

200241



BISE Gujranwala Model Paper

Subject: Computer Science
Time = 20 Minutes

Inter Part-II Annual 2024
Marks = 15

OBJECTIVE

Q#1: Choose one of the multiple options that is correct.

(MS-ACCESS)

- i. Which of the following model is more flexible:
 - a) Network data model
 - b) Hierarchical data model
 - c) Relational data model
 - d) Object data model
- ii. A table must have
 - a) Primary key
 - b) Secondary key
 - c) Composite key
 - d) Sort key
- iii. In ERD model, the relationship between two entities is represented by a(n):
 - a) Diamond symbol
 - b) Rectangular box
 - c) Oval symbol
 - d) Line
- iv. 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
- v. Which of the following object of database is used to retrieve data from database?
 - a) Queries
 - b) Forms
 - c) Reports
 - d) Tables
- vi. To find four character name starts with H, the criteria is specified as:
 - a) H*4
 - b) H?4
 - c) H????
 - d) H####

(C-LANGUAGE)

- vii. .exe file is produced by:
 - a) Compiler
 - b) Interpreter
 - c) Linker
 - d) Loader
- viii. $a += b$ is equivalent to:
 - a) $b += a$
 - b) $a = +b$
 - c) $a = a + b$
 - d) $b = b + b$
- ix. The valid equivalent C statement of $\text{area} = \pi r^2$:
 - a) $\pi \times r^2$
 - b) $\pi * r^2$
 - c) $\pi * r \wedge 2$
 - d) $\pi * r * r$
- x. Which of the following is NOT a control structure?
 - a) Sequence
 - b) Selection
 - c) Repetition
 - d) Database

- xi. In which loop, semicolon(;) must be placed at end of its syntax?
 - a) for loop
 - b) while loop
 - c) do-while loop
 - d) for-each
- xii. Memory is allocated to a local variable at the time of its:
 - a) declaration
 - b) destruction
 - c) definition
 - d) first reference
- xiii. Which of the following is true about a function call?
 - a) Stops the execution of the program
 - b) Transfer control to the called function
 - c) Transfer control to the main function
 - d) Resumes the execution of the program
- xiv. On successfully closing a file, the fclose() returns:
 - a) NULL
 - b) 0 (zero)
 - c) 1 (one)
 - d) FILE pointer
- xv. Which of the following mode open only an existing file for both reading and writing?
 - a) "w"
 - b) "w+"
 - c) "r+"
 - d) "a+"

(VISUAL BASIC)

- vii. Identify invalid variable name?
 - a) _num
 - b) Int
 - c) 01_num
 - d) num_01
- viii. $a < > b$ is equivalent to:
 - a) $a > b$
 - b) $a < b$
 - c) $\text{NOT}(a = b)$
 - d) $a < b \text{ AND } a > b$
- ix. The valid equivalent VB statement of $\text{area} = \pi r^2$:
 - a) $\pi \times r^2$
 - b) $3.14 * r^2$
 - c) $\pi * r \wedge 2$
 - d) $3.14 * r * r$
- x. All of the followings are examples of controls EXCEPT:
 - a) Label
 - b) Button
 - c) TextBox
 - d) Caption
- xi. In which loop body run at least once?
 - a) FOR .. NEXT
 - b) WHILE .. WEND
 - c) DO .. LOOP .. WHILE
 - d) DO .. UNTIL .. LOOP
- xii. Which of the following function is used to convert numeric value into string:
 - a) Val
 - b) IntToStr
 - c) Str
 - d) String
- xiii. Which of the following is true about a function call?
 - a) Stops the execution of the program
 - b) Transfer control to the called function
 - c) Transfer control to the main function
 - d) Resumes the execution of the program

xiv. Which event is not related to Label control?

- a) Click b) Load
- c) DblClick d) Change

xv. The Stretch property is related to control:

- a) Picture b) Image
- c) Form d) Button

SUBJECTIVE

Section-I

MS-ACCESS

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

(12)

- i. Differentiate between data and information.
- ii. Define Primary Key.
- iii. What is Cardinality?
- iv. Describe functional dependency.
- v. Identify candidate keys and select primary key for relation: EMPLOYEE(ID, NAME, CNIC)
- vi. What is redundancy?
- vii. Write any two data types in MS Access.
- viii. Define wildcards.
- ix. What is the difference between list box and combo box.

(C-LANGUAGE)

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

(12)

- i. What is an object code?
- ii. Name two pre-processor directives.
- iii. How does a variable declare? Give an example
- iv. What is an arithmetic underflow?
- v. Differentiate between unary and binary operators.
- vi. Re-write the following code by using conditional operator:

```
if ( x > 5 )
    y=3;
else
    y=4;
```

vii. Find any two errors:

```
int x;
scanf("%d", x);
if (x%2=0)
    printf("Pakistan"),
```

viii. Trace the output:

```
int num=10;
num *= 5;
printf("%d", num);
```

ix. Find the output of the following code segment:

```
int x = 3, y, z ;
y = x = 10 ;
z = x < 10 ;
printf ( "x = %d  y = %d  z = %d", x, y, z ) ;
```

OR

(VISUAL BASIC)

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

- i. What is object code?
- ii. Define algorithm
- iii. How a variable is declared in VB ? Give an example
- iv. What is arithmetic underflow?
- v. Differentiate between unary and binary operators
- vi. What is integrated development environment?
- vii. Find any two errors

```
Public Sub Message_Click( )
    printf "Welcome to Islamabad"
End Subroutine
```

- viii. Define properties window in VB.
- ix. Write down the general syntax of InputBox() function.

(C-LANGUAGE)

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

- i. Define Format specifier.
- ii. List the names of two functions used for character input.
- iii. What is logical AND operator?
- iv. Find any two errors:

```
int x = 2.5;
switch(x){
    case x < 5:
    case 2.5:
}
```

- v. Predict the output:
for (i=1 ; i<= 20 ; i+=2)
printf("%d", i);
- vi. Give an example such that where you prefer to use do-while loop not while loop?
- vii. Re-write the following code by using do-while loop
for(i=10 ; i>=0 ; i-=2)
printf("Pakistan Zindabad");

- viii. Write down a function header statement, that accepts one integer and other decimal point value.
- ix. How to declare a pointer variable?

OR

(VISUAL BASIC)

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

- i. What are control statements?
- ii. Draw the flowchart of if-then statements
- iii. How a select case help you in coding?
- iv. Predict the output:

```
For X=0 to 20 Step 4
    print X
Next
```

- v. Write the output of the following code segment:

```
Dim Marks As Integer = 30
If Marks > 40 Then
    MsgBox "Pass"
Else
    MsgBox "Fail"
End If
```

- vi. Find any two errors:

```
Dim N As Integer = 1
While N <= 5 Do
    Print "Hello Friend"
    N++
Wend
```

- vii. Re-write the following code by using do-until-loop

```
Dim N As Integer
For N = 1 To 10 Step 2
    Print "Pakistan Zindabad"
Next
```

- viii. What is infinite loop?

- ix. Differentiate between DO..LOOP..WHILE and DO..UNTIL loop ?

Section-II

(MS-ACCESS)

Note: Attempt any ONE (1) question.

7. Define ER-Diagram. Explain ER-Diagram with the help of an example. (8)
8. Discuss different types of queries in database. (8)

Section-III

(C-LANGUAGE)

Note: Attempt any TWO (2) questions.

7. Write a C-Language program that input ages of three persons and display who is youngest? (8)
8. Write a C-Language program which prints the following pattern by using loop: (8)

```
1
3   5
5   7   9
7   9   11  13
```

9. How is a function call made in a C-Program ? Discuss with an example (8)

OR

(VISUAL BASIC)

Note: Attempt any TWO (2) questions.

7. Write a Visual Basic program that input ages of three persons and display who is youngest? (8)
8. Write a Visual Basic program which prints the following pattern by using loop: (8)

```
1
3   5
5   7   9
7   9   11  13
```

9. How is a function call made in a C-Program ? Discuss with an example (8)