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.

MS-ACCESS

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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

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

.ne: 2:10 Hours   SUBJECTIVE   Marks: 60

Note: Section I is compulsory.

SECTION – I
MS-ACCESS   12

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2. Write short answers to any SIX questions:

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   12

3. Write short answers to any SIX questions:

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)

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)

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.

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
MS-ACCESS

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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

12

3. Write short answers to any SIX questions:

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

12

4. Write short answers to any SIX questions:

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
```
What is meant by iteration in a loop?

ix.

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 |

Roll No. of Candidate : _____

COMPUTER SCIENCE Intermediate Part-II , Class 12th (1stA 423- IV) **Paper: II**

Time: 20 Minutes **OBJECTIVE ..... Code: 8838** **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.

MS-ACCESS

1.
   1. Customers, cars and parts are example of
      - (A) attributes
      - (B) entities
      - (C) cardinals
      - (D) relationships
   2. A form within another form is called
      - (A) sub-form
      - (B) main form
      - (C) multi-form
      - (D) inserted form
   3. How many primary keys can a table have ?
      - (A) 1
      - (B) 2
      - (C) 1 to 3
      - (D) 4
   4. Which of the following file is used to store additional copy of data?
      - (A) master file
      - (B) transaction file
      - (C) backup file
      - (D) basic file
   5. Two or more attributes with different names but same meaning create a problem known as
      - (A) homonyms
      - (B) aliases
      - (C) synonyms
      - (D) alternate attributes
   6. How many table views are available in MS-Access ?
      - (A) 5
      - (B) 2
      - (C) 3
      - (D) 4

VISUAL BASIC

   7. All of the followings are relational operators except
      - (A) &
      - (B) =
      - (C) <>
      - (D) >=
   8. Which statement is used in For........Next loop for early termination of loop ?
      - (A) Exit
      - (B) Exit do
      - (C) Exit for
      - (D) Break
   9. Which data type is used to handle a Yes or No response?
      - (A) Short
      - (B) Integer
      - (C) Boolean
      - (D) Date
   10. The keyword that marks end of a do structure is
      - (A) loop
      - (B) End do
      - (C) Exit do
      - (D) End while
   11. Which loop executes one or more statements while the condition remains false ?
      - (A) Do while loop
      - (B) Do loop while
      - (C) Do Until loop
      - (D) While wend
   12. The default message box style is
      - (A) OK only
      - (B) Yes No
      - (C) Retry Cancel
      - (D) Yes No Cancel
   13. Which programming structure executes program statement in order ?
      - (A) Relation
      - (B) Sequence
      - (C) Decision
      - (D) Repetition
   14. In visual basic, which statement indicates the end of decision structure
      - (A) End
      - (B) Next
      - (C) End if
      - (D) Else
   15. The MOD operator is used for
      - (A) Integer remainder
      - (B) Exponentiation
      - (C) Multiplication
      - (D) Division

320-(IV)-1stA423-32000

COMPUTER SCIENCE
Intermediate Part-II , Class 12ᵗʰ (1ˢᵗA 423)
Paper: II

Time: 2:10 Hours
SUBJECTIVE
Marks: 60

Note: Section I is compulsory.

SECTION – I

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

i. Define data capturing.
ii. What is foreign key?
iii. What is meant by a file in database?
iv. Describe referential integrity.
v. Define 1NF.

MS-ACCESS
vi. Differentiate between menubar and toolbar.
vii. Write down any two characteristics of a table.
viii. What is the difference between crosstab queries and parameter queries?
ix. List down any two layouts of forms.

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

i. What are uses of preprocessor directives?
ii. Differentiate between Linker and Loader?
iii. Give two examples of run time errors.
iv. What will happen if stdio.h file is missing in a C Program?
v. Differentiate between Constant and Variable.
vi. Declare an integer variable with name marks and store 799 in it.
vii. Predict output of the code given below
```
int  a=27, b=19;
printf("% d+% d=% d", a, b, a+b);
```

C-LANGUAGE
viii. Trace out errors from following code segment
```
Void main ( );
doub t=45;
prnF("%f",t)
```
ix. How is the end of text file indicated?

OR

VISUAL BASIC

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

i. Write down any two uses of flowchart.
ii. Write down about Natural Programming Languages.
iii. List out advantages of structured programming.
iv. What is the usage of label control?
v. What is the purpose of name property of a control in VB?

vi. What is the purpose of QueryUnload event?
vii. Write down the syntax of KeyPress event.
viii. Why SetFocus method is used in Visual Basic?
ix. What is meant by Modal Form?

C-LANGUAGE

4. Write short answers to any SIX questions: 12

i. What is the use of "getch" function?

ii. What is the use of format specifier in C-language?

iii. Write down output
```
int N=65;
printf ("% c",N);
```

iv. Write down output
```
int x=20;
if (x!=10)
  printf ("Nothing");
else
  printf ("Hello");
```

v. Define compound statement.

vi. Convert the following loop into do-while loop.
```
int x;
for (x=1;x<=10;x++)
printf ("%d",x%2);
```

vii. What is for loop?

viii. Which part of loop contains the statements to be repeated?

ix. Write down an expression in C that represents speed is not greater than eighty.

OR

VISUAL BASIC

4. Write short answers to any SIX questions: 12

i. Define archive property of FileListBox control.

ii. What is scrollbar control?

iii. What is the purpose of ListCount property?

iv. Define label control.

v. State WordWrap property.

vi. Why popup menus are used?

vii. What is font dialog box?

viii. What is tooltip?

ix. What are the advantages of having parent and child forms?

SECTION - II
MS-ACCESS

Note: Attempt any ONE question.

5. Define database system. What are four major components of database system? Write in detail. (8)

6. Explain different components of logical model in detail. (8)

SECTION – III

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

C – LANGUAGE

7. What is if-else-if statement? Explain syntax and working with example. (8)

8. Write a program using loop to calculate the following series
2+4+6+8+…………+40 (8)

9. Explain the benefits of using function. (8)

OR
VISUAL BASIC

7. What is extended if-then-else statement? Explain syntax and working with example. (8)

8. Write a program using loop to calculate the following series
2+4+6+8+…………+40 (8)

9. Explain the benefits of function procedure. (8)

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Roll No. of Candidate : _____

COMPUTER SCIENCE (INTERMEDIATE PART-II) 421 - (IV)   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. Attempt as many questions as given in objective type question paper and leave others blank.

MS-ACCESS AND C-LANGUAGE

1. 1. Which provides information about the function to the compiler

    (A) function header   (B) function body   (C) function call   (D) function prototype

    2. The part of for loop executes only once

    (A) condition   (B) increment   (C) decrement   (D) initialization

    3. The conditional operator is an alternative of

    (A) if   (B) if-else   (C) nested if   (D) if-else-if

    4. Which escape sequence is used for backspace?

    (A) \B   (B) \b   (C) /b   (D) \bs

    5. The & symbol is scanf function indicate variable's

    (A) address   (B) value   (C) format   (D) data type

    6. Which of the following statement is true for A=25 and B=35

    (A) A+B   (B) A>=B   (C) A!=B   (D) A==B

    7. The total number of keywords in C-Language are

    (A) 32   (B) 60   (C) 98   (D) 102

    8. A set of rules that must be followed to develop a program is called

    (A) bug   (B) debugging   (C) preprocessor   (D) syntax

    9. In assembly language, long machine language instructions are replaced with English like words called

    (A) statements   (B) mnemonics   (C) directives   (D) instructions

    10. Which view is used to add, edit or delete record from table?

    (A) record view   (B) datasheet view   (C) design view   (D) edit view

    11. A database consists of various components called

    (A) tools   (B) properties   (C) entities   (D) objects

    12. A primary key value cannot be null is what kind of integrity?

    (A) referential integrity   (B) entity integrity   (C) data integrity   (D) security integrity

    13. Organizing the database on secondary storage is related to

    (A) logical design   (B) physical design   (C) implementation   (D) analysis

    14. The foreign key is found in

    (A) parent table   (B) index table   (C) master table   (D) dependent table

    15. Which of the following type of files requires the largest processing time?

    (A) random files   (B) indexed files   (C) sequential files   (D) direct access files

324-(IV)-421-32000

COMPUTER SCIENCE	(INTERMEDIATE PART-II) 421	Paper II
Time: 2:10 Hours	**SUBJECTIVE**	Marks: 60

Note: Section I is compulsory.

(SECTION – I)

2. Write short answers to any SIX questions: 12

MS-ACCESS

i. Define key.
ii. What is table in database?
iii. Write down the purpose of feasibility study.
iv. List four data distribution strategies.
v. What do you mean by IDE?
vi. Define form.
vii. List different types of action queries.
viii. When is referential integrity used?
ix. Differentiate between forms and reports.

3. Write short answers to any SIX questions: 12

C-Language

i. Define high level language.
ii. Give any four examples of high level languages.
iii. Differentiate between preprocessor directives and header files.
iv. Write down the use of OR operator.
v. List six relational operators in C Language.
vi. What do you know about the data type in C Language.
vii. Predict the output of the following code segment:

```
int a = 1 , b = 2 , c = 3;
if ((a == b) \\ (b == c) \\ (c == 4))
printf ("Yes");
else
printf ("No");
```

viii. Predict the output of the following code segment:

```
if (2 % 3 > = 1)
printf("Yes");
else
Printf("No");
```

ix. Find the errors:

```
if(x = 1 or 2)
printf (" % d ", x );
```

4. Write short answers to any SIX questions: 12

C-Language

i. Compare getch and getche functions.
ii. What is use of format specifier?
iii. Define standard input.
iv. Define function body.
v. What is lifetime of local variable?
vi. Define stream in file handling.
vii. Determine output of following code:

```
int x = 1;
int y = 10;
while (x < = 5 \\ y > = 1) {
printf (" %d – %d ", x , y);
x = x + 1;
y = y – 1;
}
```

viii. Determine output of following code:

```
int i;
for (i = 1; i < = 10; i + + )
Printf (" %d  %d " , i , i * i);
```

ix Trace out errors from following code:

```
int  k = 1
while (k < = 5 );
{
k = k +1
printf (' % C ' k)
}
```

(Turn Over)

Gujranwala Board-2021

(SECTION - II)

MS-ACCESS

Note: Attempt any ONE question of the following:

5. Describe four objectives and four features of database management system. **(8)**

6. When is a relation in 2nd normal form? Explain with example. **(8)**

(SECTION – III)

Note: Attempt any TWO questions of the following:

C – LANGUAGE

7. What is programming language? Discuss the two main categories of programming languages. **2+3+3 (8)**

8. Explain nested if statement with its purpose, syntax, flow chart and suitable program example. **(8)**

9. Write down a program that produces the following output: **(8)**

0	1
1	2
2	4
3	8
4	16
5	32
6	64

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Roll No. of Candidate : _____

Computer Science (New Scheme)   (INTERMEDIATE PART-II) 419 - (IV)   **Paper II**

Time: 20 Minutes   pakcity.org   **OBJECTIVE**   **Marks: 15**

Code: 8837

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 in the circles. Cutting or filling of two or more circles will result zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank.

MS-ACCESS AND C-LANGUAGE

1.

1. Format specifier used for string

(A) % f   (B) % s   (C) % c   (D) % d

2. The extension of C Program file is

(A) .txt   (B) .obj   (C) .h   (D) .c

3. It is simple to create database using.

(A) query   (B) common standards   (C) easier programming   (D) wizard

4. Which of the following is used to describe the characteristics of an object?

(A) attribute   (B) relationship   (C) cardinality   (D) modality

5. SQL is a(n)

(A) unstructure language   (B) structure language

(C) object oriented language   (D) software

6. Which of the following function is used to write a string to a file?

(A) puts ( )   (B) putc ( )   (C) f puts ( )   (D) f gets ( )

7. What is the value of x after executing the code: for (x=1; x<=10; x++)

(A) 9   (B) 10   (C) 11   (D) 12

8. Another term for a conditional operator is

(A) ternary   (B) binary   (C) uniary   (D) byte

9. The column of a table correspond to

(A) table   (B) record   (C) attribute   (D) cell

10. In 3NF, a non-key attribute must not depend on a(n)

(A) non-key attribute   (B) key attribute   (C) composite key   (D) sort key

11. To find a four character name that starts with H, the criteria is

(A) H*4   (B) H????   (C) H?4   (D) H####

12. The parameters in function declaration.

(A) actual parameters   (B) formal parameters   (C) returned parameters   (D) call parameters

13. Which loop structure always executes at least once?

(A) do-while   (B) for   (C) while   (D) for-next

14. An expression that uses a relational operator is known as

(A) operational   (B) sequential   (C) relational   (D) serial

15. Which of the following operator has the lowest precedence?

(A) !   (B) +   (C) =   (D) ==

(TURN OVER)

OR

MS-ACCESS AND VISUAL BASIC

Code: 8838

1. The naming prefix for a label control is
   (A) lab   (B) lbl   (C) lbc   (D) labl

2. The output of the compiler is called
   (A) program   (B) source code   (C) linked code   (D) object code

3. It is simple to create database using.
   (A) query   (B) common standards   (C) easier programming   (D) wizard

4. Which of the following is used to describe the characteristics of an object?
   (A) attribute   (B) relationship   (C) cardinality   (D) modality

5. SQL is a(n)
   (A) unstructure language   (B) structure language
   (C) object oriented language   (D) software

6. Which keyword is used to trigger the execution of another procedure?
   (A) go   (B) start   (C) call   (D) run

7. What will be the value of n after executing the following code
   For n = 1 to 10 step 2
   print n
   Next
   (A) 9   (B) 10   (C) 11   (D) 12

8. Which method is used to delete an item from the list box?
   (A) remove item   (B) add item   (C) clear item   (D) erase item

9. The column of a table correspond to
   (A) table   (B) record   (C) attribute   (D) cell

10. In 3NF, a non-key attribute must not depend on a(n)
    (A) non-key attribute   (B) key attribute   (C) composite key   (D) sort key

11. To find a four character name that starts with H, the criteria is
    (A) H*4   (B) H????   (C) H?4   (D) H####

12. Every element of array has its own
    (A) upper bound   (B) index   (C) name   (D) syntax

13. Which is post test loop?
    (A) do-while   (B) while   (C) for-next   (D) for

14. The default message box style is
    (A) Yes No   (B) Yes No Cancel   (C) OK Only   (D) Retry Cancel

15. Visual Basic is a product of
    (A) IBM   (B) Sun System   (C) Microsoft   (D) Google

326-(IV)-419-25000

Computer Science (New Scheme)   (INTERMEDIATE PART-II) 419   **Paper II**

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

Note: Section I is compulsory.

(SECTION – I) 🞲 Pakcity.org 🞲

2. Write short answers to any SIX questions: 12

MS-ACCESS

i. Why is it important to specify data type and size of a field?

ii. Differentiate between master file and transaction file.

iii. Write any two purposes of using views.

iv. What is the purpose of logical database design?

v. How is referential integrity achieved?

vi. Differentiate between partial dependency and transitive dependency.

vii. What do you know about RDBMS?

viii. What is the cardinality of a relation?

ix. Differentiate between combo box and list box.

3. Write short answers to any SIX questions: 12

C-Language

i. Define a program.

ii. What are delimiters?

iii. Define variable initialization.

iv. Declare two integer variables x and y in one declaration statement.

v. Determine the output of the following code:

```
int x , y = 6;
x = y ++;
printf ( " %d " , x );
```

vi. Find errors in following code:

```
int a
printf ( " %d " a );
```

vii. Define scanf ( ) function.

viii. Write a single printf statement to display the following text:

C:\My documents

ix. What will be the output of the following code:

```
printf ( " Book\n Reading\t is good habit " );
```

OR

VISUAL BASIC

3. Write short answers to any SIX questions: 12

i. Define text box.

ii. Define object.

iii. What is the purpose of "name" property of a control?

iv. What is load event?

v. Define class.

vi. What happened when you hide a form?

vii. Define variable initialization.

viii. What is an expression?

ix. Convert the following expression in VB.

$x^2 + 3x - 4$

(Turn Over)

4. Write short answers to any SIX questions: 12

C-Language

i. What is the purpose of default label in switch statement?

ii. Convert the following conditional expression into if-else statement.

x < 0 ? y = 10 : z = 20 ;

iii. Determine the output of the following code:

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

iv. Write the purpose of continue statement.

v. Write the syntax of for loop.

vi. Convert the following code in do while loop.

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

vii. What is function call?

viii. Define global variable.

ix. What is binary stream?

OR
VISUAL BASIC

4. Write short answers to any SIX questions: 12

i. What is the purpose of text property of a button?

ii. How to select a check box in code?

iii. Define combo box.

iv. Write the limitation of IF...THEN structure.

v. What is selection structure?

vi. Define relational operators.

vii. Draw the flow chart of While...End...While loop.

viii. Write the syntax of Do...While loop.

ix. Define Do...Until...Loop.

(SECTION - II)
MS-ACCESS

Note: Attempt any ONE question.
5. Briefly explain the database design process with the help of diagram. 8
6. What is a form? Explain its uses and advantages. 8

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

7. Discuss printf function in detail. 8
8. What is nested " if " statement? Explain its working with example. 8
9. Write a program that displays counting from 10 to 1 using For loop. 8

OR
VISUAL BASIC

7. What is variable? Write down the rules to give name to the variable. 8
8. Define array. Explain its different types in Visual Basic (VB). 8
9. Write a program that displays counting from 10 to 1 using For-Next loop. 8

326-419-25000

Computer Science (New Scheme)   **(INTER PART-II) 418 - (I)**   Paper II

Time: 20 Minutes   **OBJECTIVE**   Marks:

Code: 8831

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type of the paper and leave others blank.

MS-ACCESS AND C-LANGUAGE

1. 1. Multiple copies of the same data is referred to as:
    (A) data integrity   (B) data inconsistency   (C) data redundancy   (D) data isolation

    2. A primary key that consists of two or more attributes of a relation is called:
    (A) sort key   (B) candidate key   (C) sub key   (D) composite key

    3. In E-R diagram, rectangle is used to represent:
    (A) entity   (B) attribute   (C) primary key   (D) relationship

    4. In 2 NF, which form of dependency is removed:
    (A) transitive dependency   (B) partial dependency
    (C) associative dependency   (D) consistency dependency

    5. The example of popular DBMS is:
    (A) MS-Word   (B) MS-Access   (C) MS-Excel   (D) MS-Power Point

    6. The maximum length of text type field in MS-Access is:
    (A) 50 characters   (B) 250 characters   (C) 155 characters   (D) 255 characters

    7. The extention of header file is:
    (A) .c   (B) .h   (C) .hf   (D) .h

    8. In C, the maximum length of variable name is:
    (A) 25 characters   (B) 255 characters   (C) 31 characters   (D) 55 characters

    9. Which function is used to display output on screen in C-Language?
    (A) scanf( )   (B) printf( )   (C) gets( )   (D) print

    10. Which statement is used for making two way decision?
    (A) if   (B) nested-if   (C) while   (D) if-else

    11. Which of the following is not logical operator:
    (A) &&   (B) || (C) !   (D) > =

    12. How many types of loop structure are in C-Language?
    (A) 5   (B) 4   (C) 2   (D) 3

    13. What will be the value of x after executing the following code?
    ```
    for(x=1; x<=7; x++);
    printf("%d",x);
    ```
    (A) 5   (B) 7   (C) 8   (D) 1

    14. A function does not return any value has return type:
    (A) nothing   (B) float   (C) void   (D) int

    15. Which mode opens only an existing file for both reading and writing?
    (A) "r+"   (B) "w"   (C) "w+"   (D) "a"

1. Multiple copies of the same data is referred to as:

   (A) data integrity   (B) data inconsistency   (C) data redundancy   (D) data isolation

2. A primary key that consists of two or more attributes of a relation is called:

   (A) sort key   (B) candidate key   (C) sub key   (D) composite key

3. In E-R diagram, rectangle is used to represent:

   (A) entity   (B) attribute   (C) primary key   (D) relationship

4. In 2 NF, which form of dependency is removed:

   (A) transitive dependency   (B) partial dependency

   (C) associative dependency   (D) consistency dependency

5. The example of popular DBMS is:

   (A) MS-Word   (B) MS-Access   (C) MS-Excel   (D) MS-Power Point

6. The maximum length of text type field in MS-Access is:

   (A) 50 characters   (B) 250 characters   (C) 155 characters   (D) 255 characters

7. The icons on toolbox represents

   (A) property   (B) program load   (C) label   (D) V.B. controls

8. All are examples of controls except:

   (A) label   (B) text box   (C) property   (D) list box

9. Visual Basic has a(n):

   (A) Assembler   (B) Interpreter   (C) Linker   (D) Compiler

10. Forms & controls are collectively called:

    (A) properties   (B) methods   (C) events   (D) objects

11. To exit the window of Visual Basic press the following:

    (A) Alt+F6   (B) Ctrl+F9   (C) Alt+F9   (D) Alt+F4

12. The naming pre-fix for label control is:

    (A) lbe   (B) lab   (C) lbel   (D) lbl

13. Which control is used to choose one item from the pre-defined list?

    (A) text box   (B) check box   (C) list box   (D) radio

14. The expression 20/3 gives:

    (A) 2   (B) 6.333   (C) 6   (D) 60

15. How many times the following loop will execute?

    for j=10 to 1 step-2

    Next

    (A) 5 times   (B) 10 times   (C) 6 times   (D) 4 times

Computer Science (New Scheme)   (INTER PART-II) 418   Paper II
Time: 2:10 Hours   SUBJECTIVE pakcity.org Marks: 60
Note: Section I is compulsory.

(SECTION – I)

2. Write short answers to any SIX questions: 12

MS-ACCESS

i.   What is the use of DML?
ii. List three examples of database systems.
iii. Define primary key.
iv. What is a relationship?
v.   What is a repeating group?
vi. What is a functional dependency?
vii. List three methods to create table in MS-Access.
viii. Write the use of data sheet form.
ix. Differentiate between form and report.

3. Write short answers to any SIX questions: 12

C-Language

i.   Write shortcut key to compile and run C-program.

ii. What is the use of define preprocessor?

iii. Define delimiters.

iv. Why C is known as strongly typed language?

v.   How does cancellation error occur?

vi. Write output of the following code:
```
int x = 5;
printf("%d %d", 2 * x , 3 * x);
```

vii. Name any four format specifiers provided by C.

viii. Write output of the following code:
```
int a, b, c;
a = 15;
b = 10;
c = a + b;
printf("c = %d", ++c);
```

ix. Find errors from the following code:
```
#include < stio.h >
void main ( )
{
int x = 10, y = 13;
x = ++y;
y = x++;
printf(" %d %d", x ,y);
}
```

(Turn Over)

OR

VISUAL BASIC

3. Write short answers to any SIX questions: 12

i. What is project window?

ii. Differentiate between project file and form file.

iii. State the purpose of name property of a control.

iv. Define focus.

v. Write the use of KeyUp and KeyDown events.

vi. Show output of following code:

```
Dim x As Integer
Dim y As Integer
Dim z As Integer
x = 11
y = 23
z = x
x = y
y = z
Print "x=" & x
Print "y=" & x
```

vii. Explain the use of option explicit statement in Visual Basic.

viii. Find errors in the following code:

```
Dimm A As Integer
Dim B As Integer
A = 2 * 10
B = 3 * 5
Print A Mod B
```

ix. Write output of the following code:

```
Const Length As Double = 12
Const Width As Double = 4
Dim Perimeter As Double
Perimeter = 2 * Length + 2 * Width
Print "The Perimeter of the rectangle is" & Perimeter
```

4. Write short answers to any SIX questions: 12

C-Language

i. When you must use curly braces { } with selection structure.

ii. Show output

```
int n = 1, m = 2;
if(n == m)
    printf("%d", n);
else
{
if(n == m-1)
    printf("%d %d", n , m);
}
```

iii. Trace errors in the following code:

```
int n = 7;
if(n > 4 && < 10)
    printf(n is valid);
Else
    printf("n is invalid");
```

iv. Define infinite loop.

v. What is the output of following code.

```
int n = 1;
while(n <= 10)
{
    if(n % 2 == 1)
        printf("%d", n);
    n++;
}
```

vi. Convert the following code into "for" loop.

```
int i = 1;
while (i <= 10)
{
    printf("%d", i);
    i = i + 2;
}
```

vii. Write the syntax for function declaration.

viii. What is function definition?

ix. What is the use of fopen( ) function?

(Contd…P/3)

OR

VISUAL BASIC

4. Write short answers to any SIX questions:

i. What is the use of Val function?

ii. What is a relational expression?

iii. Find output of following code:

```
Dim n, m As Integer
n = 1
m = 2
If n = m Then
    Print n
Else
    If n = m - 1 Then
        Print n
        Print m
    End If
End If
```

iv. What is nested loop in Visual Basic?

v. Define Do-While loop in Visual Basic.

vi. What is the output of following code?

```
Dim n As integer
n = 1
While n <= 20
    If n mod 3 = 0 Then
        Print n
    End if
Wend
```

vii. Predict the output of following code:

```
Dim n , m as Integer
m = 10
n = m + 2
m = n - m
Print m
```

viii. Find errors in the following code:

```
Dim x as int;
If x < 3 Then
    Print x
End
```

ix. Explain the difference between Do-While and For-Next loop.

(SECTION - II)
MS-ACCESS

Note: Attempt any ONE question.

5. What is data modeling? What are the ingredients of data modeling?

6. Discuss different types of forms in MS-Access.

(SECTION – III)

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

C – LANGUAGE

7. Write any eight rules for naming variables in C-language.

8. Write a program that inputs a week day number and prints the name of day on screen using switch..case structure.

9. What is do-while loop? Explain its working with example.

OR

VISUAL BASIC

7. Discuss implicit and explicit declaration of variables in Visual Basic.

8. Write a code in Visual Basic that inputs a week day number and displays the name of the day in a message box using Select...Case structure.

9. What is Do-While loop? Explain its working with examples.

332-418-20000