MS-ACCESS

2. Write short answers of any six parts from the following.   2 x 6 =12

i. Why is report generator used in database system?   ii.   What is the purpose of backup and recovery?

iii. Who is a database administrator?   iv.   Write the purpose of feasibility study.

v. What is the concept of transitive dependency?   vi.   Define repeating group.

vii. What do you know about RDBMS?   viii.   Define the term cardinality of a relation.

ix. Enlist different types of forms in MS-ACCESS.

C-Language

3. Write short answers of any six parts from the following.   2 x 6 =12

i. What is the difference between machine language and assembly language?

ii. What is meant by structured programming language?   iii.   What is meant by comments. Also give an example.

iv. What is the difference between implicit and explicit type casting?

v. Define format specifier with example.

vi. Trace the errors.

```
# Include <stdio.h>
void main ( )
{
    printf("High level language")
}
```

vii. Find the output of the following code

```
# include <stdio.h>
  void main ( )
  {
    int x=10, y=20, z=30;
      x=x+y;
      y=y+z;
      z=x-y;
    printf ("result=%d%d%d",x,y,z);
```

viii. Find the errors

```
# include <stdio.h>
  void Main( )
  {
    int x,y;
    x=10; y=20;
    printf ("%d%d",x,y,);
  }
```

ix. Define source code.

4. Write short answers of any six parts from the following.   2 x 6 =12

i. Write use of if,else if statements.   ii.   Describe nested loop.

iii. Find error from following code:

```
int y;z;
  if (y==z)
  printf ("yes")
```

iv. Find out from the following

```
int price=19;
  if (price!=10)
  printf("price");
```

v. Find out output of following.

```
int num=1;
  while (num<6)
{   printf("\n num=%d",num);
      n+1;   }
```

vi. Convert while into dowhile

```
int i=1;
  while (i<=15)
{ printf ("n";i);
      i=i+1;  }
```

vii. Describe user defined function.   viii.   What is function call?

ix. Compare binary and text stream.

OR   Visual Basic

3. Write short answers of any six parts from the following.   2 x 6 =12

i. What is properties window?

ii. Define source code.

iii. What is meant by structured programming language?

iv. What is the difference between a project file and a form file?

v. What is difference between machine language and assembly language?

vi. Trace the errors.

```
Private    b1-click( )
    text1 = "welcome to VB"
End sub
```

vii. Find the errors.

```
Private sub b1-click ( )
  option Explicit
     x=10   y=25
    z=x+y
  Printf("result="+z)
End sub
```

viii. Find the output of the following code.

```
private sub command1-click( )
  option explicit
  Dim x,y,z as integer
  x=10
  y=20
    z=x+y
  Print("result="&x&" "&y&" "&z)
  End sub
```

ix. How are the properties set at design time and run time?

4. Write short answers of any six parts from the following.   2 x 6 =12

i. What do you know about Visual Studio?

ii. Differentiate between z="p" and z=p.

iii. Define operator precedence.

iv. What is an assignment operator?

v. Enlist about named constant.

vi. How are character stored?

vii. Show out the output.

```
Dim  m,n
  m=40
  n=mxm
  print Result n
```

viii. Find error from following code.

```
Dim x,y as integer
  x==13
  y=3
  print x%y;
```

ix. Define about foccis.

Section -II
MS-ACCESS

Note: Attempt only one question from the following.   8x1=8

5. What is data modeling?Explain ingredients of data modeling.   08

6. What are queries?Explain types of queries.   08

Section -III

Note:Attempt any two questions either from "C-language" or "Visual Basic".   8x2=16

C-language

7. Write down step wise procedure for writing a C Program.   08

8. Write a program in C-language that inputs two numbers from user and finds whether they are equal or not.   08

9. What is while loop?Write its syntax,also draw flowchart.Explain its working with the help of an example.   08

Visual Basic

7. Explain application development steps in visual basic with example.   08

8. Write a program in V.B that inputs two numbers from user and finds whether they are equal or not.   08

9. What is while-wend loop?Write its syntax,also draw flowchart.Explain its working with the help of an example.   08

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Roll No._____ *To be filled in by the candidate*

| Paper Code | 8 | 8 | 3 | 1 |

Sessions;2013-2015&2014-2016

Computer Science (Objective Type)

Time: 20 Minutes   Marks: 17

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A,B,C & D to each question are given.Which answer you consider correct, fill the corresponding circle A,B,C or D given in front of each question with Marker or pen ink on the answer sheet provided.

MS-ACCESS

1.1. Which of the following data model is more flexible:
 (A) Network   (B) Heirarchical   (C) Relational   (D) Object oriented
2. Data inconsistancy is caused by:
 (A) Data organization   (B) Data integrity   (C) Data independence   (D) Data redundancy
3. Primary key that consists of more than one attributes is:
 (A) Composit key   (B) Candidate key   (C) Foreign key   (D) Alternate key
4. A table may have foreign keys:
 (A) one   (B) two   (C) four   (D) any number
5. In 3rd normal form,which form of dependency is removed?
 (A) Functional   (B) Non-functional   (C) Associative   (D) Transitive
6. Which is a default data type of an attribute in table design?
 (A) Text   (B) Number   (C) Auto number   (D) Memo
7. Which of the following is used to create and modify a form?
 (A) Form view   (B) data sheet view   (C) form design view   (D) new form view

C-Language

8. Which of the following key combination is used to compile a c program:
 (A) Ctrl+F9   (B) Ctrl+F8   (C) Alt+F9   (D) Shift +F9
9. The number of bytes a double data type occupy in memory.
 (A) 04   (B) 08   (C) 10   (D) 12
10. Which of the following format specifier is used for integer type data?
 (A) %f   (B) %d   (C) %c   (D) %s
11. An ampersand '&' before the name of a variable denotes:
 (A) address   (B) actual value   (C) variable name   (D) data type
12. Which programming structure makes only comparison?
 (A) sequence   (B) selection   (C) repetition   (D) itrative
13. Which of the following is conditional operator?
 (A) Relational operator   (B) Logical operator   (C) Ternary operator   (D) increment operator
14. What statement is used to move control to start of a loop?
 (A) continue   (B) break   (C) return   (D) exit
15. Which of the following is executed once in a for loop?
 (A) Decrement   (B) Increment   (C) Test condition   (D) Initialization
16. Variable declared outside of any function is:
 (A) global variable   (B) local variable   (C) static variable   (D) automatic variable
17. Which of the following mode creates new file?
 (A) "w"   (B) "w+"   (C) "r+"   (D) "a+"

OR   Visual Basic

8. The number bytes used by long integer in visual basic.
 (A) 01   (B) 02   (C) 04   (D) 08
9. The visual basic project is saved with extension:
 (A) .Exe   (B) .VBP   (C) .frm   (D) .VB
10. The Cint() method converts valid text int which type?
 (A) single   (B) integer   (C) double   (D) float
11. The MOD operator in VB is used for:
 (A) Integer remainder   (B) exponentiation   (C) division   (D) multiplications
12. Which of the following is a unary operator in VB?
 (A) AND   (B) NOT   (C) =   (D) +
13. A statement block in VB can consist of how many lines?
 (A) 01   (B) unlimited   (C) at most 255   (D) 128
14. Which loop is suitable if the number of itrations are not known in advance?
 (A) Do...loop....while   (B) For...Next   (C) Do....For   (D) For....While
15. Setting the table index of a control to O will:
 (A) displays the control to right side   (B) makes the control visible
 (C) align the control to left   (D) set the focus on it
16. You can enter data in a control only when it has the:
 (A) focus   (B) property   (C) tab order   (D) method
17. When you run multiple form project,visual basic automatically loads:
 (A) the first form saved   (B) the startup form   (C) the last form saved   (D) all the forms in application

Inter-(Part-II)-A-2017

Sessions;&2013-2015&2014-2016

Computer Science (Essay Type)

Time: 3:10 Hours

Marks: 83

Section -I
MS-ACCESS

2. Write short answers of any eight parts from the following.

2 x 8 =16

i. What is meant by data manipulation?

ii. Differentiate between candidate key and primary key.

iii. Write the purpose of using views.

iv. Define parent and dependent table.

v. Give any four examples of entity.

vi. Which activities are involved in data analysis?

vii. Define relationship using an example.

viii. Define the concept of synonym.

ix. Describe database object.

x. What is the use of input mask?

xi. Why is a list box used in form?

xii. What do you know about relational database management system(RDBMS).

C-Language

3. Write short answers of any eight parts from the following.

2 x 8 =16

i. Distinguish between source code and object code.

ii. What is the use of "define" preprocessor?

iii. Describe the delimiters.

iv. Define user-defined identifier and give some examples.

v. Predict the output of the following code:

```
void  main ( )
{
    int a=21;
    printf("%d",a%2)
}
```

vi. Trace the error in the following code:

```
int  a,b;
clrscr ( )
a=b=x=0,
    b=a - -;
    a=x++;
printf("%d,%d",a,b);
```

vii. Predict the output of the following code:

```
int x=5;
printf("%d,%d,%d",x,x*4,x%4);
```

viii. Describe field width specifier, also give any two examples.

ix. Why is the ampersand(&) used in scanf function?

x. What are integer constant?Give one example.

xi. Predict the output of the following code

```
void main ( )
{
    int x,y,z;
    x=3;
    y=2;
    z=4;
printf("%d%d%d",x+y,y+5,x+z);
    getch( );
}
```

xii. Trace the errors from the following code:

```
void main ( )
{
    float a=3.14;
    printf("%d",a);
    getch( );
}
```

4. Write short answers of any six parts from the following.

2 x 6 =12

i. Write two advantages of switch statement.

ii. Write the syntax of "if-else if-else" statement?

iii. Trace the error.

```
void main ( )
{
    int a;b;
    a=10;
    b=5;
    if a>b
    printf("Pakistan");
    else
    printf("Hold");
}
```

iv. Trace output:

```
int p=3, q=5;
if ((p>q)||(p!=4))
    p=p+1;
else
    p=p-1;
    p=p*2;
    printf("%d",p)
```

v. Trace output:

```
K=0;
While (k<=5)
{
    printf ("%d\n",k);
    k++;
}
```

vi. Convert the following code into while loop

```
for (int i=1;i<=10;i++)
{
    Printf("%d\n",i);
}
```

vii. What is a function call?

viii. What is Binary Stream?

ix. Why formal parameters are different from actual parameters?

OR   Visual Basic

3. Write short answers of any eight parts from the following.   **2 x 8 =16**

i. Describe integrated development environment.
ii. What is code window?
iii. Write any two steps for creating V.B project.
iv. Describe visual basic events.Give one example.
v. What is the use of Keydown and keyup events?
vi. Trace the error from the following code:

```
if x=5;
    x=3;
end if
```

vii. Why is important to declare variable before they can be used in V.B?
viii. Explain the difference between constant and variable in V.B.

ix. Predict the output of the following code:
```
Dim a As integer
For a= 0 to 10
    print a
Next a
End Sub
```

x. Trace the error of the following code
```
Dim n As integer
    n=5
while n<=10;
    Print N
    n=n+1
wend
```

xi. Predict the output of the following Code:
```
Dim A,B As integer
    A=10
    B=2
Print A-B
Print A^B
```

xii. Predict the output of the following code:
```
Dim N as integer
    N=10
Print N*N
Print N^N
```

4. Write short answers of any six parts from the following.   **2 x 6 =12**

i. Write down two advantages of case statement.
ii. Write the syntax of "if-else-if" statement.
iii. Write any two parts of form object.
iv. What is meant by hiding a form?
v. Write any two mouse events.
vi. What is meant by method in visual basic?
vii. What is function call?
viii. What is the use of keypress event?
ix. When do we use variant datatpye?

Section -II
MS-ACCESS

Note: Attempt only one question from the following.   **8x1=8**
5. Define database model?Describe different types of database models?   08
6. Define filter.Explain different types of filters in MS-Access.   08

Section -III

Note: Attempt any two questions either from "C-language" or "Visual Basic".

C-language

7. What is meant by basic structure of C program?Discuss different parts of basic structure of C program with the help of an example.   08

8. Write a c program that inputs the number of the months of the year and display the name of the corresponding month using switch statement(eg if user enters 6,it will display june).   08

9. What is do while( ) loop?Write its syntax and diagram.Explain its working with example.   08

Visual Basic

7. What is visual basic integrted development environment?Write down the steps of application development in visual basic.   08

8. Write a visual basic program that inputs the number of the months of the year and display the name of the corresponding month using select case(e.g if user enters 6,it will display june).   08

9. What is do while( ) loop?Write its syntax and diagram.Explain its working with example.   08

Section-IV (Practical)

Note: Answer any three parts from the following.   **5x3=15**

10(A). Write the procedure to create a table in design view.
B. Write a procedure to create a form using wizard.
C. Write a program to calculate the area of a circle in c-language or Visual Basic.(Hint:Area= πr^2)
D. Write a program to print numbers from 1 to 100 in c-language on visual basic.
E. Write a program to compute square of a number using function in C-language or visual basic.

718-012-A---- *1340*

Session:2015-2017&2016-2018

Computer Science (Objective Type)

Time: 20 Minutes

Marks: 15

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A,B,C & D to each question are given.Which answer you consider correct, fill the corresponding circle A,B,C or D given in front of each question with Marker or pen ink on the answer sheet provided.

MS-ACCESS

1.1. The graphical query tool is known as:
  (A) Query grid   (B) Design grid   (C) Query form   (D) Design form

2. A form within another form is called:
  (A) Sub form   (B) Main form   (C) Multiform   (D) Header

3. The extension of image file is:
  (A) .exl   (B) .doc   (C) .bmp   (D) .ppt

4. A primary key that consists of more than one attributes is called:
  (A) Foreign key   (B) Composite key   (C) Multi valued key   (D) Global key

5. Merging the relation is also known as:
  (A) view integration   (B) view entities   (C) view tables   (D) view relations

6. A report may be based on:
  (A) Table   (B) Field   (C) Byte   (D) bits

C-Language

7. While Loop is also called:
  (A) Conditional loop   (B) Wend loop   (C) Counter loop   (D) Nested loop

8. Which is a loop stunt?
  (A) if   (B) if else   (C) switch   (D) for

9. A built-in function:
  (A) cannot be redefined   (B) can be redefined   (C) cannot return value   (D) should be redefined

10. The following function is used to read character from a file:
  (A) putc( )   (B) getc( )   (C) fputs( )   (D) fgets( )

11. The ".exe" file in c-language is produced by:
  (A) Linker   (B) Loader   (C) Compiler   (D) Interpreter

12. Variable cannot contain a(n):
  (A) Number   (B) Underscore   (C) Letter   (D) Period

13. Which of the following is not valid Escape code?
  (A) \t   (B) \v   (C) \y   (D) \f

14. Another term for a conditional operator,
  (A) Ternary   (B) Binary   (C) Byte   (D) iteration

15. Conditional operator takes:
  (A) one operand   (B) Two operands   (C) three operands   (D) four operands

OR   Visual Basic

7. Logical operator:
  (A) And   (B) =   (C) >=   (D) <>

8. How do you find loop statement in following options?
  (A) if else   (B) if   (C) switch   (D) for

9. The keyword use to terminate a Do structure:
  (A) Loop   (B) End do   (C) Exit do   (D) End while

10. In counter controlled loop it is important to declare_____and counter variable:
  (A) Identify   (B) Initialize   (C) Size   (D) Specify

11. The ".exe" file in visual basic is produced by:
  (A) Linker   (B) Loader   (C) Compiler   (D) Interpreter

12. In Visual Basic variable cannot contain:
  (A) Number   (B) Underscore   (C) Letter   (D) period

13. Which form property will put text into title bar of the form:
  (A) Title   (B) Border text   (C) Text   (D) Header

14. Another term for a condition operator:
  (A) Ternary   (B) Binary   (C) Byte   (D) Iteration

15. MoDt is:
  (A) 20   (B) 1   (C) 0   (D) 2

Roll No. _____ *To be filled in by the candidate*

Sessions;2015-2017&2016-2018

Computer Science (Essay Type)

Time: 2:10 Hours

Marks: 60

Section -I

MS-ACCESS

2. Write short answers of any six parts from the following. 2 x 6 =12

i. Define data manipulation.
ii. Describe network model.
iii. Write any two uses of form.
iv. Define the term cardinality.
v. Describe the term synonym.
vi. Briefly explain normalization.
vii. State the use of reports.
viii. Define filter.
ix. Differentiate between fixed length and variable length field.

C-Language

3. Write short answers of any six parts from the following. 2 x 6 =12

i. Differentiate between compiler and Interpreter.
ii. Define object code.
iii. State the purpose of header file.
iv. What is assignment operator?
v. Enlist logical operators.
vi. Define escape sequence.
vii. Find the error

```
Void main ( )
   {
      int c=7
      printf("%d",C;
   }
```

viii. Find the error

```
void main ( )
   {
      int a=10
      printf("%d",a);
   }
```

ix. Write the output

```
float f=3.14159;
printf ("%8.4f",f);
```

4. Write short answers of any six parts from the following. 2 x 6 =12

i. Find out two errors from following code.

```
if (x==y)
   printf("hello")
```

ii. Find output from following code

```
int price=10;
if (price==10)
   {  printf("%d",price);
   }
```

iii. Describe selection structure.
iv. Define sentinal values.
v. Find out output from following code.

```
int i,j=0;
for(i=1;i<=5;++i)
{  printf("%d%d",i,j);}
```

vi. Convert while loop into Do while loop

```
int i=1;
while (i<=15)
{ printf("n",i)
   i=i+1;}
```

vii. What is function?
viii. Differentiate between function defination and declaration.
ix. Define a stream.

3. Write short answers of any six parts from the following.
2 x 6 =12

i. Write any two properties of algorithm.

ii. Why is assembly language called symbolic language?

iii. How properties are set at design time and run time?

iv. When is the visual basic in design time?

v. Define project explorer window.

vi. Show the output.

```
Dim A,B as integer
    A=10
    B=A*A/A
    print B
```

vii. Find the errors

```
Option explicit
Dim  D,E integer
    D=5
    E=13
    F=(D*E)+7
    Print F
```

viii. Show output:

```
Dim R,S,T as integer
    R=9
    S=4
    T=R*S+15
    Print T
```

ix. Differentiate between structured and object oriented programming.

4. Write short answers of any six parts from the following.
2 x 6 =12

i. Define Expression.

ii. Define named constant.

iii. What is specified variable declaration?

iv. How is character stored in VB?

v. What data type is used in storing data?

vi. List out keyword with examples.

vii. What is meant by data type?

viii. Show output of following

```
Dim A,B, as integer
    A=20
    B=A*A
    Print B
```

ix. How to write following expression in VB.

$$X = \frac{3Y}{5-Z}$$

Section -II
MS-ACCESS

Note: Attempt only one question from the following.
    8x1=8

5. Define key and discuss its different types.
    08

6. What is data type? Explain six different data types available in MS-Access.
    08

Section -III

Note: Attempt any two questions either from "C-language" or "Visual Basic".
    8x2=16

C-language

7. What is bug and debugging? Explain types of errors in C-program.
    08

8. Write a program in C-language, which inputs two numbers from the user and determines whether
    08

   the numbers are equal or not.

9. What is While loop? Write its syntax, also draw flowchart. Explain its working with the help of an example.
    08

Visual Basic

7. What are controls? Explain three basic controls in Visual Basic.
    08

8. Write a program in Visual Basic, which inputs two numbers from the user and determines whether
    08

   the numbers are equal or not.

9. What is While-Wend loop? Write its syntax, also draw flowchart. Explain its working with the help of an example. 08

Session;2014-2016

Computer Science (Objective Type)

Time: 20 Minutes   **Marks: 17**

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A,B,C & D to each question are given.Which answer you consider correct, fill the corresponding circle A,B,C or D given in front of each question with Marker or pen ink on the answer sheet provided.

MS-ACCESS

1.1. The data in tables is entered in:
    (A) Design view   (B) Normal view   (C) Datasheet view   (D) layout view

2. Which of the following is used to retrieve data from database and represent it to the user in a formatted way?
    (A) Report   (B) Form   (C) Query   (D) Table

3. Which of the following is not a DBMS?
    (A) MS-Access   (B) Excel   (C) SQL server   (D) Oracle

4. SQL stands for:
    (A) Sort Query language   (B) Self Query Language
    (C) Seek Query Language   (D) Structured Query Language

5. The foreign key is found in:
    (A) Parent table   (B) Dependent table   (C) Pivot table   (D) Index table

6. In an ER-diagram, the rectangle represents:
    (A) Entity   (B) Attribute   (C) Relationship   (D) None

7. The goal of normalization is to:
    (A) Get stable data structure   (B) Remove constraints
    (C) Increase redundancy   (D) Increase no. of relations

C-Language

8. One execution of a loop is known as a(n):
    (A) Cycle   (B) Duration   (C) Iteration   (D) Test

9. A loop which never ends is called:
    (A) Running loop   (B) Continuous loop   (C) nested loop   (D) infinite loop

10. The scanf is a:
    (A) Built-in function   (B) User defined function   (C) Local function   (D) Keyword

11. A file is stored in:
    (A) RAM   (B) ROM   (C) Hard Disk   (D) Cache

12. Which data type is used to store a string value in a variable?
    (A) int   (B) float   (C) long   (D) char

13. Division by zero is an example of:
    (A) Compile error   (B) Runtime error   (C) Logical error   (D) None

14. How many variables can be used in one printf function?
    (A) one   (B) two   (C) ten   (D) many

15. Which of the following is an output function?
    (A) printf   (B) getch   (C) getche   (D) scanf

16. Which of the following statement is the simplest form of decision structure?
    (A) switch   (B) if statement   (C) while loop   (D) nested if

17. Which of the following is equivalent to (p>=q)?
    (A) p<q   (B) !(p<q)   (C) p>q   (D) !(p>q)

OR   Visual Basic

8. One execution of a loop is known as a(n):
    (A) Cycle   (B) Duration   (C) Iteration   (D) Test

9. A loop which never ends is called:
    (A) Running loop   (B) Continuous loop   (C) Nested loop   (D) Infinite loop

10. The scanf is a:
    (A) Built-in function   (B) user defined function   (C) Local function   (D) keyword

11. A file is stored in:
    (A) RAM   (B) ROM   (C) Hard Disk   (D) Cache

12. Which data type is used to store a string value in a variable?
    (A) Integer   (B) Long   (C) Real   (D) String

13. Division by zero is an example of:
    (A) Compile error   (B) Runtime error   (C) Logical error   (D) None

14. How many variables can be used in one print function?
    (A) one   (B) two   (C) ten   (D) many

15. Which of the following is an example of output function?
    (A) print   (B) load   (C) cls   (D) input box

16. Which of the following statement is the simplest form of decision structure?
    (A) Select...case   (B) If statement   (C) While...Wend   (D) Nested If

17. Which of the following is equivalent to (p>=q)?
    (A) p<q   (B) Not(p<q)   (C) p>q   (D) Not(p>q)

Roll No. _____ *To be filled in by the candidate*

Computer Science (Essay Type)

Time: 3:10 Hours   **Marks: 83**

Section -I
MS-ACCESS

2. Write short answers of any eight parts from the following.   **2 x 8 =16**

i. Distinguish between chekbox and radio button.
ii. Differentiate between secondary key and primary key.
iii. List any two properties of a relation.
iv. What is the purpose of logical database design?
v. Name any four data types available in MS Access.
vi. State the purpose of using normalization.
vii. How is referential integrity achieved?
viii. State the purpose of using reports in MS Access.
ix. Write any two advantages of using RDBMS.
x. Name two table views available in MS Access.
xi. Differentiate between data redundancy and data inconsistency.
xii. Write any two constraints for selecting a file organization.

C-Language

3. Write short answers of any eight parts from the following.   **2 x 8 =16**

i. Briefly describe delimiter?
ii. Differentiate between syntax error and logical error?
iii. What are run-time errors?
iv. Distinguish between implicit and explicit type casting.
v. Find errors in the following code statement.

```
include <STDIO.H>
    void main ( );
    {
        Printf("Pakistan);
    }
```

vi. Find errors in the following assignment.

```
int a,b,c,d:
    char grade;
    a=10;
    b="20";
    c=30;
    grade=A;
```

vii. Find out the output of following expression.

```
20*(10/(5-3))+13
```

viii. Differentiate between gets and puts function.

ix. Define printf and scanf function.
x. Define assignment statement.
xi. Predict the output of following.

```
Printf ("Pakistan\n Good\n Country");
```

xii. Predict output of the following.

```
Printf ("Welcome \t to \t Lahore");
```

4. Write short answers of any six parts from the following.   **2 x 6 =12**

i. List different types of control structures in C-language.
ii. Differentiate between break and continue statement.
iii. Trace the error from following code segment.

```
int a,b,c;
    a=10
    b=3;
    if(a%b==1);
    Printf("%d",c);
```

iv. Change the following code into while loop.

```
int i;
    for (i=1;i<=10;i++)
    {
        Printf("\n Pakistan");
    }
```

v. Write the output of the following code

```
int c=1;
do
    printf ("%d",c);
    While (c++<=4);
```

vi. Trace the error in the following code segment.

```
int a
    for(a=1; a<=10; a++);
    Printf("%f",a);
```

vii. What is function call?
viii. Define function Header.
ix. What is text file?

OR   Visual Basic

3. Write short answers of any eight parts from the following.   2 x 8 =16

i. Define structure Programming.
ii. Why we need translators.
iii. Differentiate between property and method.
iv. Define integrated development environment.
v. List down any two controls.
vi. Describe the purpose of code window.
vii. How are event procedure named.
viii. Distinguish between keydown and keyup events.
ix. Describe Load method.
x. Find out errors in the following code.
```
A integer
A=Contnt(TextBo.Msg)
```
xi. Write down output of the following code.
```
Dim a As Integer
a=10
Print a\10
```
xii. Write down output of following code.
```
Dim a,b As Integer
a=20
b=6
Print"a\b="&a\b
Print"aModb="&aModb
```

4. Write short answers of any six parts from the following.   2 x 6 =12

i. Define Nested loop in Visual Basic.
ii. What is index in an Array?
iii. Differentiate between "Dim" and "Redim".
iv. What is textfile?
v. Define For-NEXT loop working?
vi. What is control array?
vii. List three properties of Combox Box control.
viii. Write two Focus events.
ix. How a function is called(invoked) in Visual Basic?

Section -II
MS-ACCESS

Note: Attempt only one question from the following.   8x1=8

5. What is a key?Describe any three types of keys used in database.   08
6. Discuss different methods of modifying a table.   08

Section -III

Note:Attempt any two questions either from "C-language" or "Visual Basic".   8x2=16

C-language

7. What is the difference among Compiler,Assembler and Interpreter?Also give one example of a language in which they are used.   08
8. Write a program in C language that inputs three numbers and finds maximum of them.   08
9. What is "While" loop? Write the syntax and draw its flowchart.Explain its working with example.   08

Visual Basic

7. Write down the difference among compiler,assembler and Interpreter?Also give one example of each.   08
8. Write a program in VB that inputs three numbers and finds maximum of them.   08
9. What is "Do...While...Loop?Write the syntax and draw its flowchart.Explain its working with example.   08

Section-IV (Practical)   5x3=15

Note: Answer any three parts from the following.

10(A). Write a procedure to create a form in MS-Access.

B. Write a procedure to create a report in MS-Access.

C. Write a program in C or VB that inputs radius of a circle and finds its area of circle by formula. $A= \pi R^2$.

D. Write a program in C or VB that prints even integers from 10 to 20 using for loop.

E. Write a function in C or VB that takes value of a variable as argument and returns its cube.

718-012-A----

Roll No. _____ *To be filled in by the candidate*   **(For all sessions)**   Paper Code | 8 | 8 | 3 | 5

Computer Science (Objective Type)

Time: 20 Minutes   **Marks: 15**

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A,B,C & D to each question are given.Which answer you consider correct, fill the corresponding circle A,B,C or D given in front of each question with Marker or pen ink on the answer sheet provided.

MS-ACCESS

1.1. The maximum number of tables in a database are:
   (A) 01   (B) 02   (C) 03   (D) Many

2. In MS-Access, Find and replace command is found in:
   (A) File menu   (B) Edit menu   (C) View menu   (D) Tool

3. The logical grouping of characters is a:
   (A) File   (B) Record   (C) Field   (D) Database

4. A virtual table that is constructed from other tables is called:
   (A) view   (B) Table   (C) Relation   (D) Tuple

5. In an ER diagram,a diamond represents:
   (A) Entity   (B) Attribute   (C) File   (D) Relationship

6. Which form of dependency is removed in 3NF?
   (A) Full Functional   (B) Non-Functional   (C) Transitive   (D) Partial

C-Language

7. Which statement causes a loop to terminate early?
   (A) End   (B) terminate   (C) break   (D) exit

8. Which of the following is a loop statement in C?
   (A) If-else-if   (B) switch   (C) if-else   (D) for

9. Global variables are created in:
   (A) ROM   (B) RAM   (C) Cache   (D) Hard disk

10. On successfully closing a file in C,the fclose( ) returns:
    (A) 0 (zero)   (B) NULL   (C) 1(ONE)   (D) File pointer

11. Division by zero (e.g., 5/0) is an example of:
    (A) Compiler error   (B) Run time error   (C) Syntax error   (D) Logical error

12. Which of the following operators has lowest precedence?
    (A) =   (B) +   (C) *   (D) !

13. The escape sequence for backlash is:
    (A) \t   (B) \b   (C) \a   (D) \\

14. An if statement inside another if statement is called:
    (A) if statement   (B) if-else statement   (C) Nested if statement   (D) switch statement

15. When a relational expression is false,it has the value:
    (A) 0   (B) 1   (C) -1   (D) 5

OR   Visual Basic

7. The statement that will immediately terminate a FOR...NEXT loop is:
   (A) EXIT   (B) Terminate   (C) Exit For   (D) END

8. Which of the following is a loop statement in visual basic?
   (A) IF...Then...Else   (B) IF...ELSE   (C) IF...END IF   (D) FOR...NEXT

9. How many options can be selected if a frame contains four option buttons?
   (A) 0   (B) 1   (C) 2   (D) 3

10. Data can be entered in a control only when it has:
    (A) Focus   (B) Mask   (C) Event   (D) Method

11. Which event detects the pressing of standard displayable character?
    (A) Keyboard   (B) Keypress   (C) Click   (D) Load

12. Which datatype is used to handle a Yes or No response?
    (A) Boolean   (B) Short   (C) Integer   (D) Date

13. The default message box style is:
    (A) Retry cancel   (B) Yes No Cancel   (C) Yes No   (D) Ok only

14. IF...END IF statement inside another IF statement is called:
    (A) IF...END IF statement   (B) IF...Then statement
    (C) Nested IF statement   (D) IF...ELSE...IF

15. The expression 15 MOD 4 has a value equal to:
    (A) 3   (B) 5   (C) 7   (D) 9

Roll No. _____*To be filled in by the candidate* | **(For all sessions)**

Computer Science (Essay Type)

Time: 2:10 Hours

Marks: 60

Section -I
MS-ACCESS

2. Write short answers of any six parts from the following.   2 x 6 =12

i. List file names from usage point of view.
ii. Who is a data administrator?
iii. Define attribute with example.
iv. Why is Normalization used?
v. Define data integrity.
vi. Define form.
vii. State the use of wild cards.
viii. What are check boxes?
ix. Differentiate between data redundancy and data inconsistency.

C-Language

3. Write short answers of any six parts from the following.   2 x 6 =12

i. Write the purpose of define directive.
ii. Why do you include "stdio.h" header file in c-program?
iii. What is the purpose of include directive?
iv. Determine output of the code.

```
int x=15;
int y=5;
printf("%d \t %d",x%y,x/y);
```

v. What is compound condition? Give an example.
vi. How an arithmatic overflow occurs?

vii. Find errors

```
include <stdio.h>
void main ( void )
{
    int x=3
    printf("%d",x);
}
```

viii. Determine the output of the following code.

```
int a=10;
int b=12;
int c;
c=a+b;
printf("c=%3d",--c);
```

ix. Write the use of printf( ) function with an example.

4. Write short answers of any six parts from the following.   2 x 6 =12

i. Determine the output

```
if (7%3==0)
    printf ("Punjab");
else
    printf ("Sindh");
```

ii. Find the error

```
void main ( )
{
    Far (int n=1; n<=5, n++)
    printf("%d",n);
}
```

iii. Define compound statement.
iv. What is nested loop?

v. Determine the output

```
int n=1;
do
{
    printf ("%d \n",n);
    n++;
} While (n<=5);
```

vi. Find the error

```
void main ( )
{
    int y=10;
    IFF (y==5)
    printf("%d" y);
}
```

vii. Why is function used in program?
viii. Describe function definition.
ix. Compare binary and text stream.

OR   Visual Basic

3. Write short answers of any six parts from the following.   2 x 6 =12

i. What is program?

ii. Which language translator is used in visual basic?

iii. How visual basic code is executed?

iv. Define the purpose of code window.

v. What is difference between project and form.

vi. Define event and method.

vii. Determine the output.

```
DIM x As Integer
    x =7/3
  print x
```

viii. Find errors in the code.

```
DIM x As float
    x=3.5
    x+x=7.0
```

ix. What is active-x control?

4. Write short answers of any six parts from the following.   2 x 6 =12

i. Define compound statement.

ii. What is nested loop?

iii. Find the error

```
Dim y=10; as integer
   IFF y=5 than
   print y
```

iv. Determine the output

```
Dim n=1 as integer;
do
    print n
    n=n+1
Loop  While n<=5
```

v. Determine output

```
if (7%3=0) then
  print ("Punjab");
else
   print("Sindh");
```

vi. Find the error

```
DIM n=1 as Integer
For m=1 to 5
   print n
```

vii. Why is function used in program?

viii. Describe function definition.

ix. Compare binary and text stream.

Section -II

MS-ACCESS

Note: Attempt only one question from the following.   8x1=8

5. Define data modeling.Explain ingredient of data modeling.   08

6. List down different data types in MS-Access.Discuss four data types.   08

Section -III

Note:Attempt any two questions either from "C-language" or "Visual Basic".   8x2=16

C-language

7. Define data type and describe three types in detail.   08

8. Write a program in C language that inputs a number and finds whether it is positive, negative or zero.   08

9. Define while loop and differentiate while and do-while loop in detail.   08

Visual Basic

7. Define data type and describe three types in detail.   08

8. Write a program in Visual basic that inputs a number and finds whether it is positive,negative or zero.   08

9. What is Do-While loop?Discuss flowchart,syntax and example of Do-While loop in detail.   08

638-012-A----

Computer Science (Objective Type)

Time: 20 Minutes **Marks:15**

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A,B,C & D to each question are given.Which answer you consider correct, fill the corresponding circle A,B,C or D given in front of each question with Marker or pen ink on the answer sheet provided.

MS-ACCESS

1.1. Arithmetic manipulation of data is known as:

(A) Summarizing (B) Classifying (C) Sorting (D) Calculations

2. An attribute is also known as:

(A) Field (B) Table (C) Row (D) Relation

3. In ERD Model,the relationship between two entities is represented by a:

(A) rectangular box (B) oval symbol (C) diamond symbol (D) line

4. Every relation must have a:

(A) candidate key (B) primary key (C) secondary key (D) alternate key

5. Which of the following object of database is used to retrieve data from database?

(A) Queries (B) Forms (C) Reports (D) Tables

6. A referential integrity constraint is a rule that maintains consistency among the:

(A) columns of two tables (B) two columns of same table

(C) rows of two table (D) attribute of two tables

C-Language

7. Every statement in a C program terminates with:

(A) Colon (B) Semicolon (C) Delimiters (D) comma

8. Preprocessor directives are commands for:

(A) Microprocessor (B) Language processor

(C) Loader (D) C preprocessor

9. Which of the following operators has lowest precedence:

(A) = (B) ! (C) == (D) +

10. The logical not operator,denoted by!, is a:

(A) Uniary operator (B) Ternary operator (C) Binary operator (D) Bitwise operator

11. The escape sequence for Tab is:

(A) \f (B) \n (C) \r (D) \t

12. The format specifier %f is used for:

(A) Character (B) Integer (C) Double (D) Float

13. A compound statement refers to a group of statements enclosed in:

(A) ( ) (B) { } (C) [ ] (D) " "

14. A loop inside the body of another loop is:

(A) For loop (B) while loop (C) nested loop (D) infinite loop

15. Function prototypes for built-in functions are specified in:

(A) source files (B) header files (C) object files (D) image files

Roll No. _____ *To be filled in by the candidate* | **(For all sessions)**

Computer Science (Essay Type)

Time: 2:10 Hours   **Marks: 60**

Section-I   (MS-ACCESS)

2. Write short answers of any six parts from the following.   **2 x 6 =12**

i. List two properties of relation.   ii. What do you mean by primary key?

iii. Define data modeling.   iv. What is cardinality?

v. How is MS-ACCESS loaded?   vi. What are reports?

vii. What is Join?Write its purpose.   viii. Write uses of query.

ix. Write two advantages of using a microsoft ACCESS IDE.

(C-Language)

3. Write short answers of any six parts from the following.   **2 x 6 =12**

i. Why is C known as strongly typed language?   ii. Describe header file.

iii. Write shortcut key to run a C-program.   iv. Give any four examples of valid variable names.

v. Differentiate between constant and variable.   vi. What is high level language?

vii. Determine the output of the following code   viii. Find errors in the following code
segment:

```
    int  m=0,  n=5;
      if(m%n>1)
   printf("success");
    else
   printf("Failure");
```

```
     int P=20
     if( P ≥ 5 )
     printf("OK");
```

ix. Write an expression in C-language for the given statement: age is from 18 to 25.

4. Write short answers of any six parts from the following.   **2 x 6 =12**

i. Write the syntax of printf and scanf functions.   ii. Define the term stream in context of file handling.

iii. What is meant by character input in
   C-programming language?

iv. Find the errors in the following code segment.

```
        a=10;
       Avg=0;
      While(a<=10);
      Avg+=a
```

v. Trace the output of the following piece of code.

```
    for(int x=1;x<=10;x=x+4)
       printf("%d\n",x);
```

vi. Determine the output of the following code segment.

```
       int j=5;
      While(j<=15)
      {
        printf("Pakistan\n")
          j=j+2;
      }
```

vii. Write down any two benefits of functions.   viii. What is meant by scope of variable?

ix. Enlist escape sequences used for different purposes.

Section -II   (MS-ACCESS)   **8x1=8**

Note: Attempt only one question from the following.

5. Write four major components of database system.   **08**

6. Define functional dependency.How do partial dependencies affect a relation?   **08**

Section -III   (C-language)   **8x2=16**

Note: Attempt any two question from the following.

7. Define programming language.Discuss two main types of programming languages.   **08**

8. What is control structure?Briefly describe basic control structures of C program.   **08**

9. Write a program that prints odd numbers between(1 to 100) using for loop.   **08**