

# Sargodha Board-2024

**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 <input checked="" type="radio"/>	Cardinality	Domain	Range
2.	Which of the following may be a temporary file?	Transaction <input checked="" type="radio"/>	Master	Backup	Basic
3.	The number of characters in variable-length field are	1	2	Constant	Variable <input checked="" type="radio"/>
4.	Customers, cars and parts are examples of	Attributes	Relationships	Entity <input checked="" type="radio"/>	Cardinality
5.	A relation that is in 2NF and contains no transitive dependency is said to be in	1NF	2NF	3NF <input checked="" type="radio"/>	4NF
6.	The smallest meaningful unit of data in a database is called	Character	File	Record	Field <input checked="" type="radio"/>
7.	(C.Lng) On successfully closing a file? The fclose( ) returns:	1	Null	END	0 <input checked="" type="radio"/>
	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 explorer	Standard input output <input checked="" type="radio"/>	Symbolic input output	String input output
	OR (VB) _____ window contains statements that are executed when some event occurs?		Code	form	form layout
9.	(C.Lng) Which of the following is a valid character constant?	abc	“+” <input checked="" type="radio"/>	“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 <input checked="" type="radio"/>	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 <input checked="" type="radio"/>	20003000	5000
	OR (VB) One execution of a loop is known as	duration	iteration	turn	cycle
12.	(C.Lng) Which of the following is not a selection statement?	break; <input checked="" type="radio"/>	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 <input checked="" type="radio"/>	Standard
	OR (VB) Image control holds a graphic that is assigned to _____ property.	caption	text	picture	autosize
14.	(C.Lng) Another name for built-in function is	user-defined	Library <input checked="" type="radio"/>	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”	<input type="checkbox"/> 123 <input type="checkbox"/>	123 <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> 123 <input checked="" type="radio"/>
	OR (VB) The Integer data type in VB occupies _____ bytes	1	12	3	2



# Sargodha Board-2024

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

14 (Inter Part-II)

(Session 2020-22 to 2022-24)

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)  $6 \times 2 = 12$

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		Roll No	Subject	Marks
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Table 1

Table 2

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?

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

Answer briefly any SIX parts from the followings:-

$6 \times 2 = 12$

## C – Language

## Visual Basic

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?

(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?

Answer briefly any Six parts from the followings:-

$6 \times 2 = 12$

## C – Language

## Visual Basic

Define control structure.

Determine the output

```
int a = 1, b = 5;
```

```
if ((a+b) < 6)
```

```
printf("Result=%d", b);
```

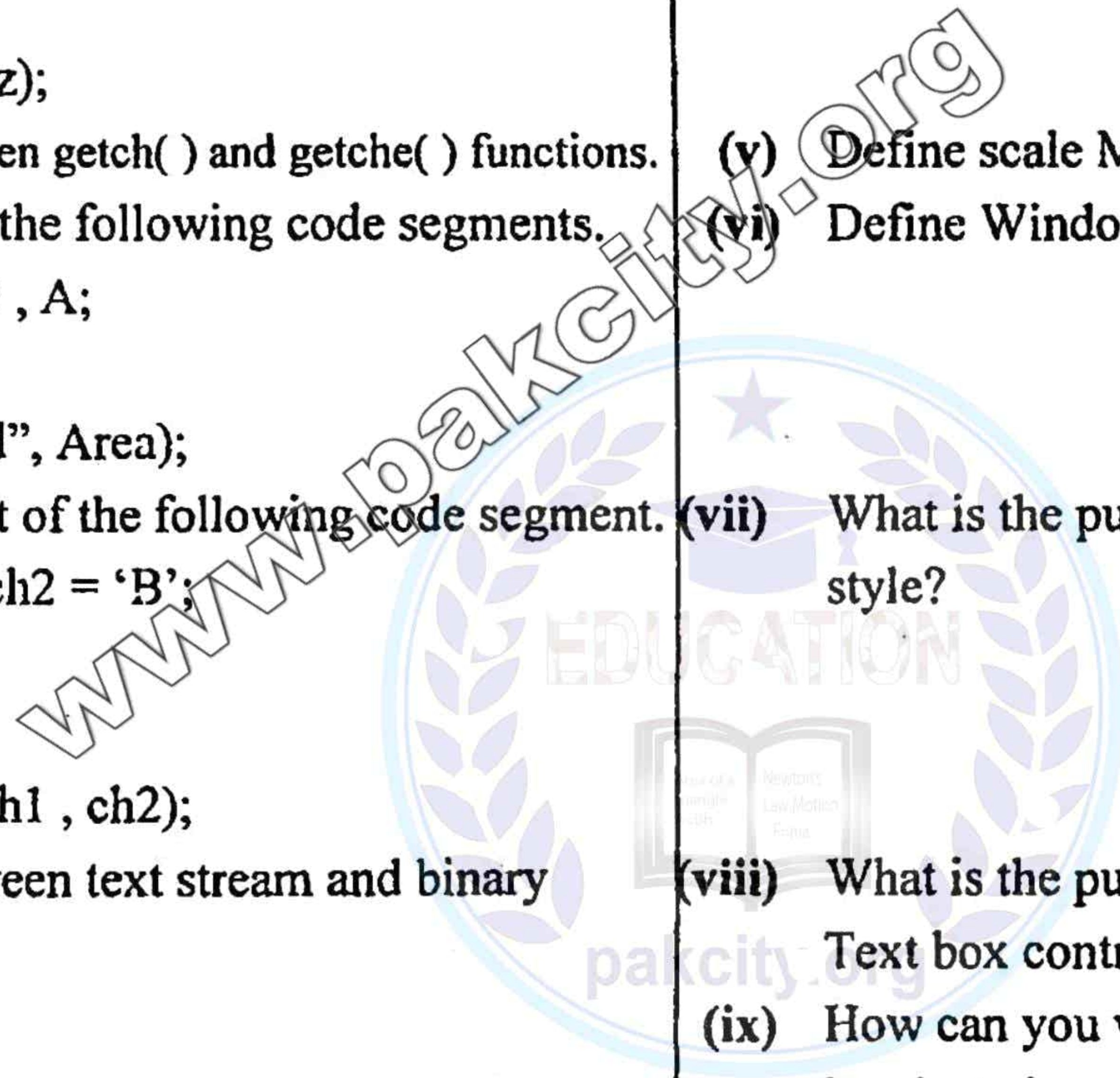
```
printf("Answer=%d", a+b);
```

What is sentinel value?

(i) Define variant data type.

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

(iii) Describe implicit variable declaration.





## 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++;
}
```

(v) Convert the following code by using for loop

```
int count = 1;
while (count <=10)
{
    printf("%d\n",count);
    count++;
}
```

(vi) Describe unstructure programming.

(vii) What is function header?

(viii) Define actual parameters.

(ix) Write any two benefits of user defined functions

(iv) Write the syntax of input BOX.



(v) What is the purpose of Val function?

(vi) Write the syntax of IF-THEN structure

(vii) Define compound comparison.

(viii) Describe the purpose of continue statement

(ix) Write the syntax of While-Wend loop

## 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.



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.	Which of the following may be a temporary file?	Master file	Transaction file	Back up file	Random file
2.	The foreign key found in:	Parent table	Dependant table	Pivot table	Index table
3.	In hybrid distribution which kind of fragments are stored at only one site:	Critical fragments	Critical and non-critical fragments	non-critical fragments	only large fragments
4.	In relational database, a table is also called a:	Tuple	Relation	File	Schema
5.	How many types of queries are available in Microsoft Access?	4	3	2	5
6.	Which type of Form displays one record at a time?	Tabular	Columnar	Datasheet	Justified
7.	(C.Lang) Preprocessor directives are commands for: OR (VB) The rectangle symbol in a flow chart indicates:	Micro processor Condition	Language Processor Input	C Preprocess or Process	Loader Out put
8.	(C.Lang) Select a language that requires no translator to execute the program: OR (VB) In visual Basic, a form is another name for a(n):	C Language Label	Assembly Language Method	C++ Property	Machine Language Object
9.	(C.Lang) Program variables are created in: OR (VB) Methods characterize an object's:	Cache Style	RAM Behavior	ROM Value	Hard disk Appearance
10.	(C.Lang) Float data type requires memory of: OR (VB) The MOD operator is used for:	1 byte Division	2 bytes Multiplication	4 bytes Integer Remainder	8 bytes Exponentiation
11.	(C.Lang) The symbol used for modulus operator is: OR (VB) Relational operators are used to:	&& Add numbers	% Compare numbers	= Multiply	! Divide numbers
12.	(C.Lang) The format specifier % f is used for: OR (VB) One execution of loop is known as:	int Duration	char Test	float Iteration	long Continuity
13.	(C.Lang) Conditional operator is an alternative of: OR (VB) An index can be of the data type:	nested if String	if-else Integer	if Boolean	switch Currency
14.	(C.Lang) Which loop structure always executes at least once: OR (VB) Which control provides an identifiable grouping for controls:	for Text Box	do-while Frame Control	while Label	while-do Command Button
15.	(C.Lang) Which of the following looks for the prototypes of functions used in a program? OR (VB) Example of a windows common dialog box is:	Processor Label	Linker Text	Loader Timer	Compiler Open



# Sargodha Board-2023

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

1223 (Inter Part-II)

(Session 2019-21 to 2021-23)

Computer Science (Subjective)

Paper (II)

Time Allowed: 2.10 hours

Maximum Marks: 60

## SECTION ----- I

2. Answer briefly any Six parts from the following.

(MS-Access)  $6 \times 2 = 12$

- (i) What do you mean by data independence? (ii) What is view? (iii) Define end user.  
(iv) Why is normalization used. (v) What is homonym?  
(vi) What is database wizard? (vii) Define cardinality. (viii) How are records sorted in a query?  
(ix) What is checkbox?

3. Answer briefly any SIX parts from the followings:-

$6 \times 2 = 12$

### C – Language

### Visual Basic

- |  |  |
|--|--|
| (i) Why main function is important in every C Language program?                              | (i) What is translator?                          |
| (ii) Differentiate between structured and unstructured programming languages.                | (ii) How are controls placed on Form?            |
| (iii) Define the "IDE" of turbo C++.   | (iii) Who is programmer?                         |
| (iv) What is object program?   | (iv) Distinguish between Load and Unload events. |
| (v) What is user-defined identifier?   | (v) What is enable property?                     |
| (vi) What will be the value of X (integer variable)?<br><code>X=3%10% Z;</code>              | (vi) Define implicit declaration.                |
| (vii) What will be the output of the following code?<br><code>printf("%d", 'a'+ 'b');</code> | (vii) Define Input box.                          |
| (viii) Trace error from the following code:<br><code>int x;<br/>scanf ("%d", x);</code>      | (viii) How controls are aligned left?            |
| (ix) Differentiate between new line and EOF marker.  | (ix) How to make controls of equal size?         |

4. Answer briefly any Six parts from the followings:-

$6 \times 2 = 12$

### C – Language

### Visual Basic

- |   |  |
|---|--|
| (i) What is the use of scanf ( ) function? Write its syntax.  | (i) Write two properties of an Algorithm.                      |
| (ii) Describe the term Format specifier in C-language   | (ii) What is the difference between hiding and closing a Form? |
| (iii) Trace the output of the following code segment:<br><code>int x=0, y=5, z=4;<br/>x = x+y*2;<br/>y=x-y/2;<br/>printf("%d%d", x,y);</code> | (iii) Define implicit declaration.                             |
| (iv) Define conditional operator. Write its syntax.   | (iv) Describe default property of command button.              |



- (v) Trace the output of the following code segment:
- ```
int p=3, q=5;
if((p>q) || (p!=4))
    p=p+1;
else
    q=p-1;

printf ("%d%d", p, q);
```
- (vi) Write an expression in C-Language for the following:  
Y is greater than X and less than Z.
- (vii) What is meant by loop?
- (viii) Why is sentinel value used in loop?
- (ix) Convert the following code into while ( ) loop.
- ```
int a;
for (a=1; a<=25; a+=2)
if (a%7!=0)

    print f("%d\n", a);
```
- (v) What is pop up menu?
- (vi) Convert the following code into while---wend loop.
- ```
Dim a As Integer
For a=1 To 25 step 2
    IF (a Mod 7<>0) Then
        Print (a)
    End If
Next
```
- (vii) What is Visual Basic event?
- (viii) Differentiate between methods and properties.
- (ix) Define combo box control.

## SECTION ----- II

**Note:** Attempt any ONE question.

(8 × 1 = 8)

**MS - ACCESS**

5. Describe the file types from usage print of view?
6. Briefly describe basic data distribution strategies.

## SECTION ----- III

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

7. **C – Language** Define "nested if" statement. Explain its working with Syntax, Flowchart and Example.
7. **--OR-- Visual Basic** Define "Nested if-Then-Else" structure. Explain its working with Syntax, Flowchart and Example.
8. **C – Language** Write a program in C-Language which prints the sum of the following series by using loops  
1+4+9+16+25+....+256
8. **--OR-- Visual Basic** Write a program in VB which prints the sum of the following series by using loops  
1+4+9+16+25+.....+256
9. **C – Language** What are global variables? Explain their scope and life time with an example.
9. **--OR-- Visual Basic** What are global variables? Explain their scope and life time with an example.



## Sargodha Board-2022

1222 Warning:- Please write your Roll No. in the space provided and sign. Roll No. \_\_\_\_\_  
(Inter Part – II) (Session 2018-20 to 2020-22) Sig. of Student \_\_\_\_\_

Chemistry (Objective)

Group – I

Paper (II)

Time Allowed:- 20 minutes

PAPER CODE 4485

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 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.

Q.1

- 1) Major source of acid deposition in atmosphere is  
(A) SO (B) SO<sub>2</sub> (C) SO<sub>3</sub> (D) N<sub>2</sub>O
- 2) Residence time of NO in atmosphere is  
(A) 1 day (B) 2 days (C) 3 days (D) 4 days
- 3) Which among the following has highest value of heat of hydration  
(A) Li<sup>+</sup> (B) K<sup>+</sup> (C) Mg<sup>2+</sup> (D) Al<sup>3+</sup>
- 4) Down's cell is used to prepare  
(A) Sodium carbonate (B) Sodium bicarbonate (C) Sodium metal (D) Sodium hydroxide
- 5) Which element forms an ion with charge +3  
(A) Be (B) Al (C) C (D) Si
- 6) Oxidation of NO in air produces  
(A) N<sub>2</sub>O (B) N<sub>2</sub>O<sub>3</sub> (C) N<sub>2</sub>O<sub>4</sub> (D) N<sub>2</sub>O<sub>5</sub>
- 7) Which is the strongest Acid?  
(A) HClO (B) HClO<sub>2</sub> (C) HClO<sub>3</sub> (D) HClO<sub>4</sub>
- 8) Which of following is a typical transition metal?  
(A) Sc (B) Y (C) Ra (D) Co
- 9) Which set of hybrid orbitals have planar triangular shape  
(A) sp<sup>3</sup> (B) sp<sup>2</sup> (C) sp (D) dsp<sup>2</sup>
- 10) β – β' – dichloroethyl sulphide is commonly known as  
(A) Mustard gas (B) Laughing gas (C) Phosgene gas (D) Bio-gas
- 11) Aromatic hydrocarbons are derivatives of  
(A) Normal series of paraffins (B) Alkene (C) Benzene (D) Cyclohexane
- 12) Which one of following is not a nucleophile.  
(A) H<sub>2</sub>O (B) H<sub>2</sub>S (C) BF<sub>3</sub> (D) NH<sub>3</sub>
- 13) Rectified spirit contains ethyl alcohol about.  
(A) 80% (B) 85% (C) 90% (D) 95%
- 14) The Carbon atom of carbonyl group is  
(A) sp hybridized (B) sp<sup>2</sup> hybridized (C) sp<sup>3</sup> hybridized (D) dsp<sup>2</sup> hybridized
- 15) The solution of which acid is used for seasoning of food  
(A) HCOOH (B) CH<sub>3</sub>COOH (C) C<sub>6</sub>H<sub>5</sub>COOH (D) CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>COOH
- 16) Which is synthetic polymer?  
(A) Animal fat (B) Starch (C) Cellulose (D) Polyester
- 17) For which crop ammonium nitrate fertilizer is not used?  
(A) Cotton (B) Wheat (C) Sugar Cane (D) Paddy rice

1219 -- 1222-- 19000 (3)





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

**1222 (Inter Part - II)**

**(Session 2018-20 to 2020-22)**

**Chemistry (Subjective)**

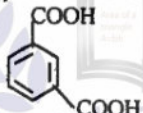
**(Group I)**

**Paper (II)**

**Time Allowed: 2.40 hours**

**Maximum Marks: 68**

**Section ----- I**

2. Answer briefly any Eight parts from the followings:-  $8 \times 2 = 16$
- (i) Why d and f block elements are called transition elements?
  - (ii) Why metallic character increases from top to bottom in group of metals?
  - (iii) What happens when (a) Beryllium is treated with sodium hydroxide. (b) Lithium hydride is treated with water.
  - (iv) BeO is Amphoteric oxide. Justify with two reactions.
  - (v) Write down any four uses of Aluminium. (vi) Write down any two uses of boric acid.
  - (vii) Write down the reaction of  $\text{HNO}_3$  with (a) CaO (b)  $\text{Na}_2\text{CO}_3$
  - (viii)  $\text{H}_2\text{SO}_4$  act as oxidizing agent. Justify with two reactions.
  - (ix) What are Chelates. Give one example. (x) What are substitutional alloys. Give one example.
  - (xi) Write down the name of Non-woody raw materials.
  - (xii) Write down the reactions taking place in first 24-hours during setting of cement.
3. Answer briefly any Eight parts from the followings:-  $8 \times 2 = 16$
- (i) Why iodine exists in solid state among the halogen.
  - (ii) Give four uses of Noble gases. (iii) What is vital force theory. How it was rejected.
  - (iv) Why there is restricted rotation about the double bond.
  - (v) What is ozonolysis. Give reaction. (vi) Alkene is more reactive than alkane. Give reason.
  - (vii) What are Monohaloalkane. Give example. (viii) Define  $\beta$  - elimination with example.
  - (ix) Define degree of Polymerization with example.
  - (x) How Nylon 6,6 is prepared? (xi) What is denaturation of protein.
  - (xii) Give any four uses of Ethene.
4. Answer briefly any Six parts from the followings:-  $6 \times 2 = 12$
- (i) How n-hexane and n-heptane can give Benzene and Toluene respectively?
  - (ii) How will you prepare m-chloronitrobenzene from benzene in two steps.
  - (iii) Why absolute alcohol can not be prepared by fermentation process.
  - (iv) Convert Ethanol into methanol.
  - (v) How does formaldehyde reacts with? (a) Tollen's Reagent. (b) Fehling Solution.
  - (vi) Name the following by IUPAC System.  
(a)  $\text{HCOO CH}_2\text{CH}_2\text{CH}_3$  (b) 
  - (vii) How will you convert.  $\text{CH}_3\text{COOH} \longrightarrow \text{CH}_4$
  - (viii) Describe the term chemical oxygen demand (COD).
  - (ix) How leather Tanneries are polluting water?

**Section ----- II**

**Note: Attempt any three questions.**

**( $8 \times 3 = 24$ )**

- 5. (a) Discuss two similarities and two differences of hydrogen with group IV-A elements.
- (b) Discuss four points regarding the peculiar behaviour of boron.
- 6. (a) Describe with diagram the manufacture of sodium by Down's Cell.
- (b) Explain the following properties of transition elements.  
(i) Binding energy (ii) Oxidation state
- 7. (a) Define hybridization. Discuss the structure of Ethyne on the basis of 'sp' hybridization.
- (b) Write a note on mechanism of Bi molecular substitution reaction ( $\text{S}_{\text{N}}2$ ).
- 8. (a) How does acetylene react with following (i) HBr (ii)  $\text{NH}_3$  (iii) HCN (iv)  $\text{O}_2$
- (b) Write reactions of formaldehyde with following compounds.  
(i) HCN (ii) conc. NaOH (iii)  $\text{NaHSO}_3$  (iv)  $\text{K}_2\text{Cr}_2\text{O}_7/\text{H}_2\text{SO}_4$
- 9. (a) Straight Chain structure of Benzene is ruled out. Give the reasons.
- (b) Give the two methods for the preparation of Phenol.





## Sargodha Board-2022

1222 Warning:- Please write your Roll No. in the space provided and sign. Roll No. \_\_\_\_\_

(Inter Part – II)

(Session 2018-20 to 2020-22)

Sig. of Student \_\_\_\_\_

Chemistry (Objective)

Group – II

Paper (II)

Time Allowed:- 20 minutes

PAPER CODE 4482

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 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.

Q.1

- 1) The most non-metallic element of the periodic table is  
(A) Nitrogen (B) Fluorine (C) Oxygen (D) Carbon
- 2) The mineral ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) has the general name.  
(A) Gypsum (B) Dolomite (C) Calcite (D) Epsom Salt
- 3) Which metal is used in thermite process because of its reactivity?  
(A) Iron (B) Copper (C) Aluminium (D) Zinc
- 4) Laughing gas is chemically.  
(A) NO (B)  $\text{N}_2\text{O}_4$  (C)  $\text{N}_2\text{O}_3$  (D)  $\text{N}_2\text{O}$
- 5) Which halogen occurs naturally in a positive oxidation state?  
(A) Fluorine (B) Chlorine (C) Bromine (D) Iodine
- 6) Coordination number of Ni in  $[\text{Ni}(\text{CO})_4]$  is  
(A) 2 (B) 4 (C) Zero (D) 6
- 7) The chemist who synthesized Urea from ammonium cyanate was  
(A) Wholer (B) Kolbe (C) Berzelius (D) Lavoisier
- 8) Which of the following gases is used for artificial ripening of fruits?  
(A) Ethane (B) Methane (C) Ethene (D) Propene
- 9) Benzene cannot undergo reactions.  
(A) Substitution (B) Addition (C) Oxidation (D) Elimination
- 10) Which one of the following is not a nucleophile?  
(A)  $\text{BF}_3$  (B)  $\text{H}_2\text{O}$  (C)  $\text{H}_2\text{S}$  (D)  $\text{NH}_3$
- 11) Rectified spirit contains ethyl alcohol about  
(A) 80% (B) 85% (C) 90% (D) 95%
- 12) Which of the following reagents will react with both aldehydes and Ketones?  
(A) Grignard reagent (B) Tollen's reagent (C) Fehling's reagent (D) Benedict's reagent
- 13) Acetic acid is manufactured by  
(A) Distillation (B) Fermentation (C) (D) Esterification
- 14) Which of the following polymers is a synthetic polymer?  
(A) Animal Fat (B) Starch (C) Polyester (D) Cellulose
- 15) Micro-nutrients are required in quantity ranging from  
(A) 6-200 g (B) 6-200 Kg (C) 4-40 g (D) 4-40 Kg
- 16) Newspaper can be recycled again and again by how many times?  
(A) 03 (B) 04 (C) 05 (D) 06
- 17) Pesticides used to Kill the undesired plants are called  
(A) Fungicides (B) Herbicides (C) Insecticides (D) Biocides



## Sargodha Board-2022

**Warning:-** Please, do not write anything on this question paper except your Roll No.  
1222 (Inter Part - II) (Session 2018-20 to 2020-22)

Chemistry (Subjective)  
Time Allowed: 2.40 hours

(Group II)

Paper (II)  
Maximum Marks: 68

### Section ----- I

2. Answer briefly any Eight parts from the followings:-  $8 \times 2 = 16$
- (i) Why diamond is a non-conductor and graphite is fairly a good conductor?
  - (ii) Why d and f-block elements are called transition elements.
  - (iii) How is gypsum converted into plaster of paris? (iv) Why is 2% gypsum added in the Cement?
  - (v) Give the names and the formulas of different acids of boron.
  - (vi) How does borax serve as a water softening agent? (vii) Write any four uses of nitric acid.
  - (viii)  $P_2O_5$  is a powerful dehydrating agent prove it giving example.
  - (ix) Under what conditions does aluminium corrode? (x) What are interstitial compounds?
  - (xi) Write down the essential qualities of a good fertilizer?
  - (xii) What are Macronutrients? Give example.
3. Answer briefly any Eight parts from the followings:-  $8 \times 2 = 16$
- (i) Name the two oxides of Xenon and fluoride of Xenon. (ii) What is iodized salt?
  - (iii) Write the name and general formula of the carbonyl containing functional groups. Give two examples.
  - (iv) Write the name and formula of any two fused ring aromatic compounds.
  - (v) Differentiate between Clemmensen and Wolf Kishner reduction.
  - (vi) How acetylene is converted to divinyl acetylene? (vii) What is Lindlar catalyst? For which purpose it is used?
  - (viii) How Grignard reagent react with propanone? (ix) What type of reactions shown by the alkyl Halides?
  - (x) What is condensation polymerization? (xi) What are the Lipids? Write two Characteristics.
  - (xii) How will you prepare soap?
4. Answer briefly any Six parts from the followings:-  $6 \times 2 = 12$
- (i) Define resonance and resonance energy.
  - (ii) What is Wurtz Fittig reaction.
  - (iii) How does diethyl ether react with (a) HI (b)  $PCl_5$
  - (iv) Prepare ethanol by fermentation of molasses.
  - (v) Define aldol condensation, give an example.
  - (vi) Write names of four neutral amino acids.
  - (vii) Write names of esters having following flavour (a) Banana (b) Jasmine
  - (viii) Write two reactions for formation of acid rain.
  - (ix) How does Livestock waste cause water pollution.

### Section ----- II

**Note:** Attempt any three questions.

$(8 \times 3 = 24)$

5. (a) Define heat of hydration. Explain with one example. Also mention the factor affecting it.  
(b) Write down eight uses of Aluminium.
6. (a) Give the role of Gypsum in industries.  
(b) How Wrought Iron is manufactured from Cast Iron by Puddling? Explain.
7. (a) Write note on Reforming of Gasoline.  
(b) Write reactions of Grignard's reagent with following (i)  $H_3CCH_2OH$  (ii)  $CO_2$  (iii)  $ClCN$  (iv)  $H_2O$
8. (a) Describe the Kolbe's Electrolytic method for the preparation of ethyne along with mechanism.  
(b) Write down the reaction of Acetaldehyde with hydrogen cyanide (HCN) along with Mechanism.
9. (a) Explain the structure of Benzene on the basis of atomic orbital Treatment.  
(b) Write down the reactions of ethanol with following  
(i)  $SOCl_2$  (ii)  $NH_3$  (iii)  $CH_3COOH$  (iv)  $Na$

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**Computer Science (Objective)**

Paper (II)

Time Allowed:- 20 minutes

**PAPER CODE 4837**

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.   | In 3NF which form of dependency is removed?                   | Functional      | Transitive        | Non functional                   | Associative   |
| 2.   | A record is a complete set of _____ field.                    | Distinct        | Designed          | Related                          | Non-related   |
| 3.   | How many types of relationship?                               | 5               | 4                 | 3                                | 2             |
| 4.   | Which of the following may be a temporary file?               | Master file     | Transaction file  | Back up file                     | Data file     |
| 5.   | SQL is used for                                               | Data definition | Data manipulation | Data definition and manipulation | Data creation |
| 6.   | Which of the following keys does not hold uniqueness property | Candidate key   | Alternate key     | Primary key                      | Secondary key |

**C- Language**

| S.N. | Questions                                                         | A                  | B                               | C                        | D                   |
|------|-------------------------------------------------------------------|--------------------|---------------------------------|--------------------------|---------------------|
| 7.   | No. of expressions in for loop statement are:                     | 4                  | 3                               | 6                        | 5                   |
| 8.   | Choose an alternative to the if-else statement from the following | Logical operator   | Relational operator             | Conditional operator     | Arithmetic operator |
| 9.   | Memory is allocated to a local variable at the time of its.       | Declaration        | Destruction                     | Definition               | First reference     |
| 10.  | .exe file is produced by the                                      | Linker             | Loader                          | Compiler                 | Interpreter         |
| 11.  | Debugging is the process of                                       | Identifying Errors | Identifying and removing errors | Creating bugs in program | Removing Errors     |
| 12.  | Which of the following is a valid character constant?             | a                  | "b"                             | '6'                      | 6                   |
| 13.  | Select a data type that offers the highest precision?             | Float              | Long int                        | Long double              | Unsigned long int   |
| 14.  | The function getch ( ) is defined in                              | stdio.h            | string.h                        | math.h                   | conio.h             |
| 15.  | Select an operator with the highest precedence?                   | !                  | +                               | =                        | ==                  |



21 (Inter Part-II)

(Session 2017-19 to 2019-21)

Computer Science (Subjective)

Paper (II)

Time Allowed: 2.10 hours

SECTION ----- I

Maximum Marks: 60

(MS-Access)  $6 \times 2 = 12$ 

2. Answer briefly any Six parts from the following.

- (i) Who is the end user? (ii) How a relation is formed in database? (iii) List any two data distribution strategies. (iv) Define the term analysis. (v) Which database object is used to create and format printed output? (vi) What is an IDE? (vii) Differentiate between form and report. (viii) List out any four data types available in MS-Access. (ix) Why are field properties used in MS-Access?

3. Answer briefly any SIX parts from the followings:-

(C- Language.)  $6 \times 2 = 12$ 

- (i) Define Program. (ii) What is the purpose of Linker?  
 (iii) What is #define Directive? Give an Example. (iv) How a variable is Declared in C? Give an example  
 (v) What are keywords? (vi) Write two rules for Naming Variables.

(vii) Find Error:

(viii) Trace Output:

(ix) Trace Output:

if (x = 1 or 2)

int x=5, y=10;

if(7%3 == 0)

printf ("%d", x);

if (x&gt;y)

printf ("Punjab");

y=y+1;

else

printf ("Value of y=%d", y);

printf ("KPK");

4. Answer briefly any SIX parts from the followings:-

(C- Language.)  $6 \times 2 = 12$ 

- (i) Define standard output. (ii) What is use of format specifiers?  
 (iii) Differentiate between getch ( ) and getche ( ). (iv) Define local variable.  
 (v) Show output of the given code. (vi) Show output of the given code.

int m;

int a, s = 0;

for (m = 0 ; m &lt; 10 ; m = m + 2)

for (a = 10 ; a &gt; 0 ; a - = 1)

printf ("%d", m);

s+ = a;

printf ("sum is =%d", s);

(vii) Trace errors of the given code.

(viii) List different types of functions in C.

void main ( )

(ix) What is binary stream?

{

for (int n = 1 ; n &lt;= 5 , n ++)

printf ("%d", n)

}

SECTION ----- II Note: Attempt any ONE question.(MS - ACCESS)  $(8 \times 1 = 8)$ 

5. Discuss objectives of Database Management System.  
 6. When is a relation in first normal form? Explain with example.

SECTION-----III Note: Attempt any TWO questions (C - Language)  $(8 \times 2 = 16)$ 

7. What is programming language? Explain two main categories of programming language.  
 8. Define "if" Statement. Explain its working with Syntax, Flowchart and example.  
 9. Write a program in C language that inputs a number, and displays its table according to the following format:

Suppose the number entered is 5, the output will be as follows:

5 \* 1 = 5

5 \* 2 = 10

5 \* 3 = 15

:

:

:

5 \* 10 = 50





# Sargodha Board-2019

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

1219 (Inter Part – II)

(Session 2015-17 to 2017-19)

Computer Science (Objective)

Paper (II)

Time Allowed:- 20 minutes

**PAPER CODE 4831**

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.   | A type of file that contains data is called?                                          | data file           | Program file      | image file       | Query file        |
| 2.   | Which of the following is also known as control Key?                                  | Primary Key         | Candidate Key     | Sort Key         | Foreign Key       |
| 3.   | Which of the following is used to describe the characteristics of an object?          | Modality            | Attribute         | Cardinality      | Entity            |
| 4.   | In 3NF, a non-key attribute must not depend on                                        | Sort Key            | Synonym           | Homonym          | Non-Key attribute |
| 5.   | The output of a database application is                                               | Form                | Query             | Report           | Macros            |
| 6.   | The data in table is entered in                                                       | Datasheet view      | Layout view       | Design view      | Normal view       |
| 7.   | (C.Lang) Which of the following language provided the basis for the development of C? | B                   | C++               | Pascal           | Cobol             |
|      | or (VB) Which of the following is native language of computer?                        | Machine language    | Assembly          | C++              | V.B               |
| 8.   | (C.Lang) The number of digits after a decimal point is called                         | Significance        | Range             | Precision        | Scope             |
|      | or (VB) A project file is saved with the following extension.                         | .frm                | .bmp              | .vbp             | .frx              |
| 9.   | (C.Lang) Which character signifies the beginning of an escape sequence?               |                     | //                | *                | \                 |
|      | or (VB) Which event occurs after a form has closed?                                   | ShutDown            | EndClose          | FormClosing      | FormClosed        |
| 10.  | (C.Lang) Conditional operator is an alternative of                                    | if                  | if-else           | nested-if        | if-else-if        |
|      | or (VB) Which of the following is not a Visual Basic data type?                       | Byte                | Register          | Long             | Integer           |
| 11.  | (C.Lang) Which programming structure executes program statements in order?            | Sequence            | Relation          | Decision         | Repetition        |
|      | or (VB) Which of the following reverse the Boolean value of a relational expression?  | NOT                 | AND               | OR               | BUT               |
| 12.  | (C.Lang) What does a compound condition use to join two conditions?                   | Relational Operator | Relational Result | Logical Result   | Logical operator  |
|      | or (VB) Which control combines the features of a textbox and listbox?                 | Scrollbar           | Check Box         | Radio Button     | Combo Box         |
| 13.  | (C.Lang) While loop is also called                                                    | Wend loop           | Counter loop      | Conditional loop | Continuous loop   |
|      | or (VB) A loop which never ends is called                                             | Inner loop          | Nested loop       | Infinite loop    | Continuous loop   |
| 14.  | (C.Lang) The process of sending an argument to a function is called                   | Sending             | Passing           | Filtering        | Delivering        |
|      | or (VB) The process of sending an argument to a function is called                    | Sending             | Passing           | Filtering        | Delivering        |
| 15.  | (C.Lang) On Successfully closing a file, the fclose ( ) returns                       | 0 (Zero)            | NULL              | 1 (One)          | FILE Pointer      |
|      | or (VB) How many elements are in following array? DIM Arr(5,5) As Integer             | 36                  | 25                | 6                | 5                 |



# Sargodha Board-2019

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

1219 (Inter Part-II)

(Session 2015-17 to 2017-19)

Computer Science (Subjective)

Time Allowed: 2.10 hours

Paper (II)

Maximum Marks: 60

## SECTION ----- I

2. Answer briefly any Six parts from the following.

(MS-Access)  $6 \times 2 = 12$

- (i) Differentiate between data redundancy and data inconsistency.  
(ii) What do you mean by data independence? (iii) Write three important characteristics of a primary key. (iv) Why feasibility study is used? (v) Define database anomalies. (vi) Describe transitive dependency. (vii) What do you mean by Relational Data Base Management System?  
(viii) Define Referential Integrity. (ix) What are check boxes?

3. Answer briefly any SIX parts from the followings:-

$6 \times 2 = 12$

### C – Language

- (i) What do you know about delimiters?  
(ii) Differentiate between Compiler and Interpreter?  
(iii) Define expression?  
(iv) Rewrite the expression  $n++$ ; without using the operator  $++$   
(v) What will be the output of the following  

```
int number = 6;  
int x = 0;  
x = number --;  
printf ("%d\n", x);
```

  
(vi) Find errors in the following code segment  

```
int a b;  
a = 10  
b = 5;  
printf ("a+b = %c", a+b);
```

  
(vii) Define getch function?  
(viii) Write C- statement to print the value of unsigned long x.  
(ix) What will be the Output of the following.  

```
printf ("55\t");  
printf ("555");
```

### Visual Basic

- (i) Why source code is converted into object code?  
(ii) What is Compiling?  
(iii) What is properties window?  
(iv) Why Visual Basic is called event Driven language.  
(v) How are event procedure named?  
(vi) What is variable?  
(vii) How variable is declared?  
(viii) Define Inputbox?  
(ix) Differentiate between check box and option button?

4. Answer briefly any Six parts from the followings:-

$6 \times 2 = 12$

### C – Language

- (i) Define condition.  
(ii) Convert the following conditional statement into if-else statement  $x < 0 ? y = 10 : z = 20 ;$   
(iii) Determine the output of following code.  

```
If(1==2)  
printf("Hellow");  
else  
printf ("Correct it");
```

  
(iv) Define do-while Loop.

### Visual Basic

- (i) Name and describe three basic styles of combo boxes.  
(ii) How is a picture removed at runtime?  
(iii) What is the purpose of timer control?  
(iv) What does MDI mean?

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| C- Language                                                                                                        | ( 2 )<br>Visual Basic                       |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| (v) Convert following while loop into for Loop.<br><pre>int c = 0; while (c&lt;5) { printf("%d\n",c); c++; }</pre> | (v) Define ToolTip.                         |
| (vi) Determine the output<br><pre>for(a=5; a &lt;= 5; a = a + 5) printf ("%d",a);</pre>                            | (vi) Name two types of Sub programs.        |
| (vii) Define user-defined function.                                                                                | (vii) What is standard code module?         |
| (viii) Compare Local and global variables.                                                                         | (viii) Write the use of function procedure? |
| (ix) Define a stream.                                                                                              | (ix) What is function argument?             |

SECTION ----- II

**Note:** Attempt any ONE question.

(8 × 1 = 8)

**MS - ACCESS**

5. Discuss four advantages of DBMS?
6. What is field property? Discuss any four properties in detail.

SECTION ----- III

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

7. **C – Language** Describe different data types to store integer data in C-Language.
7. **--OR--Visual Basic** Describe different data types to store integer data in VB.
8. **C – Language** What is nested "if" statement? Draw its flow chart. Explain its working with an example.
8. **--OR--Visual Basic** What is nested "if" statement? Draw its flow chart. Explain its working with an example.
9. **C – Language** Write a program that inputs a number from user and display the factorial of that number.
9. **--OR--Visual Basic** Write a program in VB that inputs a number from user and displays the factorial of that number.



**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.   | In Ms Access, table contains                                                                           | Fields         | Record         | Character       | File         |
| 2.   | Which data type can be used to define a field that consist of only numbers to be used in calculations. | Text           | Number         | Memo            | Date & Time  |
| 3.   | A set of related files created and managed by a DBMS is called                                         | Field          | Record         | Database        | Module       |
| 4.   | An attribute is also known as a                                                                        | Table          | Relation       | Row             | Field        |
| 5.   | In an E-R diagram, a rectangle represents                                                              | Entity         | Attribute      | Relationship    | Relation     |
| 6.   | Which forms of dependency is removed in second Normal Form.                                            | Functional     | Transitive     | Associative     | Partial      |
| 7.   | (C.Lang) The output of the compiler is called                                                          | Object code    | Source code    | Linked code     | Library code |
|      | or (VB) What is the name of a program that translates VB code to object code as a whole                | Interpreter    | Assembler      | Debugger        | compiler     |
| 8.   | (C.Lang) A memory location with some data that can be changed is called as                             | Constant       | Named constant | Address         | Variable     |
|      | or (VB) A memory location with some data that can be changed is called as                              | Constant       | Named constant | Address         | Variable     |
| 9.   | (C.Lang) Which of the following format specifier is used for character data type.                      | %d             | %s             | %c              | %e           |
|      | or (VB) Which of the following is not a Visual Basic control.                                          | Command Button | Forms          | Variable        | Text Box     |
| 10.  | (C.Lang) Which keyword is not used in switch statement                                                 | If             | Switch         | Case            | Default      |
|      | or (VB) The naming prefix for a label control is                                                       | lbl            | lab            | l               | lbe          |
| 11.  | (C.Lang) The case block ends with                                                                      | End case       | End select     | Break           | Case end     |
|      | or (VB) In Visual Basic, which keyword is used at starting point of a decision structure.              | Loop           | For            | If              | Else         |
| 12.  | (C.Lang) The loop which never ends is called                                                           | Infinite loop  | Running loop   | Continuous loop | Nested loop  |
|      | or (VB) The keyword that marks the end of a Do- loop structure is                                      | END Do         | EXIT Do        | END while       | Loop         |
| 13.  | (C.Lang) Which loop structure always executes atleast once.                                            | do-while loop  | for loop       | while loop      | while-end    |
|      | or (VB) _____ is an example of post test loop                                                          | Do-while loop  | while loop     | do-end loop     | For loop     |
| 14.  | (C.Lang) int is a _____ in C                                                                           | Special word   | Key word       | Cut word        | First word   |
|      | or (VB) Which method is used to delete an item from the List Box?                                      | Add item       | Remove item    | Clear item      | Erase item   |
| 15.  | (C.Lang) The fopen ( ) function uses _____ parameters.                                                 | 1              | 4              | 3               | 2            |
|      | or (VB) Which one of the following controls can be placed directly on an MDI form.                     | Picture Box    | Timer          | Label           | Image        |



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

1218 (Inter Part-II)

(Session 2015-17 & 2016-18)

**Computer Science** (Subjective)

Time Allowed: 2.10 hours

Paper (II)

Maximum Marks: 60

**SECTION ————— I**

**2. Answer briefly any Six parts from the following.**

**(MS-Access)      6 × 2 = 12**

- (i) Why is it important to specify data type and size of a field? (ii) Define data redundancy. (iii) What is the basic purpose of using views? (iv) Write any two criterias to select file organization. (v) Define mutual exclusiveness of data. (vi) How entity integrity is attained? (vii) Write the use of database window in MS-Access. (viii) State the use of wild cards. (ix) Are sub-forms useful?

**3. Answer briefly any SIX parts from the followings:-**

**6 × 2 = 12**

**C – Language**

**Visual Basic**

- (i) What is header file?  
 (ii) What are logical Errors?  
 (iii) Define object code.  
 (iv) What is an Expression?  
 (v) Enlist all relational operators in C language.  
 (vi) What is the output of following code segment?  

```
int n = 10;
n % = 2;
n+ = 5;
printf("%d",n);
```

  
 (vii) What is format specifier?  
 (viii) What is the output of following code segment  

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

  
 (ix) Find Errors in the following code segment  

```
#include <stdio.h>;
VOID main( )
{
    printf("Hello c");
}
```

- (i) Define source code.  
 (ii) What is project Explorer in Visual Basic IDE?  
 (iii) Give any three rules for naming variable.  
 (iv) List three key events?  
 (v) What is concatenation operator in Visual Basic?  
 (vi) Predict the output of following code segment.  

```
Dim n As Integer
n = 10
n = n mod 2
n = n+5
print n
```

  
 (vii) Which case option is used to test a range of values?  
 (viii) What is iteration?  
 (ix) What is the difference between do-while and do-until loop?

**4. Answer briefly any Six parts from the followings:-**

**6 × 2 = 12**

**C – Language**

**Visual Basic**

- (i) What is the purpose of default statement in switch structure  
 (ii) Write the error from the following code:  

```
# include
void main ( )
{ float Y = 3.14
  if (Y == 3.14)
    printf("%d", Y)
}
```

  
 (iii) Write the output of the following code:  

```
int p = 3, q = 5;
if ( p > q)
    printf ("%d",p);
else
    printf ("%d",q);
```

  
 (iv) What is counter controlled loop?

- (i) Define Select.. case statement.  
 (ii) Write the error from the following code:  

```
Dim x As Integer
If x < 10
    MsgBox "Error";
End
```

  
 (iii) Write the output of the following code:  

```
Dim n As integer
n = 1
While n < 5
    print "PAKISTAN"
    n = n + 2
wend
```

  
 (iv) Describe nested loop.



Q.No. 4 (i) Define nested - if Statement.

(ii) Describe nested loop.

(iii) Trace Errors in the following Code :

(iv) Find Output from the following Code :

```
void main ( )
{
    int x = 3;
    int y = 4;
    if ( x < y );
    printf ( " %d ", y );
}
```

```
void main ( )
{
    int a = 5;
    If ( a % 2 == 0 )
        print f ( " Even " );
    else
        print f ( " Odd " );
}
```

(v) Write the output of the following code :

(vi) Convert the While Loop into do--while loop :

```
void main ( )
{
    int i;
    for ( i = 1; i <= 3; i++ )
        print f ( " %d ", i * i );
}
```

```
int i = 1;
while ( i <= 15 )
{
    print f ( " Hello " );
    i++;
}
```

(vii) List any two benefits of Functions.

(viii) State the purpose of Binary Stream.

(ix) Why we use Prototype in Functions?

#### Visual Basic

Q.No. 4 (i) Define a Constant.

(ii) Describe if -- then Statement.

(iii) What is an Infinite Loop?

(iv) What is meant by Looping Structure?

(v) Find Output in the following Code :

(vi) Trace the Errors in the following Code :

```
Dim n as integer
n = 15 Mod 4
print n
```

```
Dim marks as integer
marks = 50
if marks >= 30
    print " Pass "
else
    print " Fail "
End
```

(vii) Find output of the following Code :

(viii) Trace Output of the following Code :

```
i = 10
Do until i > 1
    i = i - 1
Loop
```

```
Dim n as integer
For n = 1 to 10 step 2
    print n
Next
```

(ix) Trace Error in the following Code :

```
Dim i as int
Do while a < 10
    print i
Wend
```

#### Section - II (MS - ACCESS)

**Note : Attempt any one of the following questions.**

Q.No.5 Briefly explain the Database Design Process. (8)

Q.No.6 Define Report. Discuss its two types in detail. (8)

#### Section - III

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

#### C - Language

Q.No.7 Explain any four steps for writing and executing C - Language Program. (8)

Q.No.8 Write a Program in C to Input Single Character during Execution of Program and show either it is Vowel or Consonent. (8)

Q.No.9 Define Do - While Loop. Write its syntax and its working. (8)

#### Visual Basic

Q.No.7 Explain any four steps for writing and executing Visual Basic Application. (8)

Q.No.8 Write a Program in Visual Basic to Input a Single Character during Execution of Program and show either it is Vowel or Consonent. (8)

Q.No.9 Define Do - While Loop in Visual Basic. Write its syntax and also give example. (8)