INTERMEDIATE PART-II (12ᵗʰ CLASS)

COMPUTER SCIENCE PAPER-II   (NEW SCHEME)

TIME ALLOWED: 2.10 Hours   **SUBJECTIVE**   MAXIMUM MARKS: 60

NOTE: - Write same question number and its part number on answer book, as given in the question paper

SECTION-I

(Either from "MS-Access & C-Language" or from "MS-Access & Visual Basic").

2.   Attempt any six parts.   **MS-ACCESS**   6 x 2 = 12

(i)   Define Data Dictionary.

(ii)   Describe Database.

(iii) List any two responsibilities of data administrator.

(iv)   State the purpose of cardinality.

(v)   What is Synonym?

(vi)   Differentiate between full functional dependency and transitive dependency.

(vii) What is the use of title bar in MS-Access?

(viii) Discuss the use of design view in MS-Access.

(ix)   Distinguish between form and sub-form.

3.   Attempt any six parts.   **C-LANGUAGE**   6 x 2 = 12

(i)   Explain preprocessor directives with example.

(ii)   What are delimiters in C?

(iii) Describe the concept of linker.

(iv)   Define keywords with example.

(v)   What is garbage value?

(vi)   What is output of : printf("%C",67);

(vii) Define escape sequence character with example.

(viii) What is Sentinel Controlled Loop?

(ix)   Find errors of C code:
```
int    a = 10,  b = 40
print ("sum:        ", a + b )
```

4.   Attempt any six parts.   6 x 2 = 12

(i)   What is a Continue Statement?

(ii)   Define Ternary Operator.

(iii) What is the use of Switch Statement?

(iv)   What is an Expression?

(v)   Write output of the code.
```
float  f = 3.1415 ;
printf (% 7.2f ", f )
```

(vi)   Define Function Prototype.

(vii) What is Return Statement?

(viii) What is File Pointer?

(ix)   Convert the following code into Do-while loop code:-
```
int  n = 1;
while (n < = 7 )
{
printf ("*/n");
n++;
}
```

P.T.O.

OR   VISUAL BASIC

3.   Attempt any six parts.   6 x 2 = 12

(i)   Define properties of Window.

(ii)   Explain Code Window.

(iii)   Differentiate between hiding and closing a form.

(iv)   Define Keywords

(v)   What are Variant Variables?

(vi)   Explain the use of concatenation operator.

(vii)   Explain general syntax of msgbox (   ).

(viii) Write general syntax of inputbox (   ).

(ix)   How can we declare double type variables?

4.   Attempt any six parts.   6 x 2 = 12

(i)   What is a variable declaration in Visual Basic?

(ii)   List any three properties of Timer Control.

(iii)   Define Identifier.

(iv)   What is an Assignment Operator?

(v)   Differentiate between Variable length and Fixed length string.

(vi)   Write use of Checkbox in Visual Basic.

(vii)   Trace errors
```
For i = 0 to 4 increment 1
Print "Hello"
next j
```

(viii) Find output
```
if (3 > 1) then
print ("First no is greater");
else
print("second no is greater"
end if
```

(ix)   Convert into while loop code.
```
for a = 1  to 7
print  a * 2
next  a
end sub
```

SECTION-II

MS-ACCESS   NOTE: -   Attempt any one question.

5.   Briefly describe basic data distribution strategies.   2 + 2 + 2 + 2 = 8

6.   What are Field Properties? Explain at least three field properties with examples.   2 + 2 + 2 + 2 = 8

C-LANGUAGE   NOTE: -   Attempt any two questions.

7.   Describe eight rules for naming variables in C – Language.   1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 = 8

8.   Write a program in C – Language that inputs two numbers and one arithmetic operator (+, –, *).
     It applies arithmetic operation on numbers on the basis of given operator.   8

9.   Define Do-While Loop with Syntax. Explain its working with example and flowchart.   2 + 1 + 3 + 2 = 8

OR

VISUAL BASIC   NOTE: -   Attempt any two questions.

7.   Describe any eight properties of form in Visual Basic.   8

8.   Write a program in Visual Basic that inputs two numbers and one arithmetic operator (+, –, *).
     It applies arithmetic operation on numbers on the basis of given operator   8

9.   Define Do-loop-until with syntax. Explain its working with example and flowchart.   2 + 1 + 3 + 2 = 8

COMPUTER SCIENCE PAPER-II (NEW SCHEME)
TIME ALLOWED: 20 Minutes   **OBJECTIVE**   MAXIMUM MARKS: 15

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve questions on this sheet of OBJECTIVE PAPER.

Q.No.1

(Either from "MS-ACCESS & C-LANGUAGE" OR from "MS-ACCESS & VISUAL BASIC")
MS-ACCESS

(1) A logical grouping of characters is a:-
(A) Field   (B) Record   (C) File   (D) Table

(2) A table is a two dimensional structure that consists of:-
(A) X and Y coordinates   (B) Matrix elements   (C) rows and columns   (D) Intersection of data

(3) A person's name, birthday and social security number are examples of:-
(A) Attributes   (B) Entities   (C) Relationships   (D) Descriptors

(4) _____ form of dependency is removed in $3NF$.
(A) Functional   (B) Non-functional (C) Associative   (D) Transitive

(5) _____ is not a database object.
(A) Table   (B) Query   (C) Report   (D) MS Word

(6) In a relational database, a single piece of information is called:-
(A) Table   (B) Records   (C) Entity   (D) Attribute

C-LANGUAGE

(7) The ".exe" file produced by:-
(A) Linker   (B) Loader   (C) Compiler   (D) Interpreter

(8) Variable and constant names can not contain a (n):-
(A) Number   (B) Underscore   (C) Letter   (D) Period

(9) Format specifier is started with symbol:-
(A) ?   (B) %   (C) &   (D) *

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

(11) Relational operators allow you to _____ numbers.
(A) Compare   (B) Add   (C) Multiply   (D) Divide

(12) A loop within a loop is called:-
(A) Nested loop   (B) Complex loop   (C) Infinite loop (D) Dual loop

(13) _____ is a loop statement.
(A) if   (B) if – else   (C) Switch   (D) For

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

(15) An array script should be:-
(A) int   (B) Float   (C) Double   (D) An array

OR
VISUAL BASIC

(7) The ".exe" file produced by:-
(A) Linker   (B) Loader   (C) Compiler   (D) Interpreter

(8) Variable and constant names can not contain a (n):-
(A) Number   (B) Underscore   (C) Letter   (D) Period

(9) Use _____ to declare variable in Visual Basic.
(A) Identifier   (B) Dim   (C) Sub   (D) Event

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

(11) Relational operators allow you to _____ numbers.
(A) Compare   (B) Add   (C) Multiply   (D) Divide

(12) A loop within a loop is called:-
(A) Nested loop   (B) Complex loop   (C) Infinite loop (D) Dual loop

(13) _____ is a loop statement.
(A) if   (B) if – else   (C) Switch   (D) For-next

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

(15) An array script should be:-
(A) int   (B) Float   (C) Double   (D) An array

INTERMEDIATE PART-II (12ᵗʰ CLASS)

COMPUTER SCIENCE PAPER-II   (OLD SCHEME)

TIME ALLOWED: 3.10 Hours   **SUBJECTIVE**   MAXIMUM MARKS: 83

NOTE: - Write same question number and its part number on answer book, as given in the question paper.

SECTION-I

(Either from "MS-Access & C-Language" or from "MS-Access & Visual Basic").

MS-ACCESS

2. **Attempt any Eight parts.**   8 x 2 = 16

(i)   Define Information.   (ii) Differentiate between Master file and Transaction file.

(iii)   Define Data file.

(iv) Who is user or end user?

(v)   What is meant by file organization?

(vi) What is transitive dependency?

(vii) Define normalization.

(viii) What is database Wizard?

(ix) Define Query.

(x) Name two table views available in ACCESS.

(xi) What is Form?

(xii) Write the use of Tabular form.

3. **Attempt any Eight parts.**   8 x 2 = 16

C-Language

(i)   What is Program and Programming language?   (ii) Write a note on history of C – Language.

(iii)   Define Pre-processor directive.   (iv) What is an Identifier?   (v) Define Keywords.

(vi)   Write the output of the following code:-

```
int  x, y ;
x = 3 ;
y = x ++ ;
printf("y = %d", y) ;
```

(vii)   Find out errors in the following code:-

```
int x, y, z,
clrsc ( ):
```

(viii) Define the term Standard input

(ix)   Differentiate between getch ( ) and getche ( ) .

(x)   Write output of the following code:-

```
printf ( " \ n I an \ t Pakistan");
```

(xi)   Write output of the following code:-

```
int  a = 10;
printf ("% 9d", a ) ;
```

(xii)   Find out errors in the following code:-

```
printf (Enter 1ˢᵗ value) :
scanf ("%d"x):
```

OR

VISUAL BASIC

(i)   What is Program and Programming language?

(ii)   Write a note on history of Visual Basic language.

(iii) Define Textbox.

(iv)   What is Identifier?

(v) Define Keywords.

(vi)   Write the output of the following code:-

```
Dim  x, y as integer
x = 3
y = x++
print y
```

(vii)   Find out errors in the following code:-

```
Integer x, y, z
```

(viii) Define the Checkbox.

(ix)   Differentiate between List box and Combo box.

(x)   Write output of the following code:-

```
Dim  N As integer
N = 100
Print "you entered" & N
```

(xi)   Write output of the following code:-

```
x = 10
y = 20
print "The value x = "& x &" and y = " & y
```

(xii)   Find out errors in the following code:-

```
MBox "Hello & 10
```

4. **Attempt any six parts.**   6 x 2 = 12

C-Language

(i)   What is Control structure?

(ii)   Determine the output.

```
int a, b ;
a = 20 ;
b = 60 ;
if ( b% a = = 0 )
printf ("Result = %d", b%a);
else
printf ("No result");
```

(iii)   Find the error:-

```
int y = 5
if 0 < y < 10
printf (y is between 0 and 10);
```

(iv)   What is counter controlled loop?

(v)   Determine the output.

```
int i ;
for ( i = 1 ; i < = 10 ; i = i + 3 )
print f ("%d", i );
```

(vi)   Convert the following loop in do-while loop.

```
int i ;
for ( i = 3; i < = 39 ; i + = 6 )
printf ("%d\n", i);
```

(vii)   How does a function make programming easier?

(viii)   What is global variable?   (ix) Define stream.

OR   **VISUAL BASIC**

(i)   What is Toolbar?   (ii) How are event procedures named?

(iii)   What is the functionality of show method?   (iv) What is the purpose of Val function?

(v)   Explain the difference between a constant and a variable.

(vi)   What is output of the following code segment?

```
Dim a, b As integer
a = 20
b = 10
a = a Mod b
print a
```

(vii)   Differentiate between outer and inner loop.   (viii)   Define Array.

(ix)   How does an option button differ from checkbox?

SECTION-II (Essay Type)

NOTE: - Attempt any one question.

MS-ACCESS

5.   Explain different components of logical model in detail.   2 + 2 + 2 + 2 = 8

6.   Discuss different types of queries.   2 + 2 + 2 + 2 = 8

NOTE: - Attempt any two questions either from "C-Language" OR from Visual Basic".

C-Language

7.   What is Programming Language?   Discuss two main categories of programming language.   8

                OR   **Visual Basic**

What is Visual Programming? Write its three advantages and three disadvantages.   2 + 3 + 3

C-Language

8.   Write a program to get a positive number and display its square root value.   8

                OR   **Visual Basic**

Write a program to get a positive number and display its square root value   8

C-Language

9.   What is "for loop?" Give its syntax and flowchart. Explain its working with the help of an example.   8

                OR   **Visual Basic**

What is "for loop?" Give its syntax and flowchart. Explain its working with the help of an example   8

SECTION-III (PRACTICAL)

     Attempt any three parts of the questions.   3 × 5 = 15

10.   (i)   Write down the procedure of creating a table. Also write the steps of modifying it.

      (ii)   Write down the procedure of creating form in MS-Access with one example.

      (iii)   Write a program in C or Visual Basic that inputs radius and calculates the area of circle
           If user enters 1 as choice and circumference if enters 2 while area = radius * radius * 3.141
           Circumference = 2.0 * 3.141 * radius

      (iv)   Write a program in C or Visual Basic that converts the temperature into degrees.

           Use the following formula $C = \frac{5}{9}(F - 32)$

      (v)   Write a program in C or Visual Basic that accepts the weight in pounds and converts it
           into Kilogram.

COMPUTER SCIENCE   PAPER-II   (OLD SCHEME)
TIME ALLOWED: 20 Minutes   **OBJECTIVE**   MAXIMUM MARKS: 17

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled.   Do not solve questions on this sheet of OBJECTIVE PAPER.

Q.No.1   (Either from "MS-ACCESS & C-LANGUAGE" OR from "MS-ACCESS & VISUAL BASIC")

MS-ACCESS

(1) A collection of related fields is:-
(A) Database   (B) Table   (C) File   (D) Record

(2) An attribute is also known as a:-
(A) Row   (B) Field   (C) Table   (D) Relation

(3) Organizing the database in computer disk storage is done in:-
(A) Physical design   (B) Implementation   (C) Logical design   (D) Analysis

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

(5) A database consist of various components is called:-
(A) Entities   (B) Properties   (C) Tools   (D) Objects

(6) _____ data type is the default type in Access.
(A) Text   (B) Number   (C) Memo   (D) Auto Number

(7) _____ auto form displays one record at a time.
(A) Justified   (B) Tabular   (C) Columnar   (D) Datasheet

C-Language

(8) The extension of object file is:-
(A) .txt   (B) .h   (C) .obj   (D) .c

(9) The number of bytes used by int data type in C is:-   (A) 2   (B) 5   (C) 6   (D) 8

(10) _____ escape sequence can be used to begin a new line in C.
(A) \t   (B) \a   (C) \n   (D) \b

(11) The functions used for input and output is stored in:-
(A) conio.h   (B) inout.h   (C) stdio.h   (D) math.h

(12) _____ programming structure makes a comparison.
(A) Sequence   (B) Repetition   (C) Relation   (D) Decision

(13) In if statement true is represented by:-   (A) 0   (B) 1   (C) 2   (D) 3

(14) _____ structure always executes at least once.
(A) Nested loop   (B) While loop   (C) For loop   (D) do-while loop

(15) The loop which never ends is called:-
(A) Infinite loop   (B) Nested loop   (C) Continuous loop   (D) Complex loop

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

(17) A _____ can store text only.
(A) Binary file   (B) Object file   (C) Text file   (D) Exe file

OR
VISUAL BASIC

(8) Java is a product of:-
(A) Microsoft   (B) IBM   (C) Sun system   (D) Hewlett

(9) In Visual Basic, a form is another name for a(n):-
(A) Window   (B) Object   (C) Property   (D) Label

(10) _____ method removes a form from the screen and from memory.
(A) Show   (B) Load   (C) Unload   (D) Hide

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

(12) A string literal must be enclosed in:-
(A) Single quotes (')   (B) Pound sign #   (C) Exclamation points (!)   (D) Quotation marks (")

(13) A memory location with some data that can not change is called:-
(A) Variable   (B) Constant   (C) Named constant   (D) Symbolic constant

(14) _____ conditions are required to write an if --- then ---- Else statement.
(A) 4   (B) 3   (C) 2   (D) 1

(15) A statement block can consist of _____ lines.
(A) Unlimited   (B) Limited   (C) At most 230   (D) 2

(16) The loop which never ends is called:-
(A) Infinite loop   (B) Running loop   (C) Continuous loop   (D) Loop

(17) If step keyword is not used in For ---- Next loop, counter variable is incremented by:-
(A) 3   (B) 2   (C) 1   (D) 0

BOARD OF INTERMEDIATE AND SECONDARY EDUCATION, MULTAN
OBJECTIVE KEY FOR INTERMEDIATE ANNUAL/SUPPLY EXAMINATION, 2018

Name of Subject: Computer Science   Session: 2018

Group: 1st   New Scheme   Group: 2nd   Old Scheme

Q. Nos	Paper Code 4831	Paper Code 4833	Paper Code 4835	Paper Code 4837
1	A	D	D	C
2	C	A	D	A
3	A	C	D	D
4	D	A	A	D
5	D	D	C	D
6	D	D	A	A
7	A	B	A	B
8	D	A	A	A
9	B	A	D	A
10	A	D	B	A
11	A	B	A	D
12	A	A	A	B
13	D	A	D	A
14	B	A	B	A
15	A	D	A	D
16				
17				
18				
19				
20				

Q. Nos	Paper Code 8821	Paper Code 8833	Paper Code 8835	Paper Code 8837
1	D	C	B	B
2	B	D	C	B
3	B	A,D	D	C
4	C	A,C	A,D	D
5	D	D	A,C	A,D
6	A,D	B	D	A,C
7	A,C	B	B	D
8	C	D	D	C
9	A	A	B	A,C
10	C	A	D	D
11	A,C	C	A	B
12	D	C	A	D
13	B	A	C	A
14	D	C	C	A
15	A	A,C	A	C
16	A	D	C	C
17	C	B	A,C	A
18				
19				
20				