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HSSC-(P-II)-A/2024
(For All Sessions)

Paper Code	8	8	3
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Computer Science (Objective)

Time: 20 Minutes Marks :

Note: Write Answers to the Questions on the objective answer sheet provided. Four possible answers A, B, C and D to each question are given. Write the 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 In an ER diagram, the rectangle represents:
 (A) Attribute (B) Entity ● (C) Record (D) Relationship
2. In 3NF, a non-key attribute must not depend on a:
 (A) Key attribute (B) Composite attribute (C) Primary attribute (D) Non-key attribute ●
3. The output of the query is in the form of a:
 (A) Form (B) Object (C) Table ● (D) Report
4. In MS Access, text type allows maximum number of characters up to:
 (A) 254 (B) 255 ● (C) 260 (D) 266
5. Select a data model which is more flexible among others:
 (A) Network data model (B) Hierarchical model (C) Logical data model (D) Relational data model ●
6. In a table, each primary key value should be:
 (A) Unique ● (B) Summarized (C) Non-unique (D) Null

C-LANGUAGE

7. Format specifier `% .3f` for the value of `-.005` will produce output:
 (A) `□.005` (B) `-.005` (C) `□-.005` (D) `-0.005` ●
8. Select a statement which is used for making two-way decision.
 (A) `Switch` (B) `If -else` ● (C) `If` (D) `nested if`
9. Consider `x = 12` and `y = 13`, the output of the expression `x > y ? x + y : x - y`; will be:
 (A) `-1` ● (B) `1` (C) `25` (D) `15`
10. Select the loop in which condition is written before the body of the loop:
 (A) `do - while loop` (B) `wend loop` (C) `infinite loop` (D) `while loop` ●
11. Local variables are created in:
 (A) Hard disk (B) ROM (C) RAM ● (D) Cache
12. On successfully closing a file, the `fclose()` returns:
 (A) Null (B) `0` ● (C) `1` (D) `-1`
13. A program that combines object program with additional object files is:
 (A) Linker ● (B) Loader (C) Preprocessor (D) Interpreter
14. An equivalent expression to `a /= b` is:
 (A) `b /= a` (B) `a = a/b` ● (C) `a = a/b` ● (D) `b = b/a`
15. Select format specifier that displays character on the screen.
 (A) `%d` (B) `%f` (C) `%c` ● (D) `%X`

(OR) VISUAL BASIC

7. Select the operator used for string concatenation:
 (A) `-(Under score)` (B) `& (Ampersand)` (C) `/(slash)` (D) `+(plus sign)`
8. In VB which statement is used to declare variable:
 (A) `Sub` (B) `Dim` (C) `Identifier` (D) `Event`
9. The entire select case construct is terminated with:
 (A) `End Select` (B) `Case Else` (C) `End if` (D) `Stop select`
10. The statement that will immediately terminate a For Next loop is:
 (A) `End for` (B) `Exit loop` (C) `End loop` (D) `Exit for`
11. Select a control which is invisible at run time:
 (A) Label (B) Image (C) Timer (D) Drive List Box
12. A window that requires the user to take some action before the focus can move to another form:
 (A) Modelessly (B) Modal (C) Modular (D) Module
13. The rectangle symbol in flow chart indicates:
 (A) Process (B) Input (C) Output (D) Condition
14. In Visual Basic, a form is another name for:
 (A) Tool (B) Property (C) Object (D) Code
15. The property that changes text color is:
 (A) Back color (B) Font color (C) Fore color (D) Text color

Computer Science (Subjective)

(For All Sessions)

Time: 2:10 hours

SECTION-I MS-ACCESS

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

(6x2=12)

- i. Differentiate between data and information.
- ii. Consider the following figure and indicate the Field names and records:

R No.	Name	Class ID	Dep ID
1	Asif Ali	10	4
2	Aysha	10	4
3	Saleem	11	1

- iii. Write two responsibilities of database Administrator.
- iv. How will you determine that software development is feasible for an organization or not?
- v. Write two differences between cardinality and modality of a relation.
- vi. Why it is important to normalize the relation before you use it for storing data?
- vii. What is the purpose of IDE in MS-ACCESS?
- viii. Differentiate between design view and data sheet view of table.
- ix. Write purpose of 'validation' and 'input mask' properties.

C- LANGUAGE

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

(6x2=12)

- i. Define string constant. Give an example.
- ii. Write the equivalent statement in Language C, for the following: $S = Vit + \frac{1}{2}at^2$
- iii. Predict the output of the following code segment:

```
Int    a = 7 ;
Int    y = 3 ;
Printf ("%d and %d", x/y, x%y) ;
```

iv. Find errors in the following:

```
Void  main ()
{
Int   c = 7
Printf ("%d", C)
}
```

- v. Compare getch and getche function
- vi. Find errors in the following code segment:

```
Void  main ( )
{
int   x = 5 ;
int   y
sum = x + y
Printf ("%d", sum) ;
}
```

vii. Find the output of the following code segment:

```
Void  main ( )
{
Printf (" How |t are | t you") ;
Printf ("| n Bye ") ;
}
```



viii. How file is opened in C-Language?

ix. Define file pointer.

(OR) VISUAL BASIC (V.B)

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

- i. Differentiate between design time and run time.
- ii. Define IDE.
- iii. Write down two steps for creating Visual Basic project.
- iv. Distinguish between object and event.
- v. Describe key up event.
- vi. Distinguish between hiding and closing of a form.
- vii. Define focus.
- viii. Name and explain two styles of combo box

C- LANGUAGE

(6x2=12)

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

- Why should you use a default label in switch structure?
- Determine output of following code segment:

```
Int X = 1, Y, z;
If ((x == y) || (y == z) || (z == 2))
    Print f ("yes");
else
    Printf ("No");
```

iii. Write the syntax of do while loop.

iv. Convert following code into while loop:

```
Void main ( )
{
    Int i;
    for (i = 1; i <= 10; i++)
        Printf ("Pakistan");
}
```

v. Determine output of following code:

```
Int i, p = 1;
For (i = 1; i < 6; i += 1)
    P *= 2;
Printf ("%d", P);
```

- Define between actual and formal parameters?
- What do you know about user defined functions?
- What is the scope of local variable?
- What is function definition?

(OR) VISUAL BASIC

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

- Write the syntax of message box in VB.
- What is concatenation and when would it be useful?
- What is compound condition? Give example.
- When should an if block be used instead of select case block?
- When should you use do while loop?
- Which statement terminate do and for loop early?
- Write the syntax of do loop until.
- Draw flow chart of do loop while.
- Write output of following code segment:

```
i = 1
Do
    Print i * i
    i = i + 1
Loop while i <= 5
```

SECTION-II

Note Attempt any one question from the following: (MS- ACCESS)

(8x1=8)

- What are data base anomalies? Briefly discuss insertion, deletion and modification anomalies.
- Explain any four data types available in MS-ACCESS

SECTION-III

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

(8x2=16)

(C-Language)

- Describe the characteristics of high-level programming languages.
- Write a program in C-Language which takes three members as input from user & display the smallest number by using logical operators.
- Write a program that displays first five numbers and their sum using while loop.

(VISUAL BASIC)

- Describe the characteristics of high-level programming languages.
- Write a program in VB which takes three numbers as input from user & display the smallest number by using logical operators.
- Write a program that displays first five numbers and their sum using while...wend loop.

Note: Write Answers to the Questions on the objective answer sheet provided. Four possible answers A, B, C and 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.

MA-ACCESS

Rawalpindi Board-2023

- 1.1. In ERD model, the relationship between the two entities is represented by a:

(A) Diamond symbol (B) Rectangular box (C) Oval symbol (D) Line
2. In 3NF, a non-key attribute must not depend on a (n):

(A) Non-key attribute (B) Key attribute (C) Composite key (D) Sort key
3. The data in table is entered in:

(A) Design view (B) Normal view (C) Data sheet view (D) Layout view
4. How many are the layout of Form?

(A) 2 (B) 3 (C) 4 (D) 5
5. Which of the following represents a collection of concepts that are used to describe the structure of a database?

(A) Data warehouse (B) Data model (C) Data structure (D) Data type
6. Insert command is used to insert:

(A) A new table (B) A new record (C) A view (D) Dependencies

7. The function getche () is defined in:

(A) Stdio.h (B) String.h (C) Math.h (D) Conio.h
8. Which of the following is NOT selection statement?

(A) If (B) Switch (C) While (D) If-else
9. When condition never becomes false the loop becomes:

(A) Infinite loop (B) Continuous loop (C) Finite loop (D) Tested loop
10. Function prototypes for built-in functions are specified in:

(A) Source files (B) Header files (C) Object files (D) Image files
11. C language was developed in:

(A) 1969 (B) 1972 (C) 1974 (D) 1977
12. To compile a C language program use:

(A) F2 (B) Alt+F5 (C) Alt+F9 (D) F3
13. Which of the following operator has the lowest precedence?

(A) = (B) ! (C) == (D) +
14. The symbol "==" represents:

(A) Arithmetic operator (B) Relational operator (C) Assignment operator (D) Logical operator
15. $a \neq b$ is equivalent to:

(A) $b \neq a$ (B) $a = / b$ (C) $a = a / b$ (D) $b = b / a$

7. The statement that will immediately terminate a For...next loop is:

(A) End for (B) Exit loop (C) End loop (D) Exit for
8. The upper bound of array with 10 values is:

(A) 01 (B) 1 (C) 9 (D) 5
9. Which method causes the control to be re-drawn?

(A) Refrcsh (B) Set focus (C) Visible (D) Move
10. The prefix for naming a menu item is:

(A) M (B) mnu (C) mne (D) Mn
11. The diamond symbol in a flow chart indicates:

(A) Input (B) Condition (C) Process (D) Output
12. To exit visual basic:

(A) Ctrl+Q (B) Alt+T (C) Alt+Q (D) Ctrl+Z
13. One can enter data in a control only when it has:

(A) Focus (B) Control (C) Tab order (D) Mask
14. The expression 3 mod 5 has a value equal to:

(A) 2 (B) 3 (C) 1 (D) 0
15. The entire select case construct is terminated with:

(A) Case else (B) End if (C) End select (D) Stop select

SECTION-I

Rawalpindi Board-2023

MS ACCESS

2. Write short answers of any six parts from the following: (6x2=12)
- What is data redundancy?
 - Define synonym.
 - What is the role of data administrator?
 - How many primary keys can be defined in a table?
 - Why is list box used in form?
 - How referential integrity is attained?
 - What do you mean by IDE?
 - What is the use of query wizard?
 - How does a data base differ from a table?

C LANGUAGE

3. Write short answers of any six parts from the following: (6x2=12)
- What is high level language?
 - Distinguish between compiler and interpreter.
 - Why the logical error is the most difficult to trace?
 - Define syntax error.
 - Write the legal character for an identifier.
 - Rewrite the expression $x += 2$, without using compound assignment operator.
 - Predict the output of the following code segment:
 - Find error in the following code segment:
- ```

int x = 13;
int y = 3;
Print of ("%d %d %d", x/y, y/x, x%y);

Integer x, y, sum;
z = x + y;
Print f("sum = %d", z);

```
- How is a file closed?

## (OR) VISUAL BASIC

3. Write short answers of any six parts from the following:
- What is high level language?
  - Distinguish between compiler & interpreter.
  - Why the logical error is the most difficult to trace?
  - Define syntax error.
  - Write the legal character for an identifier.
  - Define mouse down event.
  - What is mouse move event?
  - What is key up event?
  - How form is unloaded?

## C LANGUAGE

4. Write short answers of any six parts from the following: (6x2=12)
- Determine output of following code segment:
  - Determine output of following code segment:
- ```

Int n, a, b;
n = 400;
a = n % 100;
b = n / 10;
Print f("Result = %d %d", a, b);

Int X = 1, Y = 3, z = 3;
If ((X == Y) // (Y == z))! (z == 2)
Print f("Yes");
else
print f("No");

```
- Define `clrscr()` function?
 - Write following statement in C language:
 - What happens if break is missed in case block?
 - Temperature is between 25 and 35.
 - What is the use of `scanf()` function?
 - Differentiate between while and do while loop.
 - Convert following code into for loop.
 - What is nested loop?
- ```

Int c = 2
Do
Print f("%d", C);
While (C <= 5);

```

## (OR) VISUAL BASIC

4. Write short answers of any six parts from the following:
- What are Active X control?
  - Define command button control.
  - Define procedure level variable.
  - What is the purpose of "caption" property of control?
  - Which function loads a picture at run time?
  - What is meant by event procedure?
  - Define "locked" property of textbox.
  - Differentiate between image and picture control.
  - Define combo box control.

## SECTION-II

Note Attempt any one question from the following: (MS ACCESS)

- Explain features of database management system.
- What is ER diagram? Give an example of ER diagram

## SECTION-III

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

(8x2=16)

## "C-Language"

- Define "if-else-if" statement. Explain its working with syntax, flowchart and example.
- Write a program in C-language which prints the sum of the following series by using loop:

$$1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \dots + \frac{1}{n}$$

- Briefly describe the process of writing a function in C-language

## "Visual Basic"

- Define "if-then-else" structure? Explain its working with syntax, flowchart and example.
- Write a program in VB which prints the sum of the following series by using loop:

$$1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \dots + \frac{1}{n}$$

- Briefly describe the process of writing a function in VB

**Roll No.** \_\_\_\_\_ *To be filled in by the candidate*

**(For all sessions)**

|                   |          |          |          |          |
|-------------------|----------|----------|----------|----------|
| <b>Paper Code</b> | <b>8</b> | <b>8</b> | <b>3</b> | <b>3</b> |
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## 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 object of database is used to retrieve data from database?  
 (A) Queries (B) Forms (C) Reports (D) Tables
  2. 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
  3. Arithmetic manipulation of data is known as:  
 (A) Summarizing (B) Classifying (C) Sorting (D) Calculations
  4. An attribute is also known as:  
 (A) Field (B) Table (C) Row (D) Relation
  5. In ERD Model, the relationship between two entities is represented by a:  
 (A) rectangular box (B) oval symbol (C) diamond symbol (D) line
  6. Every relation must have a:  
 (A) candidate key (B) primary key (C) secondary key (D) alternate key
- ### C-Language
7. A loop inside the body of another loop is:  
 (A) For loop (B) while loop (C) nested loop (D) infinite loop
  8. Function prototypes for built-in functions are specified in:  
 (A) source files (B) header files (C) object files (D) image files
  9. Every statement in a C program terminates with:  
 (A) Colon (B) Semicolon (C) Delimiters (D) comma
  10. Preprocessor directives are commands for:  
 (A) Microprocessor (B) Language processor  
 (C) Loader (D) C preprocessor
  11. Which of the following operators has lowest precedence:  
 (A) = (B) | (C) == (D) +
  12. The logical not operator, denoted by!, is a:  
 (A) Unary operator (B) Ternary operator (C) Binary operator (D) Bitwise operator
  13. The escape sequence for Tab is:  
 (A) \f (B) \n (C) \r (D) \t
  14. The format specifier %f is used for:  
 (A) Character (B) Integer (C) Double (D) Float
  15. A compound statement refers to a group of statements enclosed in:  
 (A) ( ) (B) { } (C) [ ] (D) " "

637-12-A-☆☆---



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 segment: | viii. Find errors in the following code             |

```
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.

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

## 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.

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

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

638-12-A----

oll No. \_\_\_\_\_ To be filled in by the candidate

(For all sessions)

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| Paper Code | 8 | 8 | 3 | 1 |
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**Computer Science (Objective Type)**

Time: 20 Minutes

**Rawalpindi Board-2019**

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. Do not use marker or pen ink on the answer sheet provided.

**MS-ACCESS**

- The logical grouping of characters is a:
  - File
  - Record
  - Field
  - Database
- A virtual table that is constructed from other tables is called:
  - view
  - Table
  - Relation
  - Tuple
- In an ER diagram, a diamond represents:
  - Entity
  - Attribute
  - File
  - Relationship
- Which form of dependency is removed in 3NF?
  - Full Functional
  - Non-Functional
  - Transitive
  - Partial
- The maximum number of tables in a database are:
  - 01
  - 02
  - 03
  - Many
- In MS-Access, Find and replace command is found in:
  - File menu
  - Edit menu
  - View menu
  - Tools

**C-Language**

- Division by zero (e.g., 5/0) is an example of:
  - Compiler error
  - Run time error
  - Syntax error
  - Logical error
- Which of the following operators has lowest precedence?
  - =
  - +
  - \*
  - !
- The escape sequence for backslash is:
  - \t
  - \b
  - \a
  - \\
- An if statement inside another if statement is called:
  - if statement
  - if-else statement
  - Nested if statement
  - switch statement
- When a relational expression is false, it has the value:
  - 0
  - 1
  - 1
  - 5
- Which statement causes a loop to terminate early?
  - End
  - terminate
  - break
  - exit
- Which of the following is a loop statement in C?
  - If-else-if
  - switch
  - if-else
  - for
- Global variables are created in:
  - ROM
  - RAM
  - Cache
  - Hard disk
- On successfully closing a file in C, the fclose() returns:
  - 0 (zero)
  - NULL
  - 1 (ONE)
  - File pointer

**OR****Visual Basic**

- Which event detects the pressing of standard displayable character?
  - Keyboard
  - KeyPress
  - Click
  - Load
- Which datatype is used to handle a Yes or No response?
  - Boolean
  - Short
  - Integer
  - Date
- The default message box style is:
  - Retry cancel
  - Yes No Cancel
  - Yes No
  - Ok only
- IF...END IF statement inside another IF statement is called:
  - IF...END IF statement
  - IF...Then statement
  - Nested IF statement
  - IF...ELSE...IF
- The expression 15 MOD 4 has a value equal to:
  - 3
  - 5
  - 7
  - 9
- The statement that will immediately terminate a FOR...NEXT loop is:
  - EXIT
  - Terminate
  - Exit For
  - END
- Which of the following is a loop statement in visual basic?
  - IF...Then...Else
  - IF...ELSE
  - IF...END IF
  - FOR...NEXT
- How many options can be selected if a frame contains four option buttons?
  - 0
  - 1
  - 2
  - 3
- Data can be entered in a control only when it has:
  - Focus
  - Mask
  - Event
  - Method

637-012-A-☆



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?
- ix. Determine output of the code.

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

- v. What is compound condition? Give an example.
- vi. How an arithmetic overflow occurs?
- vii. Find errors
- viii. Determine the output of the following code.

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

```
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
- ii. Find the error

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

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

- iii. Define compound statement.

v. Determine the output

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

- iv. What is nested loop?

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.



## Rawalpindi Board-2019

### OR Visual Basic

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

2 x 6 =12

- . What is program?
- . How visual.basic code is executed?
- . What is difference between project and form.
- . Determine the output.

DIM x As Integer

x =7/3

print x

II. Which language translator is used in visual basic?

- IV. Define the purpose of code window.
- VI. Define event and method.
- VIII. Find errors in the code.

DIM x As float

x=3.5

x+x=7.0

. What is active-x control?

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

2 x 6 =12

. Define compound statement.

Find the error

Dim y=10; as integer

IFF y=5 then

print y

II. What is nested loop?

IV. Determine the output

Dim n=1 as Integer;

do

print n

n=n+1

Loop While n<=5

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

. Why is function used in program?

. Compare binary and text stream.

VIII. Describe function definition.

### Section -II

#### MS-ACCESS

e: Attempt only one question from the following.

8x1=8

Define data modelling.Explain Ingredient of data modeling.

08

List down different data types of MS-Access.Discuss four data types.

08

### Section -III

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

8x2=16

#### C-language

Define data type and describe three types in detail.

08

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

08

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

08

#### Visual Basic

Define data type and describe three types in detail.

08

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

08

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

08

638-012-A---





Roll No. \_\_\_\_\_ To be filled in by the candidate

|            |   |   |   |   |
|------------|---|---|---|---|
| Paper Code | 4 | 8 | 3 | 5 |
|------------|---|---|---|---|

Session;2015-2017&amp;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) fputc( ) | (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

- Define data manipulation.
- Describe network model.
- Write any two uses of form.
- Define the term cardinality.
- Describe the term synonym.
- Briefly explain normalization.
- State the use of reports.
- Define filter.
- 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

- Differentiate between compiler and Interpreter.
- Define object code.
- State the purpose of header file.
- What is assignment operator?
- Enlist logical operators.
- Define escape sequence.
- Find the error
- Find the error

Void main ( )

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

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

- Find out two errors from following code.  

```
if (x==y)
 printf("hello")
```
- Find output from following code  

```
int price=10;
if (price==10)
{ printf("%d",price);
}
```
- Describe selection structure.
- Define sentinel values.
- Find out output from following code.  

```
int i,j=0;
for(i=1;i<=5;++i)
{ printf("%d%d",i,j);}
```
- Convert while loop into Do while loop  

```
int i=1;
while (i<=15)
{ printf("n",i)
 i=i+1;}
```
- What is function?
- Differentiate between function definition and declaration.
- 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.
- iii. How properties are set at design time and run time?
- v. Define project explorer window.

- ii. Why is assembly language called symbolic language?
- iv. When is the visual basic in design time?
- 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.
- iii. What is specified variable declaration?
- v. What data type is used in storing data?
- vii. What is meant by data type?

- ii. Define named constant.
- iv. How is character stored in VB?
- vi. List out keyword with examples.
- 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

$$X = \frac{3Y}{5-2}$$

**Section -II**  
**MS-ACCESS**

Note: Attempt only one question from the following.

8x1=8

5. Define key and discuss its different types.
6. What is data type? Explain six different data types available in MS-Access.

08

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

08

08

### Visual Basic

7. What are controls? Explain three basic controls in Visual Basic.
8. Write a program in Visual Basic, which inputs two numbers from the user and determines whether 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

08

08