Gujranwala Board-2024

Roll No. of Candidate : _____

COMPUTER SCIENCE **Intermediate Part-II , Class 12th (1stA 424- IV)** **Group: I Paper: II**

Time: 20 Minutes **OBJECTIVE ..... Code: 8837** **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.

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MS-ACCESS

1. 1. An entity related to itself in an ERD model refers to relationship :
   (A) recursive ● (B) one to many (C) many to many (D) one to one
   2. The graphical query tool is known as :
   (A) query grid (B) design grid ● (C) query form (D) design form
   3. A virtual table that is constructed from other tables is called :
   (A) table (B) tuple (C) view ● (D) relation
   4. The data that causes inconsistency lacks :
   (A) good data (B) data integrity ● (C) data redundancy (D) data anomaly
   5. Referential integrity is applied on :
   (A) primary key (B) composite key (C) sort key (D) foreign key ●
   6. Each separate piece of information stored in a record is called :
   (A) form (B) field ● (C) table (D) query

C-LANGUAGE

7. If x = 2 , y = 3 , the expression (x > y)? (x + y) : (x * y); will display output as :
   (A) 5 (B) 10 (C) 6 ● (D) 1
8. The keyword "break" cannot be used within :
   (A) do while (B) if – else ● (C) for (D) while
9. The programmer usually prepares the source code using :
   (A) compiler (B) text editor ● (C) debugger (D) linker
10. Memory is allocated to a local variable at the time of its :
    (A) declaration (B) destruction (C) definition ● (D) first reference
11. The character conversion may occur in :
    (A) text stream (B) binary stream (C) input stream (D) output stream
12. Escape Sequence used to insert a Tab in C-Language is :
    (A) \a (B) \b (C) \t ● (D) \n
13. Format specifier %5.3 for the value 4.1257, will produce the output :
    (A) 4.125 (B) 4.126 ● (C) □4.126 (D) □4.125
14. Conditional operator is an alternative of :
    (A) if (B) if – else ● (C) switch (D) for
15. The data type in C-language that can handle fractional values, is called :
    (A) long (B) char (C) float ● (D) int

OR

VISUAL BASIC

7. Data can be entered in a control when it has :
   (A) tab order (B) mask (C) focus (D) control
8. In Visual Basic, a form is another name for :
   (A) object (B) window (C) property (D) label
9. Which of the following is not a control?
   (A) textbook (B) close button (C) command button (D) option button
10. The property that changes text color is :
    (A) backcolor (B) textcolor (C) forecolor (D) fontcolor
11. Visual Basic is a product of :
    (A) Microsoft (B) IBM (C) Hewlet (D) Sun System
12. A control that provides an identifiable grouping for control is :
    (A) textbox (B) button (C) label (D) listbox
13. The output of compiler is :
    (A) source code (B) object code (C) linked code (D) program
14. A predefined screen that can be used as one of the building blocks of an application :
    (A) object (B) window (C) property (D) label
15. The code that is used in a sub procedure to stop execution of a program is :
    (A) exit (B) halt (C) end (D) end sub

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.PUTER SCIENCE | Intermediate Part-II , Class 12th (1st A 424) | Group: I Paper: II

.ne: 2:10 Hours | SUBJECTIVE | Marks: 60

Note: Section I is compulsory.

SECTION – I

MS-ACCESS

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2. Write short answers to any SIX questions: 12

i. Write down two advantages of database systems.
ii. In which condition, you need to create composite key in a relation? Justify your answer.
iii. What is foreign key?
iv. Differentiate between relation and relationship.
v. What is the main purpose of "Partitioned" data distribution strategy?
vi. What is meant by "atomic values"?
vii. What is database wizard?
viii. Why are we using Input Masks?
ix. Differentiate between ListBox and ComboBox.

C-LANGUAGE

3. Write short answers to any SIX questions: 12

i. Define variable initialization.
ii. Write down the following statement in C-language.
"Age is between 18 years and 50 years"
iii. Find any two errors

```
integer x , y,
z = x + y;
printf("z = %d" , z):
```

iv. Find output

```
int a = 5 , b = 10;
int z = a + b * 2;
printf("Result = %d" , z);
```

v. What is meant by & in scanf function?
vi. Find any two errors

```
void main ( );
{int a = 10;
printf('%s' , b);
}
```

vii. Write the output of the following code

```
printf("\n Amir \t\t 78 \t\t 425");
printf("\n Tahir \t\t 23 \t\t 388");
```

viii. Describe the purpose of '\0' in strings.
ix. What is a stream?

OR

VISUAL BASIC

3. Write short answers to any SIX questions: 12

i. Define a method in VB.
ii. What is the main advantage of using Visual Basic?
iii. Describe form window.
iv. Differentiate between menubar and toolbar.
v. Write down any two forms events.
vi. How is a picture removed at runtime?
vii. What is ListIndex property?
viii. Define WordWrap in VB.
ix. What is FileListBox control?

C-LANGUAGE

4. Write short answers to any SIX questions: 12

i. Why break statement is used in a switch ( ) structure?
ii. Predict the output of the following code segment

```
int a = 10 , b = 5;
if (a > b)
    printf("PUNJAB");
else
    printf("KPK");
```

iii. Define nested loop. How does it work?
iv. Convert the following code into while loop :

```
int i;
for (i = 1 ; i <=5 ; i++)
{
printf("In Pakistan");
}
```

v. Predict the output of the following code segment

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

vi. Define function.
vii. How is a function activated?
viii. Write down the use of formal parameters.
ix. Write down two importances of functions?

(Turn Over)

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OR

VISUAL BASIC

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4. Write short answers to any SIX questions:

i. Define currency data type in VB.

ii. Describe option explicit declaration in VB.

iii. Write down the syntax of input box.

iv. How select……Case help in coding?

v. What is default property of command button?

vi. Trace the output:

```
if(10 MOD 3 = 0) Then
    print ("YES")
else
    print ("NO")
End if
```

vii. How an AND operator is used in VB statement?

viii. What is sentinal value?

ix. Write down the syntax of For……Next loop.

SECTION - II
MS-ACCESS

Note: Attempt any ONE question.

5. Briefly describe four major components of database systems. (8)

6. Explain different types of Queries? (8)

SECTION – III

Note: Attempt any TWO questions (either from "C-Language" or from "Visual Basic"):

C – LANGUAGE

7. What are errors? Discuss different types of errors which may occur in C-Language program. (8)

8. Write a program in C-language that inputs a year and finds whether it is a leap year or not, using if-else structure. (8)

9. Write a program that displays first five odd numbers and their average using while loop. (8)

OR

VISUAL BASIC

7. Discuss any eight form objects in VB. (8)

8. Write a program in Visual Basic that inputs a year and finds whether it is a leap year or not, using If…Then…Else structure. (8)

9. Write a program in VB that displays first five odd numbers and their average using While Wend loop. (8)

Gujranwala Board-2024

Roll No. of Candidate : _____

COMPUTER SCIENCE **Intermediate Part-II , Class 12th (1stA 424- III)** **Group: II** **Paper: II**

Time: 20 Minutes **OBJECTIVE ..... Code: 8836** **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.

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MS-ACCESS

1. 1. The smallest meaningful unit of data in a database is called :
   (A) field ● (B) character (C) record (D) byte
   2. In relational database, a table is also called :
   (A) tuple (B) relation ● (C) schema (D) file
   3. Which of the following data model is more flexible?
   (A) Network data model (B) Relational data model ●
   (C) Hierarchical data model (D) Basic data model
   4. Default field size of text data type field in MS Access :
   (A) 20 (B) 30 (C) 40 (D) 50 ●
   5. In an ER diagram, a rectangle represents :
   (A) entity (B) relationship (C) attribute ● (D) action
   6. The columns of a table correspond to :
   (A) cell (B) table (C) record (D) field ●

C-LANGUAGE

7. The case block ends with
   (A) End Select (B) End Case (C) break ● (D) Case else
8. Format Specifier %5.2f for value 4.12157, will produce output :
   (A) □4.12 ● (B) □□4.12 (C) □□□4.12 (D) □5.121
9. If a = 70 what will be the output of the following expression? n = (a >= 80)? 10 : 20;
   (A) 5 (B) 10 (C) 15 (D) 20 ●
10. The name of header file is written between :
    (A) [ ] (B) ( ) (C) < > ● (D) << >>
11. In which loop the condition comes after the body of the loop?
    (A) for loop (B) while loop (C) do – while loop ● (D) Infinite loop
12. Single line comment starts with
    (A) // ● (B) \\ (C) *\ (D) *
13. A file is stored in
    (A) RAM (B) Hard Disk ● (C) ROM (D) Cache
14. Escape sequence used for backspace in C
    (A) \ a (B) \ b ● (C) \ t (D) \ r
15. Local variables are also called
    (A) automatic variables ● (B) normal variables (C) global variables (D) basic variables

OR

VISUAL BASIC

7. A procedure or function that imparts some action to an object is called
   (A) property (B) control (C) method (D) label
8. Methods characterize an object's
   (A) behaviour (B) appearance (C) value (D) style
9. Which event detects the pressing of standard displayable characters?
   (A) key down (B) key up (C) keyboard (D) key press
10. The diamond in a flowchart indicates
    (A) input (B) output (C) condition (D) progress
11. The function which is used to display a message
    (A) input box (B) message (C) msgbox (D) text box
12. Control, that is used to display text or to accept user input
    (A) label (B) textbox (C) button (D) property
13. Relational operators are used to
    (A) add (B) compare (C) multiply (D) divide
14. Forms and controls are collectively recognized as
    (A) properties (B) objects (C) methods (D) events
15. The default message box style is
    (A) OK only (B) Yes No (C) Yes No Cancel (D) Retry Cancel

Gujranwala Board-2024

COMPUTER SCIENCE **Intermediate Part-II , Class 12th (1stA 424)** **Group: II** **Paper: II**

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

Note: Section I is compulsory.

SECTION – I

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MS-ACCESS 12

2. Write short answers to any SIX questions:

i. Define the term database.
ii. Discuss the advantage of variable length field over fixed length field.
iii. What is the role of end user in database system?
iv. Briefly describe the concept of cardinality.
v. Define centralized data distribution strategy.
vi. What is synonym problem in database?
vii. Briefly describe the role of table object in database.
viii. Define the concept of wildcards.
ix. Discuss the layout of datasheet form.

C-LANGUAGE 12

3. Write short answers to any SIX questions:

i. What is meant by initializing a variable?
ii. Write the following statement in C-language code:
Temp between 15 and 32 inclusive
iii. Write errors in the following code:

```
int m, y ;
m = 10.3;
y = 5;
printF("%d %d", m , y).
```

iv. Predict the output of the following code:

```
int x = 5 , y = 10;
x = x + y;
y = y – x;
printf("%d %d", x , y);
```

v. Why is ampersand (&) used in scanf function?
vi. Find errors in the following code:

```
#include <studio.h>
viode main ()
{ int a = 10;
printf("%d" , a);
}
```

vii. Predict output of the following code

```
int n = 512 , b ;
b = n% 10;
printf("%d \n %d" , n , b);
```

viii. Define binary stream.
ix. Write usage of file pointer.

OR

VISUAL BASIC

3. Write short answers to any SIX questions: 12

i. What are three basic controls used in Visual Basic?
ii. What is properties windows?
iii. Write ways to exit from Visual Basic.
iv. How object methods are called?
v. Define event procedures.
vi. What is meant by Focus?
vii. Differentiate between Modal and Modeless Forms
viii. What is the importance of visible property in VB Form?
ix. Write the method to close a VB Form.

C-LANGUAGE

4. Write short answers to any SIX questions: 12

i. Give examples of two control structures.
ii. Predict the output of the code:

```
char ch;
ch = 'p';
if(ch == 'p')
    printf("pass");
else
    printf("fail");
```

iii. Differentiate between 'do – while' and 'while' loop.
iv. Convert the following for( ) loop in to while ( )

```
for(int i = 1 ; i <= 5 ; i++)
    printf("%d \n" , i);
```

v. Give output of the following code:

```
for(int x=1 ; x <= 5 ; x++)
    printf("%d \n" , x * x);
```

vi. Give any two advantages of using a user defined function in C-language program.
vii. What is the purpose of function call and function return?
viii. Differentiate between local and global variables.
ix. What is the purpose of function header and function prototype?

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OR

VISUAL BASIC

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12

4. Write short answers to any SIX questions:

i. Differentiate between explicit and implicit declaration of variable.
ii. Write the syntax of input box.
iii. List four relational operators in VB.
iv. What symbol is used for NOT operator in Visual Basic? Give example.
v. When should a for – Next loop be used?
vi. Write syntax of for – Next loop.
vii. What is the purpose of counter variable?
viii. Write output of following code segment:

```
x = 0
while x <= 15
    print x + 2
    x = x + 2
wend
```

ix. What is meant by iteration in a loop?

SECTION - II
MS-ACCESS

Note: Attempt any ONE question.

5. Define Database model? Explain Hierarchical model along with example. **(8)**

6. Define view. What are two table views available in MSAccess? How can you switch between them? **(8)**

SECTION – III

Note: Attempt any TWO questions (either from "C-Language" or from "Visual Basic"):

C – LANGUAGE

7. How would you create, edit, compile, link and execute a program in C-Language? Discuss briefly. **(8)**

8. Write a program in C-language that inputs three numbers and finds the smallest number. **(8)**

9. Write a program in C-language that calculates the sum of the following series using loop: **(8)**

1.0 1.5 2.0 2.5 3.0 3.5 ..... 10.0

OR

VISUAL BASIC

7. How would you create, edit, compile, link and execute a program in VB? Discuss briefly. **(8)**

8. Write a program in Visual Basic that inputs three numbers and finds the smallest number. **(8)**

9. Write a program in Visual Basic that calculates the sum of the following series using loop: **(8)**

1.0 1.5 2.0 2.5 3.0 3.5 ..... 10.0

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Roll No _____ (To be filled in by the candidate)

(Academic Sessions 2020 – 2022 to 2022-2024)

COMPUTER SCIENCE 224-1st Annual-(INTER PART – II) Time Allowed : 20 Minutes

Q. PAPER – II (Objective Type) GROUP – I Maximum Marks : 15

PAPER CODE = 8833

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

(MS –ACCESS)

1-1	An example of a wildcard character is :			
	(A) &	(B) #	(C) * ●	(D) ”
2	A functional dependency is a relationship between two :			
	(A) Attributes ●	(B) Entities	(C) Rows	(D) Relations
3	A row of a relation is also called :			
	(A) Attribute	(B) Entity	(C) Tuple ●	(D) Field
4	All the hardware costs are considered during :			
	(A) Project planning ●	(B) Requirement analysis		
	(C) Data analysis	(D) Feasibility study		
5	The most commonly used database model in current database development is :			
	(A) Hierarchical	(B) Network	(C) Object-oriented	(D) Relational ●
6	Each set of related items in a table is called :			
	(A) Form	(B) Record ●	(C) Field	(D) Query

C-Language OR Visual Basic

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(C-Language)

7	Format specifier % 4.2 f for value .78962, will produce output :			
	(A) 0.78 ●	(B) □□.78	(C) □□□.78	(D) 0.7896
8	In which loop, statement terminator is part of its syntax :			
	(A) for	(B) do-while ●	(C) while	(D) nested loop
9	If $x = 2$ and $y = 3$, what will the output of the following expression : $x < y \ ? \ x : y ;$			
	(A) 2 ●	(B) 3	(C) 4	(D) 5
10	Another name for built-in function is :			
	(A) User-defined function	(B) Library function ●		
	(C) Custom made function	(D) Customized function		
11	The total number of keywords in C is :			
	(A) 32 ●	(B) 34	(C) 36	(D) 38
12	The following function is used to copy a string to an array of characters :			
	(A) Strcpy ●	(B) Strpcy	(C) Strncpy	(D) Copy
13	Following format specifier used for string			
	(A) % f	(B) % c	(C) % d	(D) % s ●
14	Another term for a computer making a decision is :			
	(A) Sequence	(B) Selection ●	(C) Repetition	(D) Iteration
15	The process of identifying and removing errors in program is called :			
	(A) Debugging ●	(B) Fixing	(C) Updating	(D) Modifying

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(Visual Basic)

1. 7	Statement that initializes and loads a form in memory without displaying it on screen : (A) Load (B) Unload (C) Hide (D) Remove
8	In Visual Basic, which keyword indicates the starting point of a decision structure : (A) then (B) if (C) start (D) else
9	The MOD operator is used for : (A) Integer remainder (B) Exponentiation (C) Multiplication (D) Division
10	Which structure is an example of multiple branches from single expression : (A) If --- Then (B) Select Case (C) For --- Next (D) If --- Then --- Else
11	All of the following are examples of control except : (A) Property (B) Label (C) Text box (D) Button
12	If number of iterations are not known in advance, the suitable programming structure is : (A) For --- Next (B) Do --- Loop Until (C) For --- Each Next (D) For --- While
13	In Visual Basic, a form is another name for a (n) : (A) Object (B) Property (C) Label (D) Window
14	How many bytes are occupied by long data type in Visual Basic : (A) 4 (B) 8 (C) 12 (D) 16
15	The rectangle symbol in a flow chart indicates : (A) Process (B) Condition (C) Input (D) Output

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Roll No _____ (To be filled in by the candidate) **(Academic Sessions 2020–2022 to 2022-2024)**

COMPUTER SCIENCE 224 –1st Annual-(INTER PART – II) Time Allowed : 2.10 hours

PAPER – II (Essay Type) GROUP – I Maximum Marks : 60

SECTION – I

(MS-ACCESS)

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

(i) Define file or dataset.
(ii) Discuss the role of fixed length field.
(iii) What are the responsibilities of DBA?
(iv) Briefly describe one-to-one relationship.
(v) Define hybrid data distribution strategy.
(vi) What are the anomalies?
(vii) Enlist four different layouts of form.
(viii) Define design view.
(ix) Briefly describe the role of queries in MS-Access.

C-Language

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

(i) Define keyword with example.
(ii) What is control string in printf function?
(iii) Write following statement in C Language code:
Speed not greater than 60.
(iv) Predict the output of the following code :

```
int  m = 15 , n = 4;
printf ( " %d   %d " , m %n , n%  m );
```

(v) Write errors in the following code :

```
Float  avg;
printf ( "Enter a number : ");
scanf ( "% f ", avg );
```

(vi) Find errors in the following code :

```
Void main  ( );
{
float  n1 = 4.5 ,  n2 = 7.2
printf ( " % f   /t    % f ", n1  ,  n2 )
}
```

(vii) Write name of any four file opening modes.
(viii) Define stream.
(ix) Predict output of the following code :

```
printf ( " Hello \n  Pakistan \n " );
printf ( " 123   \t  Over ! " );
```

OR

(Visual Basic)

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

(i) Why Visual Basic is called event-driven language?
(ii) Write the operating modes of VB?
(iii) What is project explorer window?
(iv) What is meant by object methods?
(v) How can be changed the focus of a control?
(vi) Enlist four form events.
(vii) How would you define predefined properties values?
(viii) How are properties assigned at Runtime?
(ix) Differentiate string properties values and Boolean values.

C-Language

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

(i) Write the syntax of nested if statement.
(ii) Differentiate for ( ) loop and while ( ) loop.
(iii) Predict the output of the following code segment and draw a flow chart :

```
char  g = 'M';
if ( g = = 'M' )
printf ( " Male");
else
printf ( " Female "  );
```

(iv) Convert the following while ( ) loop into for ( ) loop :

```
int i = 5;
while ( i < = 10 )
{
printf ( " % d \n ", i );
}
```

(v) Predict the output of the following code segment :

```
int x = 1;
while ( x + + < = 5 )
printf ( " %d \ n ", x );
```

(vi) Write two important points to use functions in C-language program.
(vii) What are two types of function arguments?
(viii) Differentiate scope of a local and global variable.
(ix) What is the purpose of void used in the following function declaration;
void counter (void) ;

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(Visual Basic)

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

(i) What is the purpose of 'val' function?
(ii) Why it is important to declare a variable before you use it?
(iii) Write the purpose of input box and text box.
(iv) Define the control structure.
(v) Differentiae do-until-loop and do-while-loop.
(vi) Write the syntax of do-until-loop.
(vii) What is sentinel value in conditional loop?
(viii) Differentiate pre-test and post-test loop.
(ix) Give output of the following code segment :

```
sum = 0
while i < = 5
print i
sum = sum + i
i = i + 1
WEND
```

SECTION – II

(MS ACCESS)

Note : Attempt any ONE question.

5. What is normalization? Explain first normal form. 8
6. Explain any four data types available in MS-Access. 8

SECTION – III

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

(C – Language)

7. Briefly describe characteristics of high level programming language. 8
8. Write a program in C-language that inputs a character and displays whether it is vowel or consonant. 8
9. Write a program that produces the following output using loop : 8

Number	Square Root
0	0.00
1	1.00
2	1.41
3	1.73
4	2.00
5	2.24

OR

(Visual Basic)

7. Briefly describe characteristics of high level programming language. 8
8. Write a program in Visual Basic that inputs a character and displays whether it is vowel or consonant. 8
9. Write a program that produces the following output using loop : 8

Number	Square Root
0	0.00
1	1.00
2	1.41
3	1.73
4	2.00
5	2.24

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Lahore Board-2024

Roll No _____ (To be filled in by the candidate)

(Academic Sessions 2020 – 2022 to 2022-2024)

COMPUTER SCIENCE 224-1st Annual-(INTER PART – II) Time Allowed : 20 Minutes

Q. PAPER – II (Objective Type) GROUP – II Maximum Marks : 15

PAPER CODE = 8836

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

(MS –ACCESS)

1-1	A functional dependency is a relationship between two : (A) Entities (B) Rows (C) Relations (D) Attributes ●
2	The process of arranging data in a logical sequence is called : (A) Sorting ● (B) Summarizing (C) Data capturing (D) Classifying
3	Merging the relation is also known as : (A) View entities ● (B) View integration (C) View relationship (D) View constraints
4	The smallest meaningful unit of data in the database is called : (A) Field ● (B) Character (C) Record (D) Byte
5	Default field size of text data type in MS-Access is : (A) 20 (B) 30 (C) 40 (D) 50 ●
6	A set of related files created and managed by a DBMS is called : (A) Field (B) Record (C) Database ● (D) Module

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C-Language OR Visual Basic

(C-Language)

7	Total number of keywords in C-Language is : (A) 30 (B) 32 ● (C) 34 (D) 36
8	In the statement File * fp ; the * represents : (A) Variable (B) Pointer ● (C) Argument (D) Parameter
9	The statement that activates a function is known as : (A) Function design (B) Function definition (C) Return type (D) Function call ●
10	If $a = 2$ and b = 4, the expression h = ($a >$ b) ? a + b : a * b; will display output as : (A) 6 (B) 8 ● (C) 10 (D) 12
11	Format specifier % 5.2 for value 4.1257, will produce the output : (A) □4.12 (B) □4.13 ● (C) □4.126 (D) □4.1257
12	Preprocessor directives are commands for : (A) Microprocessor (B) Language processor (C) C-processor ● (D) Loader
13	Switch statement is an alternative of : (A) if-else-if ● (B) Nested if-else (C) for loop (D) While loop
14	Escape sequence used to beep from speaker in C-Language is : (A) \a ● (B) \b (C) \t (D) \r
15	In for statement, the expression is executed only once : (A) Validation (B) Test (C) Condition (D) Initialization ●

OR

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(Visual Basic)

1. 7	Forms and controls are collectively recognized as : (A) Events (B) Objects (C) Properties (D) Methods
8	The Window that is used to establish initial property values for objects is : (A) Code Window (B) Property Window (C) Form Window (D) Main Window
9	Which operator is used for comparison : (A) Unary (B) Binary (C) Arithmetic (D) Relational
10	Which method removes a form from screen and from memory : (A) Hide (B) Unload (C) Show (D) Load
11	The statement that activates a function is : (A) Function design (B) Function call (C) Function definition (D) Function declaration
12	Graphical representation of a program is called : (A) Logical chart (B) Binary chart (C) Flow chart (D) E-R chart
13	The programmer usually enter source code into computer using : (A) Text editor (B) Compiler (C) Debugger (D) Linker
14	The control structure used to repeat statements is : (A) Loop (B) Selection (C) Sequential (D) Logical
15	Image controls hold a graphics that is assigned to : (A) Frame property (B) Text property (C) Caption property (D) Picture property

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Lahore Board-2024

Roll No _____ (To be filled in by the candidate) **(Academic Sessions 2020–2022 to 2022-2024)**

COMPUTER SCIENCE 224 –1st Annual-(INTER PART – II) Time Allowed : 2.10 hours

PAPER – II (Essay Type) GROUP – II Maximum Marks : 60

SECTION – I

(MS-ACCESS)

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

(i) What is indexed sequential file?
(ii) What is control key?
(iii) Differentiate between cardinality and modality.
(iv) Define repeating groups.
(v) What is the purpose of status bar ?
(vi) What is the purpose of reports?
(vii) What is the usage of secondary key in database? Justify with the help of example.
(viii) What is the main purpose of " Replicated" data distribution strategy?
(ix) Write down any two built-in functions that perform calculation in query.

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C-Language

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

(i) Define keywords.
(ii) What is meant by standard output?
(iii) Describe pointer variable.
(iv) What is binary stream?
(v) Write a C-Language statement to declare a long data type variable.
(vi) Find any two errors
```
char ch, ch1, sum
ch1 = '2';
ch2 = '6';
```
(vii) Find output
```
int x = 7;
int y = 3;
printf ( "% d and % d ", x / y , x % y );
```
(viii) Find any two errors
```
void main ( );
{
int B = 20;
printf ( " % d ", b );
}
```
(ix) Write down the output of the following code :
```
printf ( " Pakistan \t Zindabad \n " );
printf ( " We \t \t Pakistani \t people " );
```

OR

(Visual Basic)

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

(i) Define an event in VB.
(ii) Describe project explorer window.
(iii) What are mouse events in VB?
(iv) Differentiate between design time and runtime.
(v) Define property window.
(vi) Describe three styles of combo box.
(vii) What is the purpose of scroll bar control?
(viii) How does an option button differ from check box?
(ix) Why a three letter prefix is used with the names of controls?

C-Language

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

(i) Differentiate between while and do-while loops.
(ii) Define built-in functions with example.
(iii) Predict the output of the following code segment :
```
if ( 50 = = 70 )
printf ( " HAPPY");
else
if ( 80 = = 100 )
printf ( " NOT HAPPY " );
```
(iv) Differentiate between "if else" and " if-else-if" statements.
(v) Convert the following while ( ) loop into for ( ) loop :
```
int i = 5;
while ( i <= 10 )
{
printf ( " % d \n ", i );
}
```
(vi) Predict the output of the following code segment :
```
int c;
for ( c = 1; c <= 10; c = c +2 )
printf ( " %d ", c );
```

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(Turn Over)

Lahore Board-2024

4. (vii) Write the purpose of function argument.
(viii) Differentiate between function definition and function declaration.
(ix) What is the life time of local variable?

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OR

(Visual Basic)

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

(i) Define single data type in VB.
(ii) Describe explicit variable declaration.
(iii) What is concatenation in Visual Basic?
(iv) What is Val function?
(v) Differentiate between + and & in Visual Basic.
(vi) Write the syntax of While ---Wend loop.
(vii) What is default property of command button?
(viii) Describe the purpose of break statement.
(ix) What is sentinel value?

SECTION – II

(MS ACCESS)

Note : Attempt any ONE question.

5. Define database model. Describe different types of database models. 8

6. Discuss any four data types which are used in MS Access. 8

SECTION – III

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

(C – Language)

7. What necessary steps are taken to prepare a C-program for execution? Discuss briefly. 2,2,2,2

8. Write a program in C-language that inputs three numbers and display maximum number. 8

9. Write a program that inputs a number from user and displays table of that number. 8

OR

(Visual Basic)

7. What is IDE? Explain any three components of Visual Basic IDE. 2,2,2,2

8. Write a program in Visual Basic that inputs three numbers and display maximum number. 8

9. Write a program in VB that inputs a number from user and displays table of that number. 8

Multan Board-2024

Paper Code Number: 4835	2024 (1st-A) INTERMEDIATE PART-II (12th Class)	Roll No: _____
COMPUTER SCIENCE PAPER-II GROUP-I		
TIME ALLOWED: 20 Minutes	OBJECTIVE	MAXIMUM MARKS: 15

Q.No.1 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, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.

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

MS-ACCESS

S.#	QUESTIONS	A	B	C	D
1	In 3NF, a non-key attribute must not depend on a:	Non-key attribute ●	Key attribute	Composite key	Sort key
2	In a relational database, a single piece of information is called:	Table	Record	Entity	Attribute ●
3	A collection of related field is called:	Character	Record ●	Database	File
4	CREATE command is used to create:	Record	View ●	Report	Query
5	Customers, cars are examples of:	Entity ●	Attribute	Cardinals	Relationship
6	The columns of a table corresponds to:	Table	Record	Field ●	Cell

C-LANGUAGE

7	An other term for a computer making a decision is:	Sequential	Iteration	Selection ●	Repetition
8	When $x = 40$, $f = (x < 50)\ ?\ 10 : 20;$, after executing the statement, the value of x is:	20	10 ●	40	100
9	A loop within a loop is called:	Nested loop ●	Complex loop	Infinite loop	Dual loop
10	A built in function:	Can not be redefine	Can be redefined ●	Can not return a value	Should be redefined
11	The mode opens only an existing file for both reading and writing is:	"W" Output mode	"W+" Append mode	'R+" ● Create mode	"A+" Read mode
12	The extension of header file is:	.cpp	.txt	.E	.h ●
13	Variable and constant name can not contain a(n):	Number	Underscore	Letter	Period ●
14	The function that is used to display output on screen is called:	printf ●	scanf	pow	display
15	The format specifier %f is used for:	81	'F'	4.83 ●	'9'

OR

VISUAL BASIC

7	An other term for a computer making a decision is:	Sequential	Iteration	Selection	Repetition
8	When a relational expression is false, it has the value:	1	0	Less than zero	−1
9	A loop within a loop is called:	Nested loop	Complex loop	Infinite loop	Dual loop
10	A built in function:	Can not be redefine	Can be redefined	Can not return a value	Should be redefined
11	To create a new record, the file must be opened in:	Output mode	Append mode	Create mode	Read mode
12	The diamond in a flow-chart indicates:	Progress	Input	Output	Condition
13	Variable and constant name can not contain a(n):	Number	Underscore	Letter	Period
14	BASIC was introduced in:	1960 AD	1950 AD	1970 AD	1980 AD
15	Which event detects the processing of standard displayable characters?	Key down	Key up	Key press	Keyboard

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Multan Board-2024

INTERMEDIATE PART-II (12th Class)	2024 (1st-A)	Roll No:
COMPUTER SCIENCE PAPER-II GROUP-I		
TIME ALLOWED: 2.10 Hours	SUBJECTIVE	MAXIMUM MARKS: 60

NOTE: Write same question number and its parts 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. Write short answers to any six parts. MS-ACCESS 6 × 2 = 12

(i)	What is the main purpose of database system?	(ii)	Define foreign key.
(iii)	How many fields and records does the following table contain?		

Roll No.	Name	Subject	Class
01	Ali	English	1st year
02	Zia	Math	1st year

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(iv)	What is the primary objective of ER diagram?	(v)	Differentiate between entity class and entity instance.
(vi)	Define partial dependency.	(vii)	What is database wizard?
(viii)	Write the use of wild cards.	(ix)	What is the purpose of radio button?

3. Write short answers to any six parts. C-LANGUAGE 6 × 2 = 12

(i)	Why comments are used in program?	(ii)	Write the given expression in C-Language: $a = 2b^2c^3$

(iii)	Find the errors in the following code:
	integer x, y;
	x=10, y=20.5;
		(iv)	Determine the output of the following code:
			int x = 1;
			x++;
			printf ("%d", x++);

(v)	What is control string in printf ( ) function?		

(vi)	Find errors in the following code:
	void main ( )
	{
	printf (OK)
	}
		(vii)	What will be the output of following code:
			printf ("\"Hello \\\ n Dear!");

		(viii)	Define text stream.
		(ix)	What does "A+" mean in file handling?

OR

3. Write short answers to any six parts VISUAL BASIC 6 × 2 = 12

(i)	Describe categorized view of property in properties window.		
(ii)	Define the use of Command Button Control.	(iii)	Differentiate between the hide and show methods of form.
(iv)	Define Modeless form.	(v)	What is the use of Query Unload Event?
(vi)	Define List Index Property.	(vii)	What is the purpose of the statement 'Unload Me'?
(viii)	How can two groups of option buttons work independently?		
(ix)	How is information placed inside a combo box?		

4. Write short answers to any six parts C-LANGUAGE 6 × 2 = 12

(i)	Why break statement is used in a switch statement?		

(ii)	Trace the output of the following code segment:
	int p = 3, q = 5;
	if ((p > q) || (p! = 4))
	p = p + 1;
	else
	p = p – 1;
	printf ("%d", p);
		(iii)	Define infinite loop.

		(iv)	Convert the following code into while ( ) loop:
			void main (void){
			int a, k = 1;
			for (a = 1; a <= 10; a++)
			printf ("%d\n", k+a);}

(v)	Predict the output:
	int i, a = 3;
	for (i = 5; i > 0; i – –){
	a = a + i;
	printf ("%d\n", a);
		(vi)	What is the life time of a local variable?

		(vii)	Why return statement is used in function?
		(viii)	How is a function activated?
		(ix)	What is the use of formal parameters?

OR

4. Write short answers to any six parts VISUAL BASIC 6 × 2 = 12

(i)	What is concatenation in Visual Basic?	(ii)	What is Val Function?
(iii)	Define Infinite loop.	(iv)	Differentiate between "+" and "&" in Visual Basic.
(v)	How select --- case help in coding.	(vi)	Write the syntax of while --- wend loop.
(vii)	What is default property of command button?	(viii)	Which statements terminate Do and For loops early?

(ix)	Trace the output:
	If (10 Mod 3 = 0) Then
	Print ("YES")
	Else
	Print ("NO")
	End if		

SECTION-II

NOTE: Attempt any one question. **MS-ACCESS**

5.	What are the database anomalies? Discuss different anomalies in database.	8
6.	Explain any four types of queries in MS-Access.	8

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

C-Language

7.	Define bugs. Explain different types of errors in C-program.	8
8.	Write a program that inputs an integer and determines whether it is positive, negative or zero.	8
9.	Write a program that displays odd numbers from 1 to 17 using any loop.	8

OR VISUAL BASIC

7.	Define bugs. Explain different types of errors in Visual Basic.	8
8.	Write a program that inputs an integer and determines whether it is positive, negative or zero.	8
9.	Write a program that displays odd numbers from 1 to 17 using any loop.	8

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Multan Board-2024

Paper Code Number: 4832	2024 (1st-A) INTERMEDIATE PART-II (12th Class)	Roll No: _____
COMPUTER SCIENCE PAPER-II GROUP-II		
TIME ALLOWED: 20 Minutes	OBJECTIVE	MAXIMUM MARKS: 15

Q.No.1 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, on bubble sheet. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question.

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

MS-ACCESS

S.#	QUESTIONS	A	B	C	D
1	Which is also known as data set?	Module	File ●	Record	Field
2	A relation is also known as:	Table ●	Tuple	Attribute	Relationship
3	In an ER diagram, a rectangle represents:	Attribute	Field	Flow	Entity ●
4	Different attributes in two different tables having same name are called:	Synonym	Acronym	Homonym ●	Mutually exclusive
5	Which database object is used to retrieve data from database?	Queries ●	Forms	Reports	Tables
6	The data in tables is entered in:	Design view	Normal view	Datasheet view ●	Layout view

C-LANGUAGE

7	Void occupy how many bytes in memory?	Four	Three	Two	Zero ●
8	For initializing a variable, we use _____ operator.	→	= ●	?	@
9	The function getch( ) is defined in:	conio.h ●	stdio.h	math.h	input.h
10	If int z = 222, then the statement printf("%5d",z) will display:	□222□	222□□	□□222 ●	"222"
11	What will be the value of n after executing the following statement: $n = (100 > 200)\ ?\ 100 : 200\ ;$	100	200 ●	100200	200100
12	Which is valid case statement in a switch?	case $x < 2$	case "one"	case 1.2	case 1 : ●
13	How many types of looping structure are available in C?	2	3 ●	4	1
14	A function can return _____ value(s).	1 ●	2	3	Many
15	Which function is used to write a string to a file?	puts	printf	f puts ( ) ●	getch

OR

VISUAL BASIC

7	Forms and controls are collectively recognized as:	Properties	Methods	Events	Object
8	Methods characterize an object's:	Appearance	Behaviour	Value	Style
9	Variable and constant names can not contain:	Periods	Number	Underscore	Letter
10	The integer data type in VB occupies _____ bytes.	1	12	2	8
11	The loop which never ends is called _____ loop.	nested	infinite	inner	outer
12	If number of iterations are known in advance, the suitable loop is:	Do loop while	Do loop until	Do while loop	For Next
13	Image control holds a graphic that is assigned to _____ property.	caption	picture	text	auto size
14	The property that indicates the number of selected item in the list box control is:	selcount	count	sum	index
15	The property that specifies maximum number of characters that can be entered in a text box:	length	max	max length	multi length

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Multan Board-2024

INTERMEDIATE PART-II (12th Class)	**2024 (1st-A)**	**Roll No:** _____
COMPUTER SCIENCE PAPER-II GROUP-II		
TIME ALLOWED: 2.10 Hours	**SUBJECTIVE**	**MAXIMUM MARKS: 60**

NOTE: Write same question number and its parts 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. Write short answers to any six parts. MS-ACCESS **6 × 2 = 12**

(i)	What is meant by Data manipulation?	(ii)	What is the purpose of using views?
(iii)	How many fields and records are contained in following table?		

Roll No.	Student name	Class
1201	Asad	2nd year
1205	Majid	2nd year
1212	Saima	1st year

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(iv)	Why is requirement analysis conducted?	(v)	Define entity with example.
(vi)	What is meant by data integrity?	(vii)	What are major database objects in MS-Access?
(viii)	How table design view is different from datasheet view?	(ix)	Define different layouts of form.

3. Write short answers to any six parts. C-LANGUAGE **6 × 2 = 12**

(i)	Give examples of any two standard identifiers in C-language.	(ii)	Convert the express $x \geq y \geq z$ in C-language formate.

(iii)	What is the output of the following code?
	`int y=10;`
	`int x=2;`
	`y = x+y;`
	`x = x+5;`
	`printf("x = %d and y = %d", x, y);`
		(iv)	Indicate the errors in the following lines:
			`int 5=x;`
			`x =+x;`
			`printf('%s', x);`

(v)	Clarify the difference between getch( ) and getche( ) functions.		

(vi)	Find out the errors:
	`void main (void) {`
	`int total marks = 500;`
	`int 0M = 300;`
	`float p = 0M */100 ÷ total marks;`
	`printf ("%f", p);`
		(vii)	Predict the output;
			`int x=y=5;`
			`printf ("%d \n %d", ++x, x++);`

		(viii)	What is the difference between printf( ) and fprintf( ) functions?
		(ix)	Write purpose of 'fopen' and 'fclose' functions.

OR

3. Write short answers to any six parts VISUAL BASIC **6 × 2 = 12**

(i)	What is the purpose of 'name' property of a control?	(ii)	Name any two components of IDE.
(iii)	What is the difference between method and property?	(iv)	What is the purpose of control's naming conventions?
(v)	Differentiate between list-box and combo-box.	(vi)	How can you enter data in multiple lines of a text box?
(vii)	What is the purpose of tab index property?	(viii)	How can two groups of option buttons work independently?
(ix)	What is the purpose of timer control?		

4. Write short answers to any six parts C-LANGUAGE **6 × 2 = 12**

(i)	Define compound statement.		

(ii)	Determine the output of the following code segment:
	`char ch = 'a';`
	`switch (ch)`
	`{`
	`Case 'a':`
	`printf ( "A" );`
	`case 'b':`
	`printf ('B');`
	`}.`
		(iii)	Write two uses of loop.

		(iv)	Convert the following code segment into while loop.
			`Void main ( )`
			`{`
			`int i ;`
			`for ( i = 1 ; i <= 20 ; i++ )`
			`printf ( "loop" ) ;`
			`}.`

(v)	Predict the output of the following code segment.
	`int n;`
	`for (n=7; n>=1; n-- )`
	`printf ("%d", n) ;`
		(vi)	Define function header.

		(vii)	How does a function return a value?
		(viii)	Write down the use of actual parameter.
		(ix)	Why is function used in a program?

OR

4. Write short answers to any six parts VISUAL BASIC **6 × 2 = 12**

(i)	Distinguish between Constant and Variable.	(ii)	How variable is declared in Visual Basic?
(iii)	Why is it important to assign a data type to a variable?	(iv)	Define Control structure.
(v)	Write down the name of any two control structure in Visual Basic.	(vi)	Write down two uses of select case statement.
(vii)	Why nested IF is complicated?	(viii)	Define logical operator.
(ix)	Give four examples of relational expression.		

SECTION-II

NOTE: Attempt any one question. MS-ACCESS

5.	Define database model. Discuss different types of database models.	8
6.	What is field property in relation? Describe any six field properties in detail.	8

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

C-Language

7.	Define programming language. Describe any six characteristics of high level programming languages.	8
8.	A year is a leap year if it is divisible by 4, except that any year divisible by 100 is a leap year only if it is divisible by 400. Write a program that inputs a year such as 1996, 1800 and 2010, and displays "Leap year" if it is leap year, otherwise displays "Not Leap year".	8
9.	Write a program in C-Language that displays the sum and product of first ten even numbers.	8

OR VISUAL BASIC

7.	Define programming language. Describe any six characteristics of high level programming languages.	8
8.	A year is a leap year if it is divisible by 4, except that any year divisible by 100 is a leap year only if it is divisible by 400, write a program that inputs a year such as 1996, 1800 and 2010, and displays "Leap year" if it is leap year, otherwise displays "Not Leap year".	8
9.	Write a program in Visual Basic that displays the sum and product of first ten even numbers.	8

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Rawalpindi Board-2024

☆☆☆☆	Roll No

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

Paper Code	8	8	3

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. Wl 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 provid

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) $\square.005$ (B) $-.005$ (C) $\square-.005$ (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) $a=/b$ (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

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Rawalpindi Board-2024

Roll No _____ to be filled in by the candidate

HSSC-(P-II)-A/2024

Marks : 60

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
Print f ("%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 ( )
{
Print f (" How |t are | t you") ;
Print f ("| 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

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Rawalpindi Board-2024

ix. Distinguish between 'Default' and 'Cancel' properties of command button.

C- LANGUAGE

4. **Write short answers of any six parts from the following:** (6x2=12)

i. Why should you use a default label in switch structure?

ii. 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);
```

vi. Define between actual and formal parameters?

vii. What do you know about user defined functions?

viii. What is the scope of local variable?

ix. What is function definition?

(OR) VISUAL BASIC

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

i. Write the syntax of message box in VB.

ii. What is concatenation and when would it be useful?

iii. What is compound condition? Give example.

iv. When should an *if* block be used instead of select case block?

v. When should you use do while loop?

vi. Which statement terminate do and for loop early?

vii. Write the syntax of do loop until.

viii. Draw flow chart of do loop while.

ix. 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)

5. What are data base anomalies? Briefly discuss insertion, deletion and modification anomalies.

6. 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)

7. Describe the characteristics of high-level programming languages.

8. Write a program in C-Language which takes three members as input from user & display the smallest number by using logical operators.

9. Write a program that displays first five numbers and their sum using while loop.

(VISUAL BASIC)

7. Describe the characteristics of high-level programming languages.

8. Write a program in VB which takes three numbers as input from user & display the smallest number by using logical operators.

9. Write a program that displays first five numbers and their sum using while....wend loop.

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Warning:- Please, do not write anything on this question paper except your Roll No.

1224 (Inter Part – II) **(Session 2020-22 to 2022-24)** **Roll No ----------**

Computer Science (Objective) **Paper (II)** **Sig. of Student ----------**

Time Allowed:- 20 minutes **PAPER CODE 4833** **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. Write **PAPER CODE, which is printed on this question paper,** on the both sides of the Answer Sheet and fill bubbles accordingly, otherwise the student will be responsible for the situation. Use of Ink Remover or white correcting fluid is not allowed. **(MS-ACCESS)**

S.N.		Questions	A	B	C	D
1.		The number of fields in a relation is called the _____ of the relation.	Degree ●	Cardinality	Domain	Range
2.		Which of the following may be a temporary file?	Transaction ●	Master	Backup	Basic
3.		The number of characters in variable-length field are	1	2	Constant	Variable ●
4.		Customers, cars and parts are examples of	Attributes	Relationships	Entity ●	Cardinality
5.		A relation that is in 2NF and contains no transitive dependency is said to be in	1NF	2NF	3NF ●	4NF
6.		The smallest meaningful unit of data in a database is called	Character	File	Record	Field ●
7.	(C.Lng)	On successfully closing a file? The fclose( ) returns:	1	Null	END	0 ●
	OR (VB)	You can enter data in a control only when it has	control	tab order	mask	focus
8.	(C.Lng)	stdio stands for	simple input output	Standard input output ●	Symbolic input output	String input output
	OR (VB)	_____ window contains statements that are executed when some event occurs?	project explorer	Code	form	form layout
9.	(C.Lng)	Which of the following is a valid character constant?	abc	'c+' ●	"abc"	+
	OR (VB)	The property that changes text color is	back color	fore color	font color	text color
10.	(C.Lng)	a+=b is equivalent to	a=a+b ●	a=+b	b+=a	b=b+a
	OR (VB)	Variables name can not begin with	number	upper case	Lower case	underscore
11.	(C.Lng)	What will be the value of s after executing the following statement s=(2000>3000)? 2000:3000;	2000	3000 ●	20003000	5000
	OR (VB)	One execution of a loop is known as	duration	interation	turn	cycle
12.	(C.Lng)	Which of the following is not a selection statement?	break; ●	if	if else	switch ( )
	OR (VB)	_____ is an example of post test loop.	do loop while	while wend	do while	do until
13.	(C.Lng)	A loop within a loop is called	Infinite	Complex	Nested ●	Standard
	OR (VB)	Image control holds a graphic that is assigned to _____ property.	caption	text	picture	antosize
14.	(C.Lng)	Another name for built-in function is	user-defined	Library ●	custom-made	customized
	OR (VB)	A control that provides an identifiable grouping for control is	Text Box	Frame	Button	list box
15.	(C.Lng)	If int b=123, then the statement printf("%5d",b) will display.	"123"	□123□	123□□	□□123 ●
	OR (VB)	The Integer data type in VB occupies _____ bytes	1	12	3	2

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Sargodha Board-2024

Warning:- Please, do not write anything on this question paper except your Roll No.

24 (Inter Part-II) **(Session 2020-22 to 20222-24)**

Computer Science (Subjective) **Paper (II)**

Time Allowed: 2.10 hours **SECTION ———— I** **Maximum Marks: 60**

Answer briefly any Six parts from the following. **(MS-Access)** **6 × 2 = 12**

Define data file with example? **(ii)** What are two responsibilities of DBA?

) Identify Primary key and foreign key from following tables structures?

Roll No	Name	City

Table 1

Roll No	Subject	Marks

Table 2

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) What is meant by user processing requirements? **(v)** Write the purpose of feasibility study?

) Why is normalization used? **(vii)** Which database objects can be used to create a report?

iii) Define referential integrity? **(ix)** Differentiate between Form and Report?

Answer briefly any SIX parts from the followings:- **6 × 2 = 12**

C – Language

What is variable initialization?

Write down the equivalent C statement for: $(a-b)^2$

Find errors in the following code segment

```
int x = 10 + 20;
scanf("%d", x);
printf("value of x = " , x);
```

What is the output of the following code segment.

```
int  x = 2 , y = 3 , z;
z = (x+5) / (y+5);
printf("%d",x+y+z);
```

Differentiate between getch( ) and getche( ) functions.

Find the errors in the following code segments.

```
int L = 10 , W = 5 , A;
L * W = A;
printf("Area = %d", Area);
```

What is the output of the following code segment.

```
char ch1 = 'A' ,  ch2 = 'B';
ch1 = ch2;
ch2 = ch1;
printf("%c %c", ch1 , ch2);
```

Differentiate between text stream and binary stream.

What is an EOF?

Visual Basic

(i) What is variable initialization?

(ii) Write down the equivalent VB statement for: $(a-b)^2$

(iii) What is form layout window? What is its purpose?

(iv) What is the format of constant to define color in VB.

(v) Define scale Mode property.

(vi) Define Window State property.

(vii) What is the purpose of Fixed Dialog style?

(viii) What is the purpose of Tag property of Text box control.

(ix) How can you verify that a Listbox item is selected or not?

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Answer briefly any Six parts from the followings:- **6 × 2 = 12**

C – Language

Define control structure.

Determine the output

```
int a = 1 , b = 5;
  if ((a+b) < 6)
     printf("Result=%d",b);
      printf("Answer=%d",a+b);
```

What is sentinel value?

Visual Basic

(i) Define variant data type.

(ii) What is meant by name of a variable.

(iii) Describe implicit variable declaration.

Sargodha Board-2024

C- Language	Visual Basic

(iv) Write the output of the following code
K = 0;
while(K<=5)
{
printf("%3d%3d\n",K,10-K);
K++;
}
	(iv) Write the syntax of input BOX.

(v) Convert the following code by using for loop
int count = 1;
while (count <=10)
{
printf("%d\n",count);
count++;
}
	(v) What is the purpose of Val function?

(vi) Describe unstructure programming.	**(vi)** Write the syntax of IF-THEN structure
(vii) What is function header?	**(vii)** Define compound comparison.
(viii) Define actual parameters.	**(viii)** Describe the purpose of continue statemen
(ix) Write any two benefits of user defined functions	**(ix)** Write the syntax of Wile-Wend loop

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SECTION ---------- II

Note: Attempt any ONE question. **MS - ACCESS** **(8 × 1 = 8)**

5. Define DBMS. Explain different features of a dbms?

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

SECTION ---------- III

Note: Attempt any TWO questions either from "C – Language" OR from "Visual Basic". **(8 × 2 = 16)**

7. **C – Language** Briefly describe the basic structure of C program?

7. **--OR--Visual Basic** Briefly describe the basic structure of Visual Basic program?

8. **C – Language** Write a program that inputs temperature and displays a message according to the following data.

Temperature	Message
Greater than 40.	Hot day
Between 25 and 40 (inclusive)	Pleasant day
Less than 25	Cool day

8. **--OR--Visual Basic** Write a program that inputs temperature and displays a message according to the following data.

Temperature	Message
Greater than 40	Hot day
Between 25 and 40 (inclusive)	Pleasant day
Less than 25	Cool day

9. **C – Language** Write a program in C-Language that display numbers from 1 to 20 and also compute and display their sum and average by using loop.

9. **--OR--Visual Basic** Write a program in VB that display numbers from 1 to 20 and also compute and display their sum and average by using loop.

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1236 -- 1224 -- 20000

Bahawalpur Board-2024

Computer Science	(A)	L.K.No. 1469	Paper Code No. 8831
Paper II	(Objective Type)	Inter (I[st] – A – Exam – 2024)	
Time :	20 Minutes	Inter (Part - II)	Session (2020 – 22) to (2022 – 24)
Marks :	15		

(Important Instructions)

Note : Q.No.1 from Sr.No.7 to Sr.No.15 is of two types : (i) C – Language (ii) Visual Basic. The candidates are required to attempt any one of them. While Q.No.1 from Sr.No. 1 to Sr.No.6 is compulsory for all candidates.

Note : Four choices A , B , C ,D to each question are given. Which choice is correct fill that circle in front of that Question No. on the Objective Bubble Sheet. Use Marker or Pen to fill the circles. Cutting or filling two or more circles will result in Zero Mark in that Question.

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MS - ACCESS

Q.No.1 (1)	Which of the following Database model is often referred to as an Inverted Tree : (A) Hierarchical (B) Network (C) Relational (D) Object Oriented
(2)	Which of the following is also known as Control Key : (A) Sort Key (B) Composite Key (C) Primary Key (D) Candidate Key
(3)	Which of the following symbol is NOT used in ER – Diagram : (A) Rectangle (B) Oval (C) Diamond (D) Triangle
(4)	The goal of Normalization is to : (A) Increase No. of Relations (B) Increase Redundancy (C) Get Stable Data Structure (D) Remove Constraints
(5)	The output of the query is in the form of : (A) Form (B) Report (C) Graph (D) Table
(6)	How many table views are available in MS – Access : (A) 1 (B) 2 (C) 3 (D) 4

C - Language

(7)	Which places an executable file in memory : (A) Compiler (B) Linker (C) Loader (D) Debugger
(8)	Which of the following is NOT a reserved word : (A) Goto (B) While (C) For (D) Float
(9)	Format Specifier used for integer data type is : (A) % c (B) % d (C) % f (D) % s
(10)	Escape Sequence for backslash is : (A) \ (B) \ b (C) \\ (D) \t
(11)	Conditional Operator gives the result for 'a' ! = 97 ? 10 : 20 ; (A) 10 (B) 20 (C) 30 (D) 107
(12)	Which of the following is NOT valid case statement in switch : (A) Case O : (B) Case – 1 : (C) Case 'A' : (D) Case "A" :
(13)	A loop whose condition never becomes false is called : (A) Infinite Loop (B) Continuous Loop (C) Running Loop (D) Fast Loop
(14)	The Scope of a variable refers to its : (A) Name (B) Accessibility (C) Length (D) Data Type
(15)	If a file is closed by fclose ( ) function properly , then fclose ( ) function return : (A) NULL (B) 1 (C) 0 (D) – 1

Visual Basic

(7)	Which places an executable file in memory : (A) Compiler (B) Linker (C) Loader (D) Debugger
(8)	Which of the following is a reserved word : (A) Int (B) IF (C) For (D) While
(9)	You can enter data in a control only when it has : (A) Tab Order (B) Focus (C) Mask (D) Color
(10)	Methods Characterize an object's : (A) Style (B) Appearance (C) Behavior (D) Value
(11)	The naming Prefix for a label control is : (A) Lab (B) 1 b1 (C) 1 be (D) 1
(12)	Which method removes a form from the screen and from memory : (A) Show (B) Hide (C) Load (D) Unload
(13)	A Loop whose Condition never becomes false is called : (A) Infinite Loop (B) Continuous Loop (C) Running Loop (D) Fast Loop
(14)	The Scope of a variable refers to its : (A) Name (B) Accessibility (C) Length (D) Data Type
(15)	The Trigger the timer event once every second , set the interval properly to : (A) 10 (B) 100 (C) 1000 (D) 10000

Bahawalpur Board-2024

Roll No.	L.K.No. 1469 -25000	Inter (Part – II)	Session (2020 – 22) to (2022 – 24)
Computer Science (Subjective)	Inter (Ist – A – Exam – 2024)		Time 2 : 10 Hours Marks : 60

Note : Section – I (MS – ACCESS) is compulsory for all candidates and candidates have to attempt any (06) parts from Q.No.2. Attempt any (6 – 6) parts of Q.No.3 and Q.No.4 that consists of two parts i – e C – Language and Visual Basic. The Candidates have to attempt any one from these i – e either C – Language or Visual Basic. While attempt Section – II and Section III according to given instructions.

Section - I (MS – ACCESS) 18 x 2 = 36

Q.No.2	(i)	Define Database.
	(ii)	From the information given below , construct a table and find a suitable primary key PHYSICIAN (Ph_Code , Ph _ Name , Address , Mobile No , Age).
	(iii)	What is an Entity?
	(iv)	Describe views in Database.
	(v)	Write the names of any two Data Distribution Strategies.
	(vi)	Define Functional Dependency.
	(vii)	What are Macros in MS Access?
	(viii)	Differentiate between Sorting and Filtering.
	(ix)	Describe Columnar Reports.

(C - Language)

Q.No.3	(i)	Define Type Casting and its Types.	(ii)	Write the following expression in C language : $n = 5mz^2$
	(iii)	Find errors in the following Code : int a ; b ; a = 10 ; b = 5 ; printf (" % d " ; a + b) ;	(iv)	Predict the output of the following Code Segment : printf (" I \ t\ n LOVE \ t\t\t\n PAKISTAN ") ;

	(v)	Determine the output of the following Code Segment :
		int x , y , sum ;
		x = 5 ; y = 10 ;
		sum = x+ y ;
		printf (" Sum = % d " , Sum) ;
			(vi)	Find errors in the following Code segment :
				# include (Stdio . h)
				main ( )
				{
				char a = ' b ' ;
				print (" % C " , a) ;
				}

	(vii)	Name Four Escape character provided by C .	(viii)	Define Text Stream .
	(ix)	What is a String?		

(Visual Basic)

Q.No.3	(i)	Write the purpose of the statement " Unload me " .	(ii)	Describe Code Window.
	(iii)	Differentiate between Run Time and Break Time.	(iv)	How are controls placed on a form in Visual Basic ?
	(v)	What are Keyboard Events in V. B ?	(vi)	Define Label Control.
	(vii)	What is the Concept of methods in Visual Basic ?	(viii)	What is the purpose of " name " property of Control ?
	(ix)	How is picture removed at Run Time?		

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L.K.No 1469

(C - Language)

Bahawalpur Board-2024

Q.No.4	(i)	Convert the following loop into for loop :
		i = 10 ;
		while (i < = 20)
		{
		printf (" Loop ") ;
		i + + ;
		}
			(ii)	What is the Output of the following Code ,
				when a = 1000 and b = 5000
				If (a > b)
				printf ("a is larger ") ;
				else
				printf (" b is larger or equal ") ;

	(iii)	Define the purpose of Goto Statement.	(iv)	Briefly describe the Selection Structure.

	(v)	What is the output of the following Code :
		x = 7 ;
		While (x < = 15)
		{
		printf (" % d " , x) ;
		x + + ;
		}
			(vi)	Define the role of Local Variable .

	(vii)	What is User – Defined Function ?	(viii)	Discuss any two benefits of Function.
	(ix)	Describe the role of Function Call .		

(Visual Basic)

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Q.No.4	(i)	Describe the function of Input Box.		
	(ii)	What is Lost Focus?	(iii)	Discuss the advantage of Concatenation.
	(iv)	What is Logical Operator?	(v)	When should you use FOR....NEXT Loop?
	(vi)	Draw flow chart of While ... Wend.	(vii)	Write the Syntax of do loop while .
	(viii)	Write output of following Code Segment : m = 1 do Print m * 2 m + + loop while m < = 5	(ix)	Which statement terminate do and for loop early?

Section II (MS – ACCESS)

Note : Attempt any one of the following questions.

Q.No.5	What is Database ? Discuss different types of Database Models.	(08)
Q.No.6	What are Field Properties ? Define with example any three field properties of a table . 2+2+2+2=	(08)

Section III

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

C - Language

Q.No.7	What steps C.P.U takes to execute language C-Program? Briefly describe each.	(08)
Q.No.8	Write a Program in C Language that inputs temperature and displays a message according to following data : Temperature | Message Greater than 35 | Hot Day Between 25 and 35 (inclusive) | Pleasant Day Less than 25 | Cool Day	(08)
Q.No.9	Write a Program that inputs a number and Prints its Factorial.	(08)

Visual Basic

Q.No.7	Describe Various Data Types available in Visual Basic.	(08)
Q.No.8	Write a Program in V . B that inputs temperature and displays a message according to following data: Temperature | Message Greater than 35 | Hot Day Between 25 and 35 (inclusive) | Pleasant Day Less than 25 | Cool Day	(08)
Q.No.9	Write a Program that inputs a number and Prints its Factorial.	(08)

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DG Khan Board-2024

COMPUTER SCIENCE

PAPER CODE - 8835
12th CLASS – 1st Annual 2024

TIME: 20 MINUTES
MARKS: 15

OBJECTIVE

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 marks in that question.

QUESTION NO. 1

MS-ACCESS

1 The output of the query is in the form of a
(A) Table ● (B) Form (C) Report (D) List

2 How many table views are available in Microsoft Access
(A) 1 (B) 2 ● (C) 3 (D) 4

3 A collection of related fields is called
(A) Character (B) File (C) Database (D) Record ●

4 Which of the following is not a type of database key ?
(A) Public ● (B) Primary (C) Foreign (D) Secondary

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

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

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C-LANGUAGE

7 What will be the value of y after executing the following statement
y = (5 < 10) ? 5 : 10 ;
(A) 5 ● (B) 10 (C) 510 (D) 15

8 All of the followings are control statements except
(A) Sequential (B) Repetition
(C) Selection (D) Float ●

9 Which of the following symbol is used at the end of case statement
(A) ; (B) end l (C) : ● (D) <

10 The first line of function definition is known as
(A) Arguments (B) Function body
(C) Return type (D) Function header ●

11 An array subscript should be
(A) float ● (B) int (C) double (D) string

12 .exe is produced by
(A) Loader (B) Interpreter
(C) Linker ● (D) Debugger

13 The number of bytes used by float data type in C-language is
(A) 1 (B) 2 (C) 3 (D) 4 ●

14 Which of the following operator has lowest precedence ?
(A) = ● (B) + (C) * (D) ( )

15 If int a = 5 , then the statement
printf (" % 4 d " , a) will display
(A) ▯ 5▯▯ (B) 5▯▯▯ (C) ▯▯▯ 5 ● (D) " 5 "

OR

VISUAL BASIC

7 Image control holds a graphic that is assigned to ..... property
(A) Caption (B) Auto size (C) Picture (D) Text

8 All items in a list box can be cleared at once using method
(A) Remove item (B) Delete (C) Finish (D) Clear

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

10 Forms and controls are collectively recognized as
(A) Properties (B) Method (C) Object (D) Events

11 The naming prefix for a label control is
(A) lable (B) la (C) lb (D) lbl

12 Variables name cannot begin with
(A) Number (B) Uppercase
(C) Lowercase (D) Underscore

13 The long data type in VB occupies ..... bytes
(A) 1 (B) 2 (C) 4 (D) 8

14 A loop within a loop is called
(A) Nested (B) Complex (C) Outer (D) Sentinel

15 ..... is an example of post test loop
(A) Do while (B) While wend
(C) Do until (D) Do loop while

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DG Khan Board-2024

12th CLASS – 1st Annual 2024

COMPUTER SCIENCE | **SUBJECTIVE** | **TIME : 2.10 HOURS**

SECTION-I | **MARKS : 60**

MS ACCESS

QUESTION NO. 2 Write short answers to any Six (6) of the following parts **6 x 2 = 12**

(i) Define record with example

(ii) What is Alternate key ?

(iii) How many attributes and records are contained in the following relation ?

Stud. No	Stud. Name	Gender	DOB
641	Ali	Male	12/01/2005
642	Taha	Male	29/05/2007

(iv) Define relationship

(v) What is the purpose of database design process ?

(vi) What is homonym ?

(vii) What is MS Access ?

(viii) Write the use of input mask ?

(ix) Why are sub form used ?

QUESTION NO. 3 Write short answers to any Six (6) of the following questions **6 x 2 = 12**

C-Language

(i) What are standard identifiers ?

(ii) Convert the expression $A = PiR^2$ in C-language expression

(iii) If x = 2 give output of following statement

```
Printf ( " % d " , + + x ) ;
Printf ( " \n %d " , x + + ) ;
```

(iv) Write syntax of printf( ) function

(v) Indicate the errors in following code ;

```
int main (void) {
    const int pi = 3.1415 ;
    int R :
    PRINTF( " % f " , pi * R * R) ;
}
```

(vi) What is the output of following code

```
int x = 32 ;
int y = 4 ;
printf (" % d and % d is % d " , x , y , x % y) ;
```

(vii) Indicate errors in the following code ;

```
int x , y ;
0 = x = y ;
x + + + ;
printf (' % d ' , x + y) ;
```

(viii) Define a stream in C-Language

(ix) Differentiate between " w " and " w +" modes to open a file in C-Language

OR

Visual Basic

(i) Write the purpose of project explorer window

(ii) Visual basic is known as event driven programing language , why ?

(iii) What is the purpose of option explicit statement ?

(iv) Differentiate between modal and modeless form in visual basic

(v) What are intrinsic controls ?

(vi) Why we use a label control ?

(vii) What is difference between linking and embcading ?

(viii) Write the purpose of " Large change " and " Small change " properties of scroll bar

(ix) What is the purpose of "'passwordchar " property of text box ?

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DG Khan Board-2024

QUESTION NO. 4 Write short answers to any Six (6) of the following parts **6 x 2 = 12**

C-Language

(i) How are instructions executed in sequential structure ?
(ii) Predict the output of the following

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

(iii) Define loop
(iv) Convert the following do while loop into for loop

```
int c = 2 ;
do
printf ( " % d " , c ) ;
while (c + + < = 5) ;
```

(v) Predict the output of the following code segment

```
int x = 5 , y = 3 ;
do
{
 x = x * 2 ;
 y = y + 2 ;
}
 while (y < 10) ;
printf( " % d " , x) ;
```

(vi) List any two benefits of using function
(vii) Define function body
(viii) How long the global variable exist in a memory ?
(ix) Compare local and global variable

OR

Visual Basic

(i) Define constant
(ii) Write down two rules to give name to the variable
(iii) Why is it important to declare variable before use?
(iv) Distinguish between IF-Then-Else and Select-Case statement
(v) In Visual Basic how select case help you in coding
(vi) How nested IF is used in VB
(vii) Distinguish between counter control and sentinel control loop
(viii) Give an example of nested loop
(ix) Distinguish between While-wend and Do-while loop

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SECTION-II (MS – ACCESS)

Note: Attempt any one question 8
Q.5. What are database anomalies ? Discuss its three types
Q.6. Explain any four data types available in MS-Access

SECTION-III

Note: Attempt any two questions. (2 x 8) = 16

C-Language

Q.7. What is programming language ? Discuss two main categories of programming languages
Q.8. Write an interactive program that contains an if statement that may be used to compute the area of circle (area = πr^2) or the circumference of circle (circumference = $2 \pi r$) after prompting the user to type the first character of the formula name (A or C)
Q.9. Write a program in C-Language that display product of all even numbers between 2 to 20 by using loop

OR

Visual Basic

Q.7. What is programming language ? Discuss two main categories of programming languages
Q.8. Write an interactive program that contains an if statement that may be used to compute the area of circle (area = πr^2) or the circumference of circle (circumference = $2 \pi r$) after prompting the user to type the first character of the formula name (A or C)
Q.9. Write a program in VB that display product of all even numbers between 2 to 20 by using loop

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Faisalabad Board-2024

Roll No. : _____

Objective
Paper Code
8831

Intermediate Part Second

Computer Science (Objective)

Time: 20 Minutes Marks: 15

Q.No.1 **You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill the relevant circle in front of that question number on computerized answer sheet. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero marks in that question. Attempt as many questions as given in objective type question paper and leave other circles blank.**

(MS-Access)

S.#	Questions	A	B	C	D
1	Storage and retrieval of data is related to:	Data capturing	Data manipulation ●	Managing output results	Data sorting
2	An attribute is also known as:	Record	Row	Relation	Field ●
3	Organizing the database in computer storage is done in:	Logical design	Physical design ●	Analysis	Implementation
4	A functional dependency is a relationship between two:	Entities	Relations	Rows	Attributes ●
5	A database consists of various components called:	Objects ●	Properties	Tools	Entities
6	The degree of relation refers to the number of:	Rows	Tables	Fields	Columns ●

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(C – Language OR Visual Basic)

(C – Language)

7	The target code produced by the compiler is:	Object code ●	Source code	Library code	Linked code
8	The symbols that perform operations on data are called:	Syntax	Operands	Operators ●	Rules
9	An ampersand before the name of a variable in scanf ( ) function denotes:	Address ●	Actual value	Format	Data type
10	Format specifier %5d for the value 8135 will produce the output:	8135	□8135 ●	□□8135	□□□8135
11	The case block ends with:	End select	End case	Case else	Break ●
12	If X = 5 and Y = 3, the expression (X > Y) ? (X + Y) : (X – Y) ; will display output as:	8 ●	2	0	– 2
13	The do-while ( ) loop structure always ends with:	Comma	Colon	Break	Semi-colon ●
14	The scope of variable refers to its:	Length	Name	Accessibility ●	Data type
15	On successfully closing a file, the fclose ( ) returns:	Null	Zero ●	One	File pointer

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OR (Visual Basic)

7	The step-by-step procedure to solve a problems is called:	Algorithm	Programming	Control	Flowchart
8	The bar that contains command needed to work with Visual Basic is called:	Title Bar	Status Bar	Menu Bar	Scroll Bar
9	The diamond symbol in a flowchart indicates:	Condition	Input	Output	Program
10	Control used to display text or to accept user input is called:	Label	Textbox	Button	Property
11	Forms and controls are collectively recognized as:	Methods	Properties	Events	Objects
12	Relational operators are used to:	Compare	Add	Multiply	Divide
13	Form property that displays text in the title bar of the form is:	Title	Header	Border text	Caption
14	In Visual Basic, which statement indicates the end of a decision structure?	Next	End	End if	Else
15	Which language is used for solving business problems?	C++	COBOL	FORTRAN	Assembly

Faisalabad Board-2024

1217-XII124

Intermediate Part Second

Roll No. _____

Computer Science (Subjective)

Time: 02:10 Hours Marks: 60

SECTION – I

2. **Write short answers to any SIX parts.** 12

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(MS – Access)

(i) What is data dictionary?
(ii) Let you have a relation STUDENT in your database, such that STUDENT (Col1 , Col2 , Col3 , Col4 , Col5) create a view on first and last attribute of STUDENT.
(iii) What is data administrator?
(iv) What is recursive relationship? Give an example.
(v) Write any two disadvantages of "Centralized" data distribution strategy.
(vi) Define transitive dependency.
(vii) What is redundancy?
(viii) What is the main purpose of wildcards?
(ix) Differentiate between check boxes and radio buttons.

3. **Write short answers to any SIX parts.** 12

(C – Language)

(i) Define variable.
(ii) What is an array?
(iii) Find any two errors:

```
int a = 10 , b = 40 ,
printf ( "Sum = :" , a * b )
```

(iv) Find any two errors:

```
Void main ( ) ;
float i = 15.6;
printf ( "%d" , i ),
```

(v) What is meant by format string?
(vi) Describe End-of-File (EOF).
(vii) Write the output of the following code:

```
printf ( "Escape sequence is a
\" cool \ "feature of
\'C-language\' " );
```

(viii) Find output:

```
int a = 20;
int b = 3;
printf ( "Result = %d" , a % b );
```

(ix) Write the statement in C-language: " Marks are between 40 and 60 "

OR (Visual Basic)

(i) Define property in VB.
(ii) What is the purpose of control naming conventions?
(iii) Describe code window.
(iv) Differentiate between runtime and break time.
(v) What are keyboard events in VB?
(vi) Write the purpose of the statement 'unload me'.
(vii) Define label control.
(viii) What is the purpose of a form?
(ix) How does two groups of option buttons work independently?

4. **Write short answers to any SIX parts.** 12

(C – Language)

(i) Define "switch" statement.
(ii) Write the syntax of "do-while" loop.
(iii) Predict the output of the following code segment:

```
int x = 2 , y = 1 , z = 5;
if ( x > y && y > z )
printf ("YES");
else
printf ("NO");
```

(iv) Convert the following loop into do-while loop:

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

(v) List different types of functions in C.
(vi) Define function body.
(vii) Write the use of actual parameters.
(viii) How is a function activated?
(ix) Predict the output of the following code segment:

```
int i = 5;
do
{
printf ( "PAKISTAN");
i = i – 1;
}
while ( i > 0 );
```

(Continued P / 2)

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OR (Visual Basic)

(i) Define infinite loop in VB.
(ii) Define string data type in VB.
(iii) Write the syntax of Msgbox.
(iv) How select --- case helps in coding?
(v) What is default property of command button?
(vi) Define goto statement in VB.
(vii) Differentiate between pretest and post test loop.
(viii) What are legal characters of a identifier?
(ix) Write the syntax of For --- Next loop.

SECTION – II Each question carries 08 marks.

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(MS-Access) Attempt any ONE question from the following:

5. Briefly describe four disadvantages of database systems.

6. What is query? Discuss its uses and advantages.

Attempt any TWO questions either from C-Language OR Visual Basic

(C – Language)

7. What is basic structure of C-program? Explain its different parts briefly. 02,02,02,02

8. Write a program in C-language that inputs marks of a student and displays his high grade according to the given criteria:

Marks	>=90	80 – 89	70 – 79	60 – 69	40 – 59	<40
Grade	A	B	C	D	E	F

9. Write a program that displays first five numbers with their cubes using loop:

Output
1 1
2 8
3 27
4 64
5 125

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(Visual Basic)

7. What are VB common controls? Explain any three common controls of VB. 02,02,02,02

8. Write a program in Visual Basic that inputs marks of a student and displays his high grade according to the given criteria:

Marks	>=90	80 – 89	70 – 79	60 – 69	40 – 59	<40
Grade	A	B	C	D	E	F

9. Write a program in VB that displays first five numbers with their cubes using loop:

Output
1 1
2 8
3 27
4 64
5 125