

Mc100401285 Bc100400662

moaaz.pk@gmail.com bc100400662asad@gmail.com

CS201- Introduction to Programming

Latest Solved Mcqs from Midterm Papers

May 07,2011

Lectures 1-22

Mc100401285 moaaz.pk@gmail.com Moaaz Siddiq

Bc100400662 bc100400662asad@gmail.com Asad Ali

Latest Mcqs

MIDTERM EXAMINATION

Spring 2010

Question No: 1 (Marks: 1) - Please choose one

In order to get 256 from the number 2568 we divide this number by 10 and take,

- ▶ Its remainder
- ▶ The number
- ▶ **Its quotient**
- ▶ Its divisor

Question No: 2 (Marks: 1) - Please choose one

The correct syntax of do-while loop is,

- ▶ (condition) while; do { statements; };
- ▶ { statements; } do-while ();
- ▶ while(condition); do { statements; };
- ▶ **do { statements; } while (condition);**

Question No: 3 (Marks: 1) - Please choose one

Which of the following function(s) is/are included in **stdlib.h** header file?

- ▶ double atof(const char *nptr)
- ▶ int atoi(const char *nptr)
- ▶ char *strcpy (char *s1, const char *s2)
- ▶ **1 and 2 only (Pg 191)**

Question No: 4 (Marks: 1) - Please choose one

If the break statement is missed in switch statement then,

- ▶ The compiler will give error
- ▶ **This may cause a logical error (Pg 76)**
- ▶ No effect on program
- ▶ Program stops its execution

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Question No: 5 (Marks: 1) - Please choose one

The data type before a function name represents its,

- ▶ **Return Type (Pg 499)**
- ▶ Function data
- ▶ Function arguments
- ▶ Function name

Question No: 6 (Marks: 1) - Please choose one

Member function tellg() returns the current location of the _____ pointer.

- ▶ tellptr()
- ▶ write()
- ▶ seekg()

▶ **get() (Pg 215)**

Question No: 7 (Marks: 1) - Please choose one

What does $5 | 6$, evaluate to in decimal where '|' is bitwise OR operator?

☐ ▶ ☐ 3

☐ ▶ ☐ 4

☐ ▶ ☐ 5

☒ ▶ ☐ 7

5 | 6 =

0 1 0 1

0 1 1 0

0 1 1 1 = 7

Question No: 8 (Marks: 1) - Please choose one

C is widely

known as development language of _____ operating system.

- ▶ Linux
- ▶ Windows

▶ **Unix (Pg 12)**

▶ Mac OS

Question No: 9 (Marks: 1) - Please choose one

What will be

the result of arithmetic expression $6 + 27 / 3 * 3$?

▶ 33

▶ 45

▶ **9**

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▶ 30

Question No: 10 (Marks: 1) - Please choose one

How many

bytes are occupied by declaring following array of characters?

char str[] = "programming";

▶ 10

▶ 11

▶ **12**

▶ 13

Question No: 11 (Marks: 1) - Please choose one

What will be

the correct syntax for initialization of pointer *ptr* with string "programming"?

▶ char ptr = 'programming' ;

► **char *ptr = "programming" ;**

► char *ptr = 'programming' ;

► *ptr = "programming" ;

pg 166

array element in each array initialized with a single character enclosed in single quote.

pg 21

While assigning a character value to a char type variable single quotes are used around the character as 'a'.

Question No: 12 (Marks: 1) - Please choose one

What will be the result of expression $x\%2$, if $x = 7$?

☒ ► ☐ **x = 1**

☐ ► ☐ x = 3

☐ ► ☐ x = 7

☐ ► ☐ x = 2

Question No: 13 (Marks: 1) - Please choose one

UNIX has been developed in _____ language.

☐ ► ☐ JAVA

☐ ► ☐ B

☒ ► ☐ **C (pg 12)**

☐ ► ☐ FORTRAN

Question No: 14 (Marks: 1) - Please choose one

Declaring structures does not mean that memory is allocated.

☒ ► ☐ **True (Pg 229)**

☐ ► ☐ False

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<http://www.exforsys.com/tutorials/c-plus-plus/c-structures.html>

Question No: 15 (Marks: 1) - Please choose one

What will be the value of i and j in the following code segment?

```
int i, j ;
```

```
int x[5] = {2, 3, 4, 8, 9} ;
```

```
int *ptr =&x[2];
```

```
i = (*ptr)++ ;
```

```
j = *ptr++ ;
```

☐ ► ☐ i = 5, j = 5

☐ ► ☐ i = 5, j = 8

☒ ► ☐ **i = 4, j = 8**

☐ ► ☐ i = 5, j = 9

Question No: 16 (Marks: 1) - Please choose one

When an array element is passed to a function, it is passed by -----.

☒ ► ☐ **reference (Pg 266)**

☐ ► ☐ data type

☐ ► ☐ value

□ ► □ data

When we pass ordinary variables to functions, they are passed by value because of the default behavior. But when an array is passed to a function, the default behavior changes and array is passed by reference

MIDTERM EXAMINATION 2010

Question No: 1 (Marks: 1) - Please choose one

What is the output of the following statement?

```
int i = 2.5; do { cout << i * 2; } while (i > 3 && i < 10);
```

(a) 510

(b) 5

(c) 48

(d) error

Question No: 2 (Marks: 1) - Please choose one

What does !(7) evaluate to in decimal where ! is a NOT operator?

(a) 7

(b) 8

(c) 9

(d) 10

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Question No: 3 (Marks: 1) - Please choose one

The condition in while loop may contain logical expression but not relational expression.

(a) True

(b) False

Question No: 4 (Marks: 1) - Please choose one

Searching is easier when an array is already sorted

(a) True

(b) False

Question No: 5 (Marks: 1) - Please choose one

If an array has 100 elements, what is allowable range of subscripts?

(a) 0 - 99

(b) 1 - 99

(c) 0 - 100

(d) 1 - 100

Question No: 6 (Marks: 1) - Please choose one

What will be the value of 'a' and 'b' after executing the following statements?

```
a = 3;
```

```
b = a++;
```

(a) 3, 4

(b) 4, 4

(c) 3, 3

(d) 4, 3

Question No: 7 (Marks: 1) - Please choose one

What will be the correct syntax to initialize all elements of two-dimensional array to value 0?

(a) `int arr[2][3] = {0,0} ;`

(b) `int arr[2][3] = {{0},{0}} ;`

(c) `int arr[2][3] = {0},{0} ;`

(d) `int arr[2][3] = {0} ;`

Question No: 8 (Marks: 1) - Please choose one

Which of the following function returns the size of a string variable?

(a) `strlen()`

(b) `stringlen()`

(c) `strlen()`

(d) `strLength()`

When applied to a character array, the `strlen` function returns the length of the string stored there,

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not its allocated size.

<http://www.gnu.org/s/hello/manual/libc/String-Length.html>

Question No: 9 (Marks: 1) - Please choose one

What will be the range of numbers generated by function `rand () % 9`?

(a) 0 to 9

(b) 1 to 9

(c) 0 to 8

(d) 1 to 8

Question No: 11 (Marks: 1) - Please choose one

Computer can understand only machine language code.

(c) True

(d) False

Question No: 13 (Marks: 1) - Please choose one

What does $5 \wedge 6$, evaluate to in decimal where ' $\wedge$ ' is Exclusive OR operator?

(a) True

(b) False

Detail:-

It mean

$5 = 0101$

$6 = 0110$

$5 \wedge 6 = 0011$

If both input is same then the output is 0 and if different then output is 1

Question No: 14 (Marks: 1) - Please choose one

If the file is not properly closed in the program, the program _____.

(a) Terminate normally

- (b) Indicate Runtime error
- (c) Indicate Compile time error

(d) Crashes

Eventually run out of file handles and/or memory space and crash.)

<http://www.codingunit.com/c-tutorial-file-io-using-text-files>

Question No: 15 (Marks: 1) - Please choose one

Which of the following header file include string conversion functions?

- (a) string.h
- (b) stdlib.h (Pg 190)**
- (c) ctype.h
- (d) sconvert.h

Mc100401285 Bc100400662

moaaz.pk@gmail.com bc100400662asad@gmail.com

MIDTERM EXAMINATION

2009

Question No: 1 (Marks: 1) - Please choose one

A precise sequence of steps to solve a problem is called

Ø Statement

Ø Program

Ø Utility

Ø Routine

Question No: 2 (Marks: 1) - Please choose one

The Compiler of C language is written in

Ø Java Language

Ø UNIX

Ø FORTRON Language

Ø C Language

Question No: 3 (Marks: 1) - Please choose one

Initialization of variable at the time of definition is,

Ø Must

Ø Necessary

Ø Good Programming

Ø None of the given options

Question No: 4 (Marks: 1) - Please choose one

In if structure the block of statements is executed only,

Ø When the condition is false

Ø When it contain arithmetic operators

Ø When it contain logical operators

Ø **When the condition is true**

Question No: 6 (Marks: 1) - Please choose one

Dealing with structures and functions passing by reference is the most economical method

Ø **True**

Ø False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

Ø Data

Ø **Memory Address**

Ø Data Type

Ø Values

Question No: 8 (Marks: 1) - Please choose one

Preprocessor program perform its function before _____ phase takes place.

Ø Editing

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moaaz.pk@gmail.com bc100400662asad@gmail.com

Ø Linking

Ø **Compiling**

Ø Loading

Question No: 9 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

Ø area

Ø _area

Ø **10area**

Ø area2

Question No: 10 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known?

Ø **for**

Ø **while**

Ø do-while

Ø all looping processes require that the iterations be known

Ø

Question No: 11 (Marks: 1) - Please choose one

Which character is inserted at the end of string to indicate the end of string?

☐ new line

☐ tab

☒ null

☐ carriage return

Question No: 13 (Marks: 1) - Please choose one

Which of the following header file defines the **rand()** function?

☐ iostream.h

☐ conio.h

☒ **stdlib.h**

☐ stdio.h

Question No: 14 (Marks: 1) - Please choose one

Commenting the code _____

☒ **Makes a program easy to understand for others.**

☐ Make programs heavy, i.e. more space is needed for executable.

☐ Makes it difficult to compile

☐ All of the given options.

Question No: 15 (Marks: 1) - Please choose one

What's wrong with this for loop?

for (int k = 2, k <=12, k++)

☐ the increment should always be ++k

☐ the variable must always be the letter i when using a for loop

☐ there should be a semicolon at the end of the statement

☒ **the commas should be semicolons**

Mc100401285 Bc100400662

moaaz.pk@gmail.com bc100400662asad@gmail.com

Question No: 16 (Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array?

☐ int

☐ double

☐ float

☒ **char**

MIDTERM EXAMINATION 2009

Question No: 1 (Marks: 1) - Please choose one

The function of cin is

- ▶ To display message
- ▶ **To read data from keyboard**
- ▶ To display output on the screen
- ▶ To send data to printer

Question No: 2 (Marks: 1) - Please choose one

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

- ▶ cplex.h
- ▶ **ctype.h (Pg 188)**
- ▶ stdio.h
- ▶ delay.h

Question No: 3 (Marks: 1) - Please choose one

How many parameter(s) function getline() takes?

- ▶ 0
- ▶ 1
- ▶ 2
- ▶ **3**

The member function getline() also takes three parameters: the buffer to fill, one more than the maximum number of characters to get, and the termination character. getline() functions exactly like get() does with these parameters, except getline() throws away the terminating character.

<http://newdata.box.sk/bx/c/htm/ch16.htm>

Question No: 4 (Marks: 1) - Please choose one

Word processor is

- ▶ Operating system
- ▶ **Application software**
- ▶ Device driver

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moaaz.pk@gmail.com bc100400662asad@gmail.com

- ▶ Utility software

Question No: 5 (Marks: 1) - Please choose one

For which values of the integer _value will the following code becomes an infinite loop?

```
int number=1;
while (true) {
cout << number;
```

```
if (number == 3) break;  
number += integer_value; }  
▶ any number other than 1 or 2
```

▶ **only 0**

▶ only 1

▶ only 2

Rational:

number += integer_value above line decide the fate of loop so any thing other then zero leads to value of 3 which will quite the loop. Only zero is the value which keeps the loop infinite.

Question No: 6 (Marks: 1) - Please choose one

Each pass through a loop is called a/an

▶ enumeration

▶ **Iteration**

▶ culmination

▶ pass through

Question No: 7 (Marks: 1) - Please choose one

A continue statement causes execution to skip to

▶ the return 0; statement

▶ the first statement after the loop

▶ the statements following the continue statement

▶ **the next iteration of the loop**

Continue statement is used, when at a certain stage, you don't want to execute the remaining

statements inside your loop and want to go to the start of the loop.

Question No: 8 (Marks: 1) - Please choose one

What is the correct syntax to declare an array of size 10 of int data type?

▶ int [10] name ;

▶ name[10] int ;

▶ **int name[10] ;**

▶ int name[] ;

Question No: 9 (Marks: 1) - Please choose one

Consider the following code segment. What will the following code segment display?

```
int main(){
```

```
int age[10] = {0};
```

```
cout << age ;
```

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```
}
```

▶ Values of all elements of array

▶ **Value of first element of array**

▶ Starting address of array

▶ Address of last array element

Question No: 11 (Marks: 1) - Please choose one

How many bytes will the pointer *intPtr* of type **int** move in the following statement?

intPtr += 3 ;

- ▶ 3 bytes
- ▶ 6 bytes
- ▶ **12 bytes**
- ▶ 24 bytes

one int is 4 bytes so $4 \times 3 = 12$ bytes movement.

Question No: 12 (Marks: 1) - Please choose one

If there are $2(n+1)$ elements in an array then what would be the number of iterations required to

search a number using binary search algorithm?

- ▶ n elements
- ▶ **$(n+1)$ elements**
- ▶ $2(n+1)$ elements
- ▶ $2(n+1)$ elements

Question No: 13 (Marks: 1) - Please choose one

Which of the following operator is used to access the value of variable pointed to by a pointer?

- ▶ *** operator**
- ▶ -> operator
- ▶ && operator
- ▶ & operator

Question No: 14 (Marks: 1) - Please choose one

The _____ statement interrupts the flow of control.

- ▶ switch
- ▶ continue
- ▶ goto
- ▶ **break**

Question No: 15 (Marks: 1) - Please choose one

Analysis is the ----- step in designing a program

- ▶ Last
- ▶ Middle
- ▶ Post Design
- ▶ **First**

Analysis will be always followed by design and then code.

Question No: 16 (Marks: 1) - Please choose one

Paying attention to detail in designing a program is _____

- ▶ Time consuming

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- ▶ Redundant
- ▶ **Necessary**
- ▶ Somewhat Good

In programming, the details matter. This is a very important skill. A good programmer always analyzes the problem statement very carefully and in detail. You should pay attention to all the aspects of the problem.

MIDTERM EXAMINATION

Spring 2009

Question No: 1 (Marks: 1) - Please choose one_____

There are mainly----- types of software

▶ **Two**

▶ Three

▶ Four

▶ Five

Software is categorized into two main categories

• System Software

• Application Software

Question No: 2 (Marks: 1) - Please choose one_____

In C/C++ the #include is called,

▶ Header file

▶ **Preprocessor Directive (Pg 15)**

▶ Statement

▶ Function

Question No: 3 (Marks: 1) - Please choose one_____

&& is----- operator.

▶ An arithmetic

▶ **Logical**

▶ Relational

▶ Unary

we use logical operators (&& and ||) for AND and OR respectively with relational operators.

Question No: 4 (Marks: 1) - Please choose one_____

In flow chart, the symbol used for decision making is,

▶ Rectangle

▶ Circle

▶ Arrow

▶ **Diamond (Pg 51)**

http://www.ehow.com/about_5081911_symbols-used-flowchart.html

Question No: 6 (Marks: 1) - Please choose one_____

C++ views each file as a sequential stream of_____ .

▶ **Bytes**

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▶ Bits

▶ 0's or 1's

► Words

Question No: 7 (Marks: 1) - Please choose one_____

If the elements of an array are already sorted then the useful search algorithm is,

► Linear search

► **Binary search (Pg 188)**

► Quick search

► Random search

In binary search algorithm, the 'divide and conquer' strategy is applied.

This plies only to sorted arrays in ascending or descending order.

Question No: 8 (Marks: 1) - Please choose one_____

The address operator (&) can be used with,

► Statement

► Expression

► **Variable**

► Constant

Question No: 9 (Marks: 1) - Please choose one_____

When a pointer is incremented, it actually jumps the number of memory addresses

► **According to data type (Pg 160)**

► 1 byte exactly

► 1 bit exactly

► A pointer variable can not be incremented

Question No: 11 (Marks: 1) - Please choose one_____

Call by reference mechanism should be used in a program when there is

i. large amount of data to be passed

ii. small amount of data to be passed

iii. need to change the passed data

iv. no need to change the passed data

Choose the appropriate option for the above case.

► (i) and (ii) only

► **(i) and (iii) only**

► (ii) and (iii) only

► (ii) and (iv) only

Question No: 12 (Marks: 1) - Please choose one_____

Which of the following is the starting index of an array in C++?

► **0**

► 1

► -1

► any number

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Question No: 13 (Marks: 1) - Please choose one_____

The return type of a function that do not return any value must be _____

► int

► **void**

- ▶ double
- ▶ float

Question No: 14 (Marks: 1) - Please choose one_____

Which of the following is an extension of header file?

- ▶ .exe
- ▶ .txt
- ▶ **.h**
- ▶ .c

Question No: 15 (Marks: 1) - Please choose one_____

We want to access array in random order which approach is better?

▶ **Pointers**

▶ **Array index (Pg 176)**

- ▶ Both pointers and array index are better
- ▶ None of the given options.

Question No: 16 (Marks: 1) - Please choose one_____

When we declare a multidimensional array the compiler store the elements of multidimensional array in the form of,

- ▶ Columns
- ▶ Rows

▶ **Contiguous memory location (Pg 174)**

▶ Matrix

MIDTERM EXAMINATION 2009

Question No: 1 (Marks: 1) - Please choose one

In C/C++ the string constant is enclosed

- ▶ In curly braces
- ▶ In small braces
- ▶ In single quotes
- ▶ **In double quotes** <http://www.lugaru.com/man/String.Constants.html>

Question No: 2 (Marks: 1) - Please choose one

The size of int data type is

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- ▶ 1 bytes
- ▶ 2 bytes
- ▶ 3 bytes

▶ **4 bytes (Pg 257)**

Question No: 3 (Marks: 1) - Please choose one

In Flow chart process is represented by

▶ **Rectangle (Pg 51)**

- ▶ Arrow symbol
- ▶ Oval
- ▶ Circle

Question No: 5 (Marks: 1) - Please choose one

When we are using const keyword with a variable x then initializing it at the time of declaration is,

- ▶ **Must**
- ▶ Optional
- ▶ Not necessary
- ▶ A syntax error

Question No: 6 (Marks: 1) - Please choose one

Which of the following is the correct way to assign an integer value 5 to element of a matrix say 'm' at second row and third column?

- ▶ **m[2][3] = 5 ;**
- ▶ m[3][2] = 5 ;
- ▶ m[1][2] = 5 ;
- ▶ m[2][3] = '5';

Question No: 7 (Marks: 1) - Please choose one

How many total elements must be in two-dimensional array of 3 rows and 2 columns?

- ▶ 4
- ▶ 5
- ▶ **6 (3*2=6)**
- ▶ 7

Question No: 8 (Marks: 1) - Please choose one

Which of the following is the correct statement for the following declaration?

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const int *ptr.

Ø ptr is a constant pointer

Ø ptr is constant integer pointer

Ø ptr is a constant pointer to int

Ø ptr is a pointer to const int

<http://www.allinterview.com/showanswers/65662.html>

Question No: 9 (Marks: 1) - Please choose one

Consider the following code segment. What will be the output of this code segment?

```
int arr[6] = {2, 3, 7, 4, 5, 6} ;  
int *ptr1 =&arr[1] ;  
int *ptr2 = &arr[4] ;  
cout << (ptr2-ptr1) ;
```

- ▶ 3
- ▶ 9
- ▶ 12
- ▶ **2**

Question No: 10 (Marks: 1) - Please choose one

What will be the correct syntax to assign an array named arr of 5 elements to a pointer ptr?

- ▶ *ptr = arr ;
- ▶ ptr = arr ;
- ▶ *ptr = arr[5] ;
- ▶ ptr = arr[5] ;

Question No: 11 (Marks: 1) - Please choose one

C is a/an _____ language

- ▶ low level
- ▶ object based
- ▶ object oriented

▶ **function oriented (Pg 77)**

Question No: 13 (Marks: 1) - Please choose one

The variables having a name, type and size are just like empty boxes.

- ▶ False
- ▶ **True**

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Question No: 15 (Marks: 1) - Please choose one

Most efficient method of dealing with structure variables is to define the structure globally

- ▶ True <http://mathbits.com/mathbits/compsci/Structures/Define.htm>
- ▶ False

Question No: 16 (Marks: 1) - Please choose one

Syntax of union is identical to _____

▶ **Structure (pg 242)**

- ▶ Class
- ▶ Function
- ▶ None of the given options

MIDTERM EXAMINATION

2008

Question No: 16 (Marks: 1) - Please choose one

In Program

commenting the code liberally is

▶ **Useful.**

- ▶ Time consuming
- ▶ Not necessary

Question :If we want to store a string "abc" in an array str then the size of this array must be at least,

- (a) 2**
- (b) 3
- (c) 4**
- (d) 5

Question :How many bytes will the pointer *intPtr* of type **int** move in the following statement?

intPtr += 3 ;

- (a) 3 bytes
- (b) 6 bytes
- (c) 12 bytes
- (d) 24 bytes

MIDTERM EXAMINATION

2007

Question :The remainder (%) operator is,

► **An arithmetic operator (Pg 258)**

- A logical operator
- A relational operator
- A division operator

Mc100401285 Bc100400662

moaaz.pk@gmail.com bc100400662asad@gmail.com

Question :When a call to function statement is encountered,

- The control is transfer to its Prototype
- **The control is transfer to its definition**
- The compiler stop execution of whole program
- The program hangs

MIDTERM EXAMINATION

2006

Question :The value of $2*15/3*7+3*2$ is

- Ø 146
- Ø 76
- Ø 8
- Ø 70

Question: Carefully analyze the following lines of code and chose the correct option.

ch1="a";

ch2='a';

Ø ch1 and ch2 are strings

Ø **ch1 is string and ch2 is character**

Ø ch2 is string and ch1 is character

Ø ch1 and ch2 are characters

Question :The size of a double variable is

- Ø 2 bytes

Ø 4 bytes

Ø 8 bytes

Ø 10 bytes

The size of an int is: 4 bytes.

The size of a short int is: 2 bytes.

The size of a long int is: 4 bytes.

The size of a char is: 1 bytes.

The size of a float is: 4 bytes.

The size of a double is: 8 bytes.

Question :An array is also called

Ø an array variable

Ø array declaration

Ø struct

Ø constant pointer

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CS201 - Introduction to Programming Midterm Paper(1) 2010

Question No.: 1 (M a r k s : 1)

Compiler is a

System software

Application Software

Driver

Editor

http://books.google.com.pk/books?id=AJt4O4AoCtgC&pg=PA1&lpg=PA1&dq=%22compiler+is+a+system+software%22&source=bl&ots=iSKObzG2h5&sig=S_IIDilOXTgnIKvxdSOJN0IZ8o&hl=en&sa=X&ei=dtB2UOqdFeWK4gSsrIDQCQ&ved=0CEoQ6AEwBw#v=onepage&q=%22compiler%20is%20a%20system%20software%22&f=false

Question No.: 2 (M a r k s : 1)

If Num is an integer variable then Num++ means,

Add 1 two times with Num

Add 1 with Num

Add 2 with Num

Subtract 2 from Num

Question No.: 3 (M a r k s : 1)

For one byte there are _____ combinations of values that can be stored in computer.

2⁶

27

28

24

Each bit is capable of holding two possible values, the number of possible different combinations of

values that can be stored in n bits is 2^n . For example:

1 bit can hold $2 = 2^1 = 2$ possible values (0 or 1)

2 bits can hold $2 \times 2 = 2^2 = 4$ possible values

so 8 bits(one byte) = $2^8 = 256$

Question No.: 4 (Marks: 1)

In C/C++ language the header file which is used to perform useful task and manipulation

of character data is

cplex.h

ctype.h pg 188

stdio.h

delay.h

Question No.: 5 (Marks: 1)

Default case in switch statement is,

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

shinestar.star86@gmail.com

mc120201969@gmail.com

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References

Must

Optional

syntax error

Necessary

<http://www.arduino.cc/en/Reference/SwitchCase>

Question No.: 6 (Marks: 1)

When break statement is encountered in switch statement, it

Stops the entire program

Stops the execution of current statement

Exits from switch statement

None of the given options

<http://docs.oracle.com/javase/tutorial/java/nutsandbolts/switch.html>

Question No.: 7 (Marks: 1)

What will be the result of arithmetic expression $6+27/3*3$?

33

45

9

30

Question No.: 8 (Marks: 1)

What is the correct syntax to declare an array of size 10 of int data type?

int [10] name ;
name[10] int ;
int name[10] ;
int name[] ;

Question No.: 9 (Marks: 1)

How many dimensions does n-dimensional array has?

n dimensions

2n dimensions
(n+1) dimensions
(n-1) dimensions (Array starts from 0th element)

Question No.: 10 (Marks: 1)

What will be the correct syntax to access the value of fourth element of an array using

pointer ptr?

ptr[3]
(ptr+3)
*(ptr+3)

Both 1 and 3

**By vuZs Team (Aniqa MALik
Tanzeela Naz)**

Shinestar.star86@gmail.com

mc120201969@gmail.com

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Question No.: 11 (Marks: 1)

Which of the following values C++ use to represent true and false?

1 and 0

1 and -1
11 and 00
Any numerical value

Question No.: 12 (Marks: 1)

Declaring structures does not mean that memory is allocated.

True

False

<http://www.exforsys.com/tutorials/c-plus-plus/c-structures.html>

Question No.: 13 (Marks: 1)

For which array, the size of the array should be one more than the number of elements

in an array?

Int
double
float

char Pg113

Question No.: 14 (Marks: 1)

If a variable is passed by value to a function and the function makes some changes to that variable then it

Does not affect the original variable pg 83

affects the original variable

causes syntax error

None of the given options

Question No.: 15 (Marks: 1)

In C/C++ the #include is called,

Header file

Preprocessor Directive pg 269

Statement

Function

Question No.: 16 (Marks: 1)

Loops are ----- Structure.

Decision

Repetition pg 560

Sequential

Hierarchical

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

Shinestar.star86@gmail.com

mc120201969@gmail.com

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Question No.: 17 (Marks: 2)

Which variable will be used in inner code block if we have the same names of variable at

outer code block and inner code block?

Pg No 91

Question No.: 18 (Marks: 2)

Which variable will be used in inner code block pointer.

Pg No 90

Question No.: 19 (Marks: 2)

Which standard library is included when your program reads from, or writes to, files?

Pg No 199

Question No.: 20 (Marks: 3)

Perform left shift operation on a binary number 0101 and write the result in binary and decimal.

Pg No 252

Question No.: 21 (Marks: 3)

What is difference between variable and pointer?

Variables Pg No 16

Pointers: Pg No 143

Question No.: 22 (Marks: 5)

Write a C/C++ program which defines an array of 10 elements.

This program should ask a number from the user and search this number in the array if

the number exists in the array, it should display the location of the number otherwise display the message The number is not in the given array.

Question No.: 23 (Marks: 5)

Write a C/C++ program which defines an array of 15 elements and fill the array with

string "12players2teams". This program should display that how many digits and alphabets the string "12players2teams" contains using Character handling functions.

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

Shinestar.star86@gmail.com

mc120201969@gmail.com

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Question No: 1 (Marks: 1)

In C/C++ the string constant is enclosed

► In curly braces

► In small braces

► In single quotes

► **In double quotes**

<http://www.lugaru.com/man/String.Constants.html>

Question No.: 2 (Marks: 1)

For one byte there are _____ combinations of values that can be stored in computer.

~~2⁶~~

~~2⁷~~

2⁸

~~2⁴~~

Each bit is capable of holding two possible values, the number of possible different combinations of values that can be stored in n bits is 2^n . For example: 1 bit can hold $2 = 2^1 = 2$

possible values (0 or 1) .2 bits can hold $2 \times 2 = 2^2 = 4$ possible values so 8 bits(one byte) = $2^8 = 256$

Question No: 3 (Marks: 1)

Switch statement deals with,

- ▶ Integer data only
- ▶ float data only
- ▶ character data only

▶ **Integer and character data**

<http://docs.oracle.com/javase/tutorial/java/nutsandbolts/switch.html>

Question No: 4 (Marks: 1)

A record is a group of related _____.

- ▶ Files
- ▶ Bytes
- ▶ **Fields**
- ▶ Data

Ref 1:

http://wps.prenhall.com/esm_deitel_javahttp_6/25/6592/1687696.cw/content/index.html

Ref 2:

<http://books.google.com.pk/books?id=fCKOomc6NiYC&pg=PT721&lpg=PT721&dq=%22A+record+is+a+group+of+related++%22&source=bl&ots=gV8WAZayiV&sig=QJafvBmGwVjyAoIWs2Mv60cHogY&hl=en&sa=X&ei=vap5UPLNEcSF4ASaiYDQAg&ved=0CC8Q6AEwAw>

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**By vuZs Team (Aniqa MALik
Tanzeela Naz)**

Shinestar.star86@gmail.com

mc120201969@gmail.com

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Question No: 5 (Marks: 1)

C++ views each file as a sequential stream of _____.

▶ **Bytes**

- ▶ Bits
- ▶ 0's or 1's
- ▶ Words

http://books.google.com.pk/books?id=TN9wQjjDwp0C&pg=PA582&lpg=PA582&dq=C%2B%2B+views+each+file+as+a+sequential+stream+of&source=bl&ots=kD6-M5Y9Ur&sig=XYHg_wet5FD6RnnuySh_q5e49JE&hl=en&sa=X&ei=H6h5UKiuNsmk4gSbkoGoAg&ved=0CC0Q6AEwAA#v=onepage&q=C%2B%2B%20views%20each%20file%20as%20a%20sequential%20stream%20of&f=false

Question No: 6 (Marks: 1)

To access the element of two dimensional array we use,

- ▶ Single referencing
- ▶ Single dereferencing
- ▶ Double dereferencing

► **Double referencing Pg175**

Question No: 7 (M a r k s: 1)

If it is required to copy an array to another array then,

► **Both arrays must be of the same size and data type Pg 105**

- Both arrays may be of different size
- Both arrays may be of different data type
- Both arrays may be of different size and type

Question No: 8 (M a r k s: 1)

The precedence of * is higher than dot operator

► True

► **False**

http://docs.realsoftware.com/index.php/Operator_Precedence

Question No: 9 (M a r k s: 1)

Pointers works by pointing to a data type, which can be of the form,

- Integer only
- double only
- character only
- **All of the given options Pg 144**

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

Shinestar.star86@gmail.com

mc120201969@gmail.com

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Question No: 10 (M a r k s: 1)

Which of the following data type(s) can operate on modulus operator ‘%’?

- float, int
- float, double
- **int Pg 22**
- char

Question No: 11 (M a r k s: 1)

What will be the output of following code?

```
int x = 10 ;
```

```
cout << "x =" << x ;
```

- 10
- "x=10"
- **x=10**
- 10=x

Question No: 12 (M a r k s: 1)

Which looping process checks the test condition at the end of the loop?

- for
- while
- **do while**
- no looping process checks the test condition at the end

<http://publib.boulder.ibm.com/infocenter/dmndhelp/v6rxmx/index.jsp?topic=/com.ibm.btools.help>

[.modeler.collab.publish.doc/doc/concepts/modelements/loop.html](#)

Question No: 13 (Marks: 1)

What will be the correct syntax of the following statement?

ptr is a constant pointer to integer.

- ▶ const int *ptr ;
- ▶ const *int ptr ;
- ▶ int const *ptr ;
- ▶ **int *const ptr ; Pg 154**

Question No: 14 (Marks: 1)

A function must always return value.

- ▶ True
- ▶ **False**

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Shinestar.star86@gmail.com

mc120201969@gmail.com

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<http://publib.boulder.ibm.com/infocenter/comphelp/v8v101/index.jsp?topic=%2Fcom.ibm.xlcpp8>

[a.doc%2Flanguage%2Fref%2Fcplr240.htm](#)

Question No: 15 (Marks: 1)

C is a/an _____ language

- ▶ low level
- ▶ object based
- ▶ object oriented
- ▶ **function oriented pg 82**

Question No: 16 (Marks: 1)

Assignment operator is used for _____.

- ▶ calculation
- ▶ reading
- ▶ **assigning value to variables Pg 17**
- ▶ None of the given options.

Question No: 17 (Marks: 2)

What is the difference between switch statement and if statement.

1.if statement is used when we have to check two conditions while switch is a multi conditional control statement.

2. SWITCH statement can be executed with all cases if the “break” statement is not used whereas IF statement has to be true to be executed further.

(Answer provided by Moaaz Siddiq)

Question No: 18 (Marks: 2)

What is wrong with following code and also give the reason of error?

```
int x , y ;  
int *ptr1 = &x ;  
int *ptr2 =&y ;  
ptr1+ptr2 ;
```

Answer:

We need one more variable in which we put sum of ptr1 and ptr2 like

Int z;

z=ptr1+ptr2;

(Answer provided by Ferhat Qudsia)

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**By vuZs Team (Aniqa MALik
Tanzeela Naz)**

Shinestar.star86@gmail.com

mc120201969@gmail.com

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Question No: 19 (M a r k s : 2)

Which bit of the number is used as a sign bit?

The most significant bit of the number is used as a sign bit (to denote the sign of the number).

(Answer provided by Ferhat Qudsia)

Question No: 20 (M a r k s : 3)

What is the difference between tellg() and tellp() functions?

Pg No.215

Question No: 21 (M a r k s : 3)

What is difference between variable and pointer?

Variables Pg No 16

Pointers: Pg No 143

Question No: 22 (M a r k s : 5)

What happened when we try to copy the array 'arr1' into the array 'arr2' in the following

code segment, justify your answer?

```
main()  
{  
int arr1[3]={2,3,5};  
int arr2[3];  
arr2=arr1;  
}
```

We can not copy array directly in this way (arr2=arr1;)

Each member of arr1 to be copied by each member of arr2.

We can use for loop to copy array 1 to array2

(Answer provided by Ferhat Qudsia)

Question No: 23 (M a r k s : 5)

Differentiate between random access and sequential access file?

Random access file:

Random access files are not in sequence mean its not necessary put that's thing first that

written first we put any thing from file any where. So tellg() and tellp() are the two very useful

functions while reading from or writing into the files at some certain position.

Sequential access file:

Sequential access files are simple character files. while working with the sequential access files

we write in a sequence not in a random manner

(Answer provided by Ferhat Qudsia)

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

Shinestar.star86@gmail.com

mc120201969@gmail.com

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Question No: 1 (M a r k s : 1)

Compiler is a

► System software

► **Application Software**

► Driver

► Editor

<http://books.google.com.pk/books?id=AJt4O4AoCtgC&pg=PA1&lpg=PA1&dq=%22compiler+is+>

[a+system+software%22&source=bl&ots=iSKObzG2h5&sig=S_IIDilOXTgnIKvxdSOJN0IZ8o&hl](a+system+software%22&source=bl&ots=iSKObzG2h5&sig=S_IIDilOXTgnIKvxdSOJN0IZ8o&hl)

[=en&sa=X&ei=dtB2UOqdFeWK4gSsrIDQCQ&ved=0CEoQ6AEwBw#v=onepage&q=%222compil](en&sa=X&ei=dtB2UOqdFeWK4gSsrIDQCQ&ved=0CEoQ6AEwBw#v=onepage&q=%222compil)

<er%20is%20a%20system%20software%22&f=false>

Question No: 2 (M a r k s : 1)

When the logical operator AND (&&) combine two expressions exp1 and exp2 then the

result will be true only,

► **When both exp1 and exp2 are true Pg 246**

► When both exp1 and exp2 are false

► When exp1 is true and exp2 is false

► When exp1 is false and exp2 is true

Question No: 3 (M a r k s : 1)

Which of the following function(s) is/are included in ctype.h header file?

► isdigit(int c)

► isxdigit(int c)

► tolower(int c)

► All of the above Pg 188

Question No: 4 (Marks: 1)

To access the data members of structure _____ is used.

► dot operator (.) pg 231

- * operator
- operator◇
- None of given.

Question No: 5 (Marks: 1)

The address operator (&) can be used with,

- Statement
- Expression

► Variable Pg 149

- Constant

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By vuZs Team (Aniqa MALik
Tanzeela Naz)

Shinestar.star86@gmail.com

mc120201969@gmail.com

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Question No: 6 (Marks: 1)

Both compiler and interpreter are used to translate program into machine language code.

► True

- False

<http://readanddigest.com/what-are-the-differences-between-compiler-and-interpreter/>

Question No: 7 (Marks: 1)

Missing semicolon ';' at the end of C++ statement is

- Logical error
- Syntax error Pg 16
- Runtime error
- None of the given options

Question No: 8 (Marks: 1)

Switch statement is an alternative of _____ statement

► multiple if

- continue
- break
- goto

http://books.google.com.pk/books?id=bjE5EHw35DkC&pg=PA239&lpg=PA239&dq=%22multiple+if+statement+is+an+alternative+of+Switch+statement+%22&source=bl&ots=0AjPQu6EZa&sig=X1QMvHuYa5Abfze3M43tSVUEbRc&hl=en&sa=X&ei=2_Z6UImFHofd4QTBz4HABw&ved=0CC4

Q6AEwAA#v=onepage&q=%22mutiple%20if%20statement%20is%20alnternative%20of%20Swi

tch%20statement%20%22&f=false

Question No: 9 (M a r k s: 1)

Array is passed by value to a function by default.

► True

► **False Pg 266**

Question No: 10 (M a r k s: 1)

Which of the following is the correct function call having array named *student* of 10

elements as a parameter.

► addRecord(student[]) ;

► addRecord(student) ;

► addRecord(student[10]) ;

► addRecord(*student) ;

Question No: 11 (M a r k s: 1)

What will be the result of expression $x\% = 2$, if $x = 7$?

► $x = 1$

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

Shinestar.star86@gmail.com

mc120201969@gmail.com

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► $x = 3$

► $x = 7$

► $x = 2$

Question No: 12 (M a r k s: 1)

What will be the output of following code segment?

```
main(){  
int x = 5 ;  
{  
int x = 4 ;  
cout <<x  
}  
cout <<x  
}
```

► 5, 5

► 4, 4

► **4, 5**

► 5, 4

Question No: 13 (M a r k s: 1)

Which of the following operator is used to access the value of variable pointed to by a

pointer?

- ▶ * operator
- ▶ -> operator
- ▶ && operator
- ▶ & operator

Question No: 14 (M a r k s: 1)

The object _____ may be used both for file input and file output

▶ **fstream, Pg 199**

- ▶ ifstream,
- ▶ ofstream,
- ▶ none of the given options.

Question No: 15 (M a r k s: 1)

What's wrong with this for loop?

for (int k = 2, k <=12, k++)

- ▶ the increment should always be ++k
- ▶ the variable must always be the letter i when using a for loop
- ▶ there should be a semicolon at the end of the statement
- ▶ **the commas should be semicolons**

Question No: 16 (M a r k s: 1)

Let suppose

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

Shinestar.star86@gmail.com

mc120201969@gmail.com

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```
Union intorDouble{
```

```
Int ival;
```

```
Double charvar;
```

```
};
```

```
main(){
```

```
intorDouble VAZ;
```

```
int size ;
```

```
size = sizeof(VAZ);
```

```
}
```

What will be the value of variable "size", if int occupies 4 bytes and double occupies 8

bytes?

- ▶ 2
- ▶ 4
- ▶ 8
- ▶ 12

Question No: 17 (M a r k s: 2)

How a program can use a function?

The calling program just needs to write the function name and provide its arguments (without data types). It is important to note that while calling a function, we don't write the return value

data type or the data types of arguments.

Question No: 18 (Marks: 2)

Which function is used to read/write more than a single character or single line while handling files?

We use the `getline` function to read more than single character

Question No: 19 (Marks: 2)

Suppose the pointer `yptr` is pointing to the first element of the array `y` and the size of

array is 10. Can we increment the `yptr` up to 12 times? And what will happen?

Question No: 20 (Marks: 3)

(i) An array `day` is declared as: `int day[] = {1, 2, 3, 4, 5, 6, 7};`

How many elements does array '`day`' has?

(ii) If the declaration is changed as: `int day[7] = {1, 2, 3, 4, 5, 6, 7};`

How many elements does array '`day`' has?

In both the case array `day` has the 7 elements.

Question No: 21 (Marks: 3)

What is the difference between `tellg()` and `tellp()` functions?

Pg No.215

Question No: 22 (Marks: 5)

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

shinestar.star86@gmail.com

mc120201969@gmail.com

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Write code which read a string not greater than 20 characters from keyboard stored it in

an array `Name` and display it on the screen.

Question No: 23 (Marks: 5)

Write a C/C++ program which defines an array of 15 elements. This program changes all

uppercase letters of an array into lowercase letters and all lowercase letters to uppercase

using Character handling functions.

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Question No: 1 (Marks: 1)

C language is developed by

► Bill Gates

- ▶ Robert Lafore
- ▶ **Dennis Ritchie Pg 12**
- ▶ Deitel & Deitel

Question No: 2 (M a r k s : 1)

Which of the following choice is not an example of an int datatype?

- ▶ 0
- ▶ -32
- ▶ 65531
- ▶ **-4.0**

Question No: 3 (M a r k s : 1)

In flow chart, the symbol used for decision making is,

- ▶ Rectangle
- ▶ Circle
- ▶ Arrow
- ▶ **Diamond Pg 51**

Question No: 4 (M a r k s : 1)

Switch statement deals with,

- ▶ Integer data only
- ▶ float data only
- ▶ character data only
- ▶ **Integer and character data**

<http://docs.oracle.com/javase/tutorial/java/nutsandbolts/switch.html>

Question No: 5 (M a r k s : 1)

Default case in switch statement is,

- ▶ Must

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

shinestar.star86@gmail.com

mc120201969@gmail.com

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- ▶ **Optional**

- ▶ syntax error
- ▶ Necessary

<http://www.arduino.cc/en/Reference/SwitchCase>

Question No: 6 (M a r k s : 1)

***doc is _____ by type.**

- ▶ **Sequential File**
- ▶ Random Access File
- ▶ Data File
- ▶ Record File

Question No: 7 (M a r k s : 1)

Member function tellg() returns the current location of the _____ pointer.

- ▶ tellptr()

- ▶ write()
- ▶ seekg()
- ▶ **get()**

http://enggedu.com/tamilnadu/university_questions/question_answer/be_nd_2007/3rd_sem/cse/

[cs1204/part_b/13_a_1.html](http://enggedu.com/tamilnadu/university_questions/question_answer/be_nd_2007/3rd_sem/cse/cs1204/part_b/13_a_1.html)

Question No: 8 (Marks: 1)

Dealing with structures and functions passing by reference is the most economical method

- ▶ **True**
- ▶ False

<http://mathbits.com/MathBits/CompSci/Structures/Functions.htm>

Question No: 9 (Marks: 1)

In C/C++ all character strings are terminated with,

- ▶ Null character
- ▶ String
- ▶ **Zero** Pg 166
- ▶ Full stop

Question No: 10 (Marks: 1)

Word processor is

- ▶ Operating system
- ▶ **Application software**
- ▶ Device driver
- ▶ Utility software

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**By vuZs Team (Aniqa MALik
Tanzeela Naz)**

shinestar.star86@gmail.com

mc120201969@gmail.com

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http://books.google.com.pk/books?id=R5w4cJYJl5cC&pg=PA220&lpg=PA220&dq=%22Word+processor++is+an+application+software%22&source=bl&ots=YD0gggdOOr&sig=k5al9mm88OJYLVg_8Zf7zlvSOel&hl=en&sa=X&ei=MSN4ULreEKbd4QSn-4HYCg&ved=0CBsQ6AEwAA#v=onepage&q=%22Word%20processor%20%20is%20an%20aplication%20software%22&f=false

Question No: 11 (Marks: 1)

Which of the following can not be a variable name?

- ▶ area
- ▶ _area
- ▶ **10area**

► area2

Question No: 12 (Marks: 1)

Which looping process is best, when the number of iterations is known?

► **for**

► while

► do-while

► all looping processes require that the iterations be known

http://en.wikipedia.org/wiki/For_loop

Question No: 13 (Marks: 1)

By default an array of characters is passed by value to a function.

► True

► **False**

[http://books.google.com.pk/books?id=bdzzlLOJb1YC&pg=PA76&lpg=PA76&dq=in+c%2B%2B+](http://books.google.com.pk/books?id=bdzzlLOJb1YC&pg=PA76&lpg=PA76&dq=in+c%2B%2B+By+default+an+array+of+characters+is+passed+by&source=bl&ots=2AEoxqdTGk&sig=wGmO)

[By+default+an+array+of+characters+is+passed+by&source=bl&ots=2AEoxqdTGk&sig=wGmO](http://books.google.com.pk/books?id=bdzzlLOJb1YC&pg=PA76&lpg=PA76&dq=in+c%2B%2B+By+default+an+array+of+characters+is+passed+by&source=bl&ots=2AEoxqdTGk&sig=wGmO)

[OhtJ8FvfUAaMjyC5MG94SfM&hl=en&sa=X&ei=LFCBUI3_IaHI4QSq94HgBQ&ved=0C](http://books.google.com.pk/books?id=bdzzlLOJb1YC&pg=PA76&lpg=PA76&dq=in+c%2B%2B+By+default+an+array+of+characters+is+passed+by&source=bl&ots=2AEoxqdTGk&sig=wGmO)

[CwQ6A](http://books.google.com.pk/books?id=bdzzlLOJb1YC&pg=PA76&lpg=PA76&dq=in+c%2B%2B+By+default+an+array+of+characters+is+passed+by&source=bl&ots=2AEoxqdTGk&sig=wGmO)

[EwAA#v=onepage&q=in%20c%2B%2B%20By%20default%20an%20array%20of%20character](http://books.google.com.pk/books?id=bdzzlLOJb1YC&pg=PA76&lpg=PA76&dq=in+c%2B%2B+By+default+an+array+of+characters+is+passed+by&source=bl&ots=2AEoxqdTGk&sig=wGmO)

[s%20is%20passed%20by&f=false](http://books.google.com.pk/books?id=bdzzlLOJb1YC&pg=PA76&lpg=PA76&dq=in+c%2B%2B+By+default+an+array+of+characters+is+passed+by&source=bl&ots=2AEoxqdTGk&sig=wGmO)

Question No: 14 (Marks: 1)

Which of the following operator is used to access the address of a variable?

► * operator

► -> operator

► && operator

► **& operator Pg 480**

Question No: 15 (Marks: 1)

The name of an array represents address of first location of array element.

► **True Pg 120**

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

shinestar.star86@gmail.com

mc120201969@gmail.com

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► False

Question No: 16 (Marks: 1)

Let suppose

Union intorDouble{

Int ival;

Double charvar;

};

main(){

```
intorDouble VAZ;  
int size ;  
size = sizeof(VAZ);  
}
```

What will be the value of variable "size", if int occupies 4 bytes and double occupies 8 bytes?

- ▶ 2
- ▶ 4
- ▶ 8
- ▶ 12

Question No: 17 (M a r k s : 2)

What is the difference between for loop and while loop?

When number of iterations known we use for loop otherwise we will use while loop

Question No: 18 (M a r k s : 2)

Consider the structure

```
struct Customer  
{  
int custnum;  
int salary;  
float commission;  
};
```

A programmer wants to assign 2000 for the structure member *salary* in the above example of structure *Customer* with structure variable *cust1* What line of code should he write.

Question No: 19 (M a r k s : 2)

When a pointer is incremented then how many bytes will it move to change its address?

If an integer occupies four bytes in the memory, then the `yptr++`; will increment its value by four.

when we increment the `yptr`, it points to the next integer in the memory

Question No: 20 (M a r k s : 3)

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

shinestar.star86@gmail.com

mc120201969@gmail.com

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If there are 2^n elements in an array then what would be the number of iterations required

to search a number using binary search and linear search?

If an array has elements 2^n , then the maximum number of iterations required by binary search

will be n.

Question No: 21 (Marks: 3)

Perform left shift operation on a binary number 0101 and write the result in binary and decimal.

Question No: 22 (Marks: 5)

What will be the output of following code segment?

```
void func(int [], int);
main(){
    int arr[5] = {2, 3, 5, 6, 7} ;
    func(arr, 5) ;
    for (int i = 0; i<5; i++)
        cout << arr[i] << " ";
    }
    void func(int a[], int size){
        for (int i = 0; i<size; i++)
            a[i] = 2*a[i];
    }
```

Question No: 23 (Marks: 5)

What is random access file and how data can be read and write into random access file?

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Question No: 1 (Marks: 1)

In C/C++ the #include is called,

- ▶ Header file
- ▶ **Preprocessor Directive pg 269**
- ▶ Statement
- ▶ Function

Question No: 2 (Marks: 1)

To access the element of two dimensional array we use,

- ▶ Single referencing
- ▶ Single dereferencing
- ▶ **Double dereferencing Pg175**
- ▶ Double referencing

Question No: 3 (Marks: 1)

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By vuZs Team (Aniqa MALik Tanzeela Naz)

shinestar.star86@gmail.com

mc120201969@gmail.com

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Data Size of the file is always _____ the actual size of the file.

- ▶ Greater than
- ▶ Equal to

► Less than or equal to

► **None of the above** Pg 216

Similarly in case of files, the space occupied by a file (file size) can be more than the actual data length of the file itself.

Question No: 4 (Marks: 1)

When an identifier is declared with keyword const then,

► Its value can be changed during execution.

► **Its value can not be changed** Pg110

► Its value can be changed with arithmetic operator

► Its value can be overwritten

Question No: 5 (Marks: 1)

In C/C++ if we define an array of size eight (8) i.e. int Arr [8]; then the last element of this array will be stored at,

► Arr[0]

► Arr[8]

► **Arr[7]**

► Arr[-1]

Question No: 6 (Marks: 1)

If it is required to copy an array to another array then,

► **Both arrays must be of the same size and data type** Pg 105

► Both arrays may be of different size

► Both arrays may be of different data type

► Both arrays may be of different size and type

Question No: 7 (Marks: 1)

In C/C++ all character strings are terminated with,

► **Null character** Pg 166

► String

► Zero

► Full stop

Question No: 8 (Marks: 1)

Let suppose

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

shinestar.star86@gmail.com

mc120201969@gmail.com

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struct

intorDoubl

e {

int ival; Double

charvar;

};

```
main(){
intorDouble
VAZ;
int size ;
size =
sizeof(VAZ);
}
```

What will be the value of variable size, if int occupies 4 bytes and double occupies 8 bytes?

- ▶ 2
- ▶ 4
- ▶ 8
- ▶ 12

Question No: 9 (Marks: 1)

When a pointer is incremented, it actually jumps the number of memory addresses

▶ According to data type Pg 160

- ▶ 1 byte exactly
- ▶ 1 bit exactly
- ▶ A pointer variable can not be incremented

Question No: 10 (Marks: 1)

Do-while loop executes at least,

- ▶ Zero Time
- ▶ One Time
- ▶ Two Times
- ▶ N Times

<http://books.google.com.pk/books?id=xnEYsMiYgiMC&pg=PA521&lpg=PA521&dq=%22Dowhile+>

[loop+executes+at+least+One+Time%22&source=bl&ots=hovQ0faYdl&sig=_z9IXC5Zmx](http://books.google.com.pk/books?id=xnEYsMiYgiMC&pg=PA521&lpg=PA521&dq=%22Dowhile+loop+executes+at+least+One+Time%22&source=bl&ots=hovQ0faYdl&sig=_z9IXC5Zmx)

[t](http://books.google.com.pk/books?id=xnEYsMiYgiMC&pg=PA521&lpg=PA521&dq=%22Dowhile+loop+executes+at+least+One+Time%22&source=bl&ots=hovQ0faYdl&sig=_z9IXC5Zmx)

[5JsWJS6aVgrd9YKg&hl=en&sa=X&ei=Yw98UNCOEoiD4gS734HoCg&ved=0CCAQ6A](http://books.google.com.pk/books?id=xnEYsMiYgiMC&pg=PA521&lpg=PA521&dq=%22Dowhile+loop+executes+at+least+One+Time%22&source=bl&ots=hovQ0faYdl&sig=_z9IXC5Zmx)

[EwAQ#v](http://books.google.com.pk/books?id=xnEYsMiYgiMC&pg=PA521&lpg=PA521&dq=%22Dowhile+loop+executes+at+least+One+Time%22&source=bl&ots=hovQ0faYdl&sig=_z9IXC5Zmx)

[=onpage&q=%22Dowhile%](http://books.google.com.pk/books?id=xnEYsMiYgiMC&pg=PA521&lpg=PA521&dq=%22Dowhile+loop+executes+at+least+One+Time%22&source=bl&ots=hovQ0faYdl&sig=_z9IXC5Zmx)

[20loop%20executes%20at%20least%20One%20Time%22&f=false](http://books.google.com.pk/books?id=xnEYsMiYgiMC&pg=PA521&lpg=PA521&dq=%22Dowhile+loop+executes+at+least+One+Time%22&source=bl&ots=hovQ0faYdl&sig=_z9IXC5Zmx)

Question No: 11 (Marks: 1)

+= , *= , /= , etc are called,

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

shinestar.star86@gmail.com

mc120201969@gmail.com

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- ▶ Assignment operators
- ▶ Logical operator
- ▶ Compound assignment operator Pg 63

►Unary operator

Question No: 12 (Marks: 1)

Computer can understand only machine language code.

►True Pg 12

►False

Which of the following is the correct syntax to print multiple values or variables in a single command using cout?

►cout <

►cout <

►cout <

►cout <

Question No: 14 (Marks: 1)

The compilers and interpreters also belong to the System Software category.

►True Pg 11

►False

Question No: 15 (Marks: 1)

Editors are used to compile the code.

►True

►False

Compilers are used for compilation of source codes, However Editors are used to write the source codes.

Question No: 16 (Marks: 1)

The variables having a name, type and size are just like empty boxes.

►True

►False

Question No: 17 (Marks: 1)

What will be the result of the statement

`rand ( ) % 50`

When 50 divides any number, the remainder will always be less than 50.

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By vuZs Team (Aniqa MALik

Tanzeela Naz)

shinestar.star86@gmail.com

mc120201969@gmail.com

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Question No: 18 (Marks: 1)

What is the ASCII code of null character

The ASCII code of null character 00.

Ref" <http://www.theasciicode.com.ar/ascii-control-characters/null-character-ascii-code-0.html>

Question No: 19 (Marks: 2)

What is a truth Table?

A truth table is a mathematical table used in logic—specifically in connection with Boolean algebra, Boolean functions, and propositional—to compute the functional values of logical expressions on each of their functional arguments, that is, on each combination of values

taken by their logical variables .In particular, truth tables can be used to tell whether a propositional expression is true for all legitimate input values, that is, logically valid.

Question No: 20 (M a r k s: 3)

How learning to design programs is like play soccer?

Learning to design programs is like learning to play soccer. A player must learn to trap a ball, to

dribble with a ball, to pass, and to shoot a ball. Once the player knows those basic skills, the

next goals are to learn to play a position, to play certain strategies, to choose among feasible

strategies, and, on occasion, to create variations of a strategy because none fits.

Question No: 21 (M a r k s: 5)

What is the purpose of the default statement

The default statement is optional. If there is no case which matches the value of the switch statement, then the statements of default are executed.

Question No: 22 (M a r k s: 10)

Write a program which contains a user defined f takes 3 integer arguments hours, minutes and seconds and returns the number of seconds.

ConvertInSeconds that

Input variables hours , minutes and seconds in main program and call the fun **ConvertInSeconds**and display the number of seconds returned by function.

Hint:

1 hour =60 minutes

1 minute =60 seconds

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**By vuZs Team (Aniqa MALik
Tanzeela Naz)**

shinestar.star86@gmail.com

mc120201969@gmail.com

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Spring 2009 CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one_____

There are mainly----- types of software

- **Two**
- Three
- Four
- Five

Question No: 2 (Marks: 1) - Please choose one_____

In C/C++ the #include is called,

- Header file
- **Preprocessor Directive**
- Statement
- Function

Question No: 3 (Marks: 1) - Please choose one_____

&& is----- operator.

- An arithmetic
- **Logical**
- Relational
- Unary

Question No: 4 (Marks: 1) - Please choose one_____

In flow chart, the symbol used for decision making is,

- Rectangle
- Circle
- Arrow
- **Diamond**

Question No: 5 (Marks: 1) - Please choose one_____

The correct syntax of do-while loop is,

- (condition) while; do { statements; };
- { statements; } do-while ();
- while(condition); do { statements; };
- **do { statements; } while (condition);**

Question No: 6 (Marks: 1) - Please choose one_____

C++ views each file as a sequential stream of_____ .

1

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- **Bytes**
- Bits
- 0's or 1's
- Words

Question No: 7 (Marks: 1) - Please choose one_____

If the elements of an array are already sorted then the useful search algorithm is,

- Linear search
- **Binary search**
- Quick search
- Random search

Question No: 8 (Marks: 1) - Please choose one_____

The address operator (&) can be used with,

- Statement
- Expression
- **Variable**
- Constant

Question No: 9 (Marks: 1) - Please choose one_____

When a pointer is incremented, it actually jumps the number of memory addresses

- **According to data type**
- 1 byte exactly
- 1 bit exactly
- A pointer variable can not be incremented

Question No: 10 (Marks: 1) - Please choose one_____

Each pass through a loop is called a/an

- enumeration
- **iteration**
- culmination
- pass through

Question No: 11 (Marks: 1) - Please choose one_____

Call by reference mechanism should be used in a program when there is

i. large amount of data to be passed

- ii. small amount of data to be passed
- iii. need to change the passed data
- iv. no need to change the passed data

Choose the appropriate option for the above case.

- (i) and (ii) only
- **(i) and (iii) only**
- (ii) and (iii) only

2

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- (ii) and (iv) only

Question No: 12 (Marks: 1) - Please choose one_____

Which of the following is the starting index of an array in C++?

- **0**
- 1
- -1
- any number

Question No: 13 (Marks: 1) - Please choose one_____

The return type of a function that do not return any value must be _____

- int
- **void**
- double
- float

Question No: 14 (Marks: 1) - Please choose one_____

Which of the following is an extension of header file?

- .exe
- .txt
- **.h**
- .c

Question No: 15 (Marks: 1) - Please choose one_____

We want to access array in random order which approach is better?

- **Pointers**
- Array index
- Both pointers and array index are better
- None of the given options.

Question No: 16 (Marks: 1) - Please choose one_____

When we declare a multidimensional array the compiler store the elements of multidimensional array in the form of,

- Columns
- Rows
- **Contiguous memory location**
- Matrix

Question No: 17 (Marks: 1)_____

What is the output of the following program?

```
#include iostream.h
```

```
main ( ) {
```

```
int RollNo;
```

```
int rollno;
```

```
3
```

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```
RollNo = 5;
```

```
rollno = 8;
```

```
cout << "Roll No is " << rollno; }
```

Solution:

Program should not compile due to missing <> from following statement

```
#include iostream.h
```

if we ignore this then output should be

Roll No is 8

Question No: 18 (Marks: 1)_____

Why we include **iostream.h** in our programs?

Solution:

Because standard stream handling function are stored in this file. Before using these

function in our program it is necessary to tell compiler about the location of these functions.

Question No: 19 (Marks: 2)

Find out error in the code given below:

```
if ( num % 2 = 0 )
```

```
cout << "The number is even" << endl;
```

Solution:

if (num % 2 = 0) There should be extra = sign following is right statement

```
if ( num % 2 = =0 )
```

Question No: 20 (Marks: 3)

How learning to design programs is like learning to play soccer?

Solution:

“Learning to design programs is like learning to play soccer. A player must learn to trap a ball, to dribble with a ball, to pass, and to shoot a ball. Once the player knows those basic skills, the next goals are to learn to play a position, to play certain strategies, to choose among feasible strategies, and, on occasion, to create variations of a strategy because none fits. “

Question No: 21 (Marks: 5)

Write the procedure of data insertion in middle of the files by Merge Method practiced in older systems?

Solution:

- Opened the data file and a new empty file.
- Started reading the data file from beginning of it.
- Kept on copying the read data into the new file until the location we want to insert data into is reached.
- Inserted (appended) new data in the new file.
- Skipped or jumped the data in the data file that is to be overwritten or replaced.
- Copied (appended) the remaining part of the file at the end of the new file

4

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Question No: 22 (Marks: 10)

Write a recursive function that takes three arguments (an integer array, starting subscript 's' and ending subscript 'e').

In first recursive call, the function should display the array from subscript 's' (s = 0) to 'e'

(e = size of array). In each successive call, the function should print the array from index

s+1 to e. The function should stop processing and return when starting subscript becomes

equal to ending subscript.

For example, if user enters values for array 2, 3, 4, 5, 6 then the recursive function must

display the following output.

2 3 4 5 6

3 4 5 6

4 5 6

5 6

6

Solution:

```
#include <iostream.h>
void PrintArray(int arrayInput[], int &s, int &e);
main ( )
{ int pause;
int TestArray [6] = {1,2,3,4,5,6};
int StartPoint = 0;
int EndPoint = 5;
PrintArray(TestArray , StartPoint, EndPoint);
cout<<"\n";
PrintArray(TestArray , StartPoint, EndPoint);
cout<<"\n";
PrintArray(TestArray , StartPoint, EndPoint);
cout<<"\n";
PrintArray(TestArray , StartPoint, EndPoint);
cout<<"\n";
PrintArray(TestArray , StartPoint, EndPoint);
cout<<"\n";
PrintArray(TestArray , StartPoint, EndPoint);
cin >> pause;
}
void PrintArray(int arrayInput[], int& s, int& e)
{
for (int i = s; i<= e; i++)
{ cout<< arrayInput[i];
} s=s+1;
}
}
```

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Spring 2009

CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

The function of cin is

- To display message
- **To read data from keyboard**
- To display output on the screen
- To send data to printer

Question No: 2 (Marks: 1) - Please choose one

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

- cplex.h
- **ctype.h**
- stdio.h
- delay.h

Question No: 3 (Marks: 1) - Please choose one

How many parameter(s) function getline() takes?

- 0
- 1
- 2
- 3

Question No: 4 (Marks: 1) - Please choose one

Word processor is

- Operating system
- **Application software**
- Device driver
- Utility software

Question No: 5 (Marks: 1) - Please choose one

For which values of the integer _value will the following code becomes an infinite loop?

```
int number=1;
while (true) {
cout << number;
if (number == 3) break; http://vustudents.ning.com
http://vustudents.ning.com
number += integer_value; }
```

- any number other than 1 or 2
- **only 0**
- only 1
- only 2

6

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Question No: 6 (Marks: 1) - Please choose one

Each pass through a loop is called a/an

- enumeration
- **Iteration**
- culmination
- pass through

Question No: 7 (Marks: 1) - Please choose one

A continue statement causes execution to skip to

- the return 0; statement
- the first statement after the loop
- the statements following the continue statement
- **the next iteration of the loop**

Question No: 8 (Marks: 1) - Please choose one

What is the correct syntax to declare an array of size 10 of int data type?

- int [10] name ;
- name[10] int ;
- **int name[10] ;**
- int name[] ;

Question No: 9 (Marks: 1) - Please choose one

Consider the following code segment. What will the following code segment display?

```
int main(){  
int age[10] = {0};  
cout << age ;  
}
```

- Values of all elements of array
- Value of first element of array
- **Starting address of array**
- Address of last array element

Question No: 10 (Marks: 1) - Please choose one

What will be the correct syntax to initialize all elements of two-dimensional array to value 0?

- int arr[2][3] = {0,0} ;
- **int arr[2][3] = {{0},{0}} ;**

- `int arr[2][3] = {0},{0} ; http://vustudents.ning.com`
- `int arr[2][3] = {0} ;`

Question No: 11 (Marks: 1) - Please choose one

How many bytes will the pointer *intPtr* of type **int** move in the following statement?

intPtr += 3 ;

- 3 bytes
- 6 bytes
- **12 bytes**
- 24 bytes

Question No: 12 (Marks: 1) - Please choose one

7

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If there are $2^{(n+1)}$ elements in an array then what would be the number of iterations

required to search a number using binary search algorithm?

- n elements
- (n+1) elements
- $2^{(n+1)}$ elements
- $2^{(n+1)}$ elements

Question No: 13 (Marks: 1) - Please choose one

Which of the following operator is used to access the value of variable pointed to by a pointer?

- *** operator**
- -> operator
- && operator
- & operator

Question No: 14 (Marks: 1) - Please choose one

The _____ statement interrupts the flow of control.

- switch
- continue
- goto
- **break**

Question No: 15 (Marks: 1) - Please choose one

Analysis is the ----- step in designing a program

- Last
- Middle
- Post Design
- **First**

Question No: 16 (Marks: 1) - Please choose one

Paying attention to detail in designing a program is _____

- Time consuming
- Redundant
- **Necessary**
- Somewhat Good

Question No: 17 (Marks: 1)

Which programming tool is helpful in tracing the logical errors?

Solution:

Debugger is used to debug the program.

Question No: 18 (Marks: 1)

Give the syntax of opening file 'myFile.txt' with 'app' mode using ofstream variable

'out'.

Solution:

```
out.open("myfile.txt", ios::app);
```

Question No: 19 (Marks: 2)

What is the difference between **switch** statement and **if** statement.

Solution:

8

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The if statement is used to select among two alternatives. It uses a boolean expression to

decide which alternative should be executed. The switch statement is used to select

among multiple alternatives. It uses an int expression to determine which alternative

should be executed.

Question No: 20 (Marks: 3)

Identify the errors in the following code segment and give the reason of errors.

```
main(){  
int x = 10  
const int *ptr = &x ;
```

```
*ptr = 5 ;  
}
```

Solution:

Error: *ptr = 5;

Reason: declaring a pointer to a constant Integer. You cannot use this pointer to change

the value being pointed to:

Question No: 21 (Marks: 5)

If int array[10]; is an integer array then write the statements which will store values at

Fifth and Ninth location of this array,

Solution:

```
array[4] = 200;
```

```
array[8] = 300;
```

Question No: 22 (Marks: 10)

Write a function BatsmanAvg which calculate the average of a player (Batsman), Call

this function in main program (Function). Take the input of Total Runs made and Total

number of matches played from the user in main function

Solution:

```
#include <iostream.h> // allows program to output data to the screen
```

```
// function main begins program execution
```

```
int BatsmanAvg(int TotalRuns, int TotalMatches) ;
```

```
main()
```

```
{ int stopit;
```

```
int TotalRuns, TotalMatchesPlayed =0;
```

```
cout << "Please Entere the total Runs made : " ;
```

```
cin>> TotalRuns ;
```

```
cout << "Please Entere the total match played : " ;
```

```
cin>> TotalMatchesPlayed ;
```

```
cout << "\n Avg Runs = " << BatsmanAvg(TotalRuns,TotalMatchesPlayed);
```

```
cin>> stopit; //pause screen to show output
```

```
} int BatsmanAvg(int TotalRuns, int TotalMatches)
```

```
{
```

```
return TotalRuns/TotalMatches;
```

```
}
```

```
9
```

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MIDTERM EXAMINATION

Spring 2009

CS201- Introduction to Programming

Ref No: 440120

Time: 60 min

Marks: 38

Question No: 1 (Marks: 1) - Please choose one

The function of cin is

- ▶ To display message
- ▶ To read data from keyboard
- ▶ To display output on the screen
- ▶ To send data to printer

Question No: 2 (Marks: 1) - Please choose one

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

- ▶ cplex.h
- ▶ ctype.h
- ▶ stdio.h
- ▶ delay.h

Question No: 3 (Marks: 1) - Please choose one

How many parameter(s) function getline() takes?

10

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- ▶ 0
- ▶ 1
- ▶ 2
- ▶ 3

Question No: 4 (Marks: 1) - Please choose one

Word processor is

- ▶ Operating system
- ▶ Application software
- ▶ Device driver
- ▶ Utility software

Question No: 5 (Marks: 1) - Please choose one

For which values of the integer _value will the following code becomes an infinite loop?

```
int number=1;
while (true) {
    cout << number;
    if (number == 3) break;
    number += integer_value; }
▶ any number other than 1 or 2
▶ only 0
▶ only 1
```

11

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- ▶ only 2

Question No: 6 (Marks: 1) - Please choose one

Each pass through a loop is called a/an

- ▶ enumeration
- ▶ Iteration
- ▶ culmination
- ▶ pass through

Question No: 7 (Marks: 1) - Please choose one

A continue statement causes execution to skip to

- ▶ the return 0; statement
- ▶ the first statement after the loop
- ▶ the statements following the continue statement
- ▶ the next iteration of the loop

Question No: 8 (Marks: 1) - Please choose one

What is the correct syntax to declare an array of size 10 of int data type?

- ▶ int [10] name ;
- ▶ name[10] int ;

12

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- ▶ int name[10] ;
- ▶ int name[] ;

Question No: 9 (Marks: 1) - Please choose one

Consider the following code segment. What will the following code segment display?

```
int main(){  
int age[10] = {0};  
cout << age ;  
}
```

- ▶ Values of all elements of array
- ▶ Value of first element of array
- ▶ Starting address of array
- ▶ Address of last array element

Question No: 10 (Marks: 1) - Please choose one

What will be the correct syntax to initialize all elements of two-dimensional array to

value 0?

- ▶ int arr[2][3] = {0,0} ;
- ▶ int arr[2][3] = {{0},{0}} ;
- ▶ int arr[2][3] = {0},{0} ;

13

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► `int arr[2][3] = {0} ;`

Question No: 11 (Marks: 1) - Please choose one

How many bytes will the pointer *intPtr* of type `int` move in the following statement?

`intPtr += 3 ;`

- 3 bytes
- 6 bytes
- 12 bytes
- 24 bytes

Question No: 12 (Marks: 1) - Please choose one

If there are $2^{(n+1)}$ elements in an array then what would be the number of iterations required to search a number using binary search algorithm?

- n elements
- (n+1) elements
- $2^{(n+1)}$ elements
- $2^{(n+1)}$ elements

Question No: 13 (Marks: 1) - Please choose one

14

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Which of the following operator is used to access the value of variable pointed to by a pointer?

- * operator
- -> operator
- && operator
- & operator

Question No: 14 (Marks: 1) - Please choose one

The _____ statement interrupts the flow of control.

- switch
- continue
- goto
- break

Question No: 15 (Marks: 1) - Please choose one

Analysis is the ----- step in designing a program

- Last
- Middle
- Post Design
- First

15

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Question No: 16 (Marks: 1) - Please choose one

Paying attention to detail in designing a program is _____

- Time consuming

- ▶ Redundant
- ▶ Necessary
- ▶ Somewhat Good

Question No: 17 (Marks: 1)

Which programming tool is helpful in tracing the logical errors?

Question No: 18 (Marks: 1)

Give the syntax of opening file 'myFile.txt' with 'app' mode using ofstream variable

'out'.

Question No: 19 (Marks: 2)

What is the difference between **switch** statement and **if** statement.

Question No: 20 (Marks: 3)

Identify the errors in the following code segment and give the reason of errors.

```
main(){  
int x = 10  
16
```

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```
const int *ptr = &x ;  
*ptr = 5 ;  
}
```

Question No: 21 (Marks: 5)

If int array[10]; is an integer array then write the statements which will store values at

Fifth and Ninth location of this array,

Question No: 22 (Marks: 10)

Write a function BatsmanAvg which calculate the average of a player (Batsman), Call this function in main program (Function). Take the input of Total Runs made and Total number of matches played from the user in main function

MIDTERM EXAMINATION

Spring 2009

CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

A precise sequence of steps to solve a problem is called

- Statement
- **Program**
- Utility
- Routine

Question No: 2 (Marks: 1) - Please choose one

The Compiler of C language is written in

- Java Language
- UNIX
- FORTRON Language
- **C Language**

Question No: 3 (Marks: 1) - Please choose one

24

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Initialization of variable at the time of definition is,

- Must
- Necessary
- **Good Programming**
- None of the given options

Question No: 4 (Marks: 1) - Please choose one

In if structure the block of statements is executed only,

- When the condition is false
- When it contain arithmetic operators
- When it contain logical operators
- **When the condition is true**

Question No: 5 (Marks: 1) - Please choose one

Which of the following function(s) is/are included in **stdlib.h** header file?

- double atof(const char *nptr)
- int atoi(const char *nptr)
- char *strcpy (char *s1, const char *s2)
- **1 and 2 only**

Question No: 6 (Marks: 1) - Please choose one

Dealing with structures and functions passing by reference is the most economical method

- **True**
- False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

- Data
- **Memory Address**

- Data Type
- Values

Question No: 8 (Marks: 1) - Please choose one

Preprocessor program perform its function before _____ phase takes place.

- Editing
- Linking
- **Compiling**
- Loading

Question No: 9 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

- area
- area

25

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- 10area
- area2

Question No: 10 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known?

- for
- **while**
- do-while
- all looping processes require that the iterations be known

Question No: 11 (Marks: 1) - Please choose one

Which character is inserted at the end of string to indicate the end of string?

- new line
- tab
- **null**
- carriage return

Question No: 12 (Marks: 1) - Please choose one

How many bytes are occupied by declaring following array of characters?

char str[] = "programming";

- 10
- 11

- **12**

- 13

11 plus one for null char (11+1= 12)

Question No: 13 (Marks: 1) - Please choose one

Which of the following header file defines the **rand()** function?

- iostream.h
- conio.h
- **stdlib.h**
- stdio.h

Question No: 14 (Marks: 1) - Please choose one

Commenting the code _____

- **Makes a program easy to understand for others.**
- Make programs heavy, i.e. more space is needed for executable.
- Makes it difficult to compile
- All of the given options.

Question No: 15 (Marks: 1) - Please choose one

What's wrong with this for loop?

for (int k = 2, k <=12, k++)

- the increment should always be ++k

26

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- the variable must always be the letter i when using a for loop
- there should be a semicolon at the end of the statement
- **the commas should be semicolons**

Question No: 16 (Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array?

- int
- double
- float
- **char**

Question No: 17 (Marks: 1)

To Which category of the software "Compiler and Interpreter" belongs?

Solution:

They belong to system software.

Question No: 18 (Marks: 1)

What is the result of the expression $x = 2 + 3 * 4 - 4 / 2$

Solution:

12

Question No: 19 (Marks: 2)

Write a declaration statement for an array of 10 elements of type float. Include an initialization statement of the first four elements to 1.0, 2.0, 3.0 and 4.0.

Solution:

```
float tmp [10] = {1.0,2.0,3.0,4.0};
```

Question No: 20 (Marks: 3)

Write down the output of the following code?

```
int array[7], sum = 0;
for(int i=0;i<7;i++)
{ array[i] =
i;
sum+= array[i];
} cout<< "
Sum =
"
```

```
<<sum;
```

Solution:

21

Question No: 21 what will be the output of the following segment of C++ code?

27

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```
int A[5] = {1 , 2, 3, 4};
int i;
for (i=0; i<5; i++)
{
A[i] = 2*A[i];
cout << A[i] << " ";
}
}
```

Solution:

2 4 6 8 0

Question No: 22 (Marks: 10)

Write a C++ program that will determine if a departmental store customer has exceeded

the credit limit on a charge account.

Program should input the following facts in five variables

1. Account number

2. Balance at the beginning of month (Beginning balance)
3. total of all items charged by customer this month (charges)
4. total of all credits (credits)
5. allowed credit limit

Calculate the new balance

New balance = Beginning balance + charges – credits

Determine if **new balance** exceeds the **allowed credit limit** . For those customers

whose credit limit is exceeded. The program should display the message “Credit Limit

exceeded.”

28

CS201 SOLVED QUIZ NO 1 2014

Question # 1 of 10 Total Marks: 1

< and > both are _____ operators.

Arithmetic

Relational

Logical = Correct Choice

Mathematical

Question # 2 of 10 Total Marks: 1

Find out the logical error in following lines of code. If (x = 10) cout “x is 10”;

10 should be enclosed in quotations

There is no semicolon at the end of if condition

Assignment operator should not be used for Comparison = Correct Choice

Variable x should not be inside parenthesis

Question # 3 of 10 Total Marks: 1

What will be the result of the expression j = i++; if initially j = 0 and i = 5?

0

5 = Correct Choice

6

4

Question # 4 of 10 Total Marks: 1

Default mechanism of calling a function by passing it array is call by _____ and in case of passing variable is call by _____.

Reference, Reference

Reference,value = Correct Choice

Value, Reference

Value, Value

Question # 5 of 10 Total Marks: 1

When the break statement is encountered in a loop's body, it transfers the control _____ from the current loop.

Inside

Outside = Correct Choice

To break statement

To continue statement

Question # 6 of 10 Total Marks: 1

_____ statement is used to terminate the processing of a particular case and exit from switch structure.

If

Goto

Break = Correct Choice

Continue

Question # 7 of 10 Total Marks: 1

When the if statement consists of more than one statement then enclosing these statement in braces is _____.

Compulsory = Correct Choice

Optional

Not required

Relevant

Question # 8 of 10 Total Marks: 1

What will be the value of the variable output in the given piece of code? double
output = 0; output = (2 + 2) * 4 + 2 / (4 - 2);

15

17 = Correct Choice

12

1

Question # 9 of 10 Total Marks: 1

If we assign 2.06721 to an integer variable x, what will be the output if we print x using cout statement?

2 = Correct Choice

2.1

2.06

2.07

Question # 10 of 10 Total Marks: 1

_____ will be used for clarity and to force the order of evaluation in an expression.

" "

()PG32

' '

[] = Correct Choice

CS201: Introduction to Programming.

Quiz No. 1

24 November 2014.

1) Return type of a function that does not return any value must be _____.

Select correct option:

char

int

void

double

2) A function's prototype is written _____ the function call.

Select correct option:

After

Before

With

At the end of

3) What will be the size of the following character array? char name[] = "Adeel";

Select correct option:

5

6

4

7

4) In switch statement there can be _____ default statements. Select correct option:

1

2

3

4

5) _____ will be used for enclosing function statements into a block. Select correct option:

" "

()

[]

{
}

6) From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?

Select correct option:

arr[10] = {0.0};

double arr[10]= 0.0;

double arr[10] = {0.0};

double arr[] = 0.0;

7) Which of the function call is call by value for the following function prototype? float add(int);

Select correct option:

add(
&x);

```
add(  
x);  
add(  
int  
x);  
add(  
*x);
```

Question # 10 of 10 (Start time: 05:33:54 PM) Total Marks: 1

Default mechanism of calling a function by passing it array is call by _____ and in case of passing variable is call by _____

Reference, Reference

Reference, value *

Value, Reference

Value, Value

10) Which of the following function call is “call by reference” for the following function prototype? int add (int *)

```
add(  
&x);  
add(i  
nt x);  
add(x  
);  
add(*  
x); *
```

11) The string in the array is terminated by a _____

0

n

i

l

n

u

i

i

o
n

12) will be used for enclosing function statements into a block. ""

(
)
[
]

{}*

13) Default mechanism of calling a function by passing it array is call by _____ and in case of passing variable is call by _____

Reference, Reference

Reference, value*

Value, Reference

Value, Value

14) What is the output of the following code, if the first case is true switch (var) { case 'a': cout<<"apple"<<endl; case 'b': cout<<"banana"<<endl; case 'm': cout<<"mango"<<endl; default: cout<<"any fruit"<<endl; } apple

apple

anyfruit

apple banana

mango*

none of

above

15) Null character is represented by _____ in C++.

/0

\0*

\n

\t

16) The string in the array is terminated by a _____ zero

n
i

l
n
u
i
l
o
n
e

17) We can define a matrix as _____ array.

Sorted

Unsorted

Single dimensional

Multi dimensional *

18) _____ character is used to indicate the end of the string. string

New line *

Blank

space

Null

19) In call by reference, _____ of a variable is passed to the called function.

N

a

m

e

D

a

t

a

t

y

p

e

*

Value

Address

20) A function's prototype is written _____ the function call.

After

Before *

21) Characters of a string stored in an array can be accessed directly using array

_____.

Manipulation *

Superscript

Postscript

Subscript

22) Null character is used to indicate the _____ of string.

start

end *

begin

middle

23) If an array has 50 elements, what is allowable range of subscripts?

0 – 49 *

1 – 49

0

–

5

0

1

–

5

0

25) Return type of a function that does not return any value must be

_____.

char

int

void *

26) What is the output of the following code if the 3rd case is true switch
(var) { case 'a': cout<<"apple"<<endl; case 'b': cout<<"banana"<<endl; case 'm':
cout<<"mango"<<endl; default: cout<<"any fruit"<<endl; }

mango *

mango any fruit

apple

1. What is the correct syntax to declare an array of 15 elements of type float?
2. From the following; which one is the range of Random number generator function rand()? **(0 and 32767) Ans**
3. When No. of repetition is known then we use the _____ structure to perform repetition tasks **(while loop) Ans**
4. Loops are _____ Structure **(Repetition)Ans**
5. When the break statement is encountered in a loop's body, it transfers the control _____ from the current loop.
(When a break statement is encountered in a loop, the loop terminates immediately. The control exits the inner most loop if there are nested loop) ans
6. By default, the starting index of an array in C++ is _____ **(zero)Ans** (starting point is zero and ending point is less than one)
7. A while loop may execute _____ or more times.**(Zero)Ans**
8. In C/C++, by default arguments are passed by _____ to a function (value) I think value but not confirmed
9. If we pass more than one arguments to a function then they are separated by _____.
Comma ,
- 10: Which of the following function call is "call by reference" for the following function prototype? int add (int *); **add(*x);**
- 11: _____ statement is used to terminate the processing of a particular case and exit from switch structure. **if**

12: What is the output of the following code if the 3rd case is true switch (var) {
case 'a': cout<<"apple"<<endl; case 'b': cout<<"banana"<<endl; case 'm': cout<<"mango"<<endl;
default: cout<<"any fruit"<<endl; } **mango**

any fruit

13: How many times the following do-while loop will execute? int k = 10; do {
cout <<"Statements" <<endl; k -= 2; } while(k>0);

14: Using a segment of source code again by adding new functionalities
with slight or no modification is termed as _____. **Code modification**

15: While loop becomes infinite in which scenario
_____. **When the condition is always False**

16: _____ are used to compile the
code. **compiler**

17: In do while loop the condition is checked _____ one execution
of loop. **after**

18: Which of the following will be the most appropriate data type to store the value
63.547?

Float

19: The result of 4%3 will be

20: It is the job of _____ to transfer the executable code from hard disk to main
memory.
Loader

21: Compiler translates high level language program into _____ language
code **Machine**

22: In call by reference, _____ of a variable is passed to the called function.
address

23: What will be the output of the following while loop? int counter = 0 ; while(counter < 15)
cout <<counter <<" "; counter++;
Compile time error

24: _____ Loop executes atleast one
times. **do while**

- 25: In which language the compiler of C language is written? **C**
- 26 : According to c++ norms; the first character of a variable name must be an alphabet or **Special character**

CS201 - INTRODUCTION TO PROGRAMMING SOLVED QUIZ NO 1 -2012

Question # 1 of 10 (Start time: 06:31:50 PM) Total Marks: 1

if (a>b && a>c) then the condition will be true only if

Both a>b and a>c are true

a>b is false and a>c is true

a>b is true and a>c is false

Both a>b and a>c are false

Question # 2 of 10 (Start time: 06:32:48 PM) Total Marks: 1

In while loop the loop counter must be initialized,

With in the loop

Before entering the loop

At the end of the loop

None of the given options

Question # 3 of 10 (Start time: 06:33:15 PM) Total Marks: 1

_____ of a variable means the locations within a program from where it can be accessed.

Data type

Visibility

Value

Reference

Question # 4 of 10 (Start time: 06:33:49 PM) Total Marks: 1

Switch support _____ data.

Integer

Character

Float

Both integer and character

Question # 5 of 10 (Start time: 06:34:31 PM) Total Marks: 1

A function is a block of statements that can be defined once and used _____ in the program.

One time

Two times

Three times

As many times as user wants

Question # 6 of 10 (Start time: 06:35:13 PM) Total Marks: 1

_____ statement is used to terminate the processing of a particular case and exit from switch structure.

- if
- goto
- break
- continue

Question # 7 of 10 (Start time: 06:35:32 PM) Total Marks: 1

The most suitable data type for number 325.25 is _____.

- char
- int
- short
- float

Question # 8 of 10 (Start time: 06:35:51 PM) Total Marks: 1

X is an integer variable; what does X++ means,

Add 1 two times in X value

Add 1 in X value

Add 2 in X value

None of these

Question # 9 of 10 (Start time: 06:36:12 PM) Total Marks: 1

The operators ++ and -- are used to increment or decrement the value of a variable by _____

- 1
- 2
- 3
- 4

Question # 10 of 10 (Start time: 06:36:34 PM) Total Marks: 1

Which of the following loops checks the test condition at the end of the loop?

- While
- Do-While
- For
- Nested Loop

CS201 LATEST QUIZ no 1...100% correct SOLVED

2013

1) In the case of pointer to pointer or _____, the first pointer contains the address of the second pointer, which contains the address of the variable, which contains the desired value.

double dereference

DOUBLE DEREFERENCE

Single dereference

Dereference

None of the given

2) Transpose of a matrix means that when we interchange rows and columns_____

☐ the first row becomes the Last column

☒ the first row becomes the first column

CORRECT...(II)

☐ the Last row becomes the first column

☐ the first column becomes the first row

3)_____ Returns true if c is a digit or a letter and false otherwise.

☐ int isalpha(int c)

☐ int isalnum(int c)

CORRECT... (II)

☐ int isxdigit(int c)

☒ int isdigit(int c)

4)Whenever some number is added in an array name, it will jump as many _____ as the added number.

☐ rows

value

CORRECT... (II)

column

None of the given

5) At the _____, we try to break up the problem into functional units

analysis phase

design phase

CORRECT... (II)

Implementation phase

☐ None of the given

6) _____ are conventional names of the command line parameters of the 'main()' function.

☐ 'argv' and 'argc'

☒ 'argc' and 'argv'

CORRECT...(II)

☐ 'argc' and 'argu'

☐ None of the given

7) Pointers store the _____

☐ value of a variable

☒ memory address

CORRECT..(II)

☐ characters

☐ None of the given

8) Pointers work by pointing to a particular_____

☐ Value

☐ variable

☐ data type

CORRECT...(III)

☐ None of the given

9) The statement cout << yptr will show the _____the yptr points to.

☐ Value

CORRECT..(II)



```
int isalpha(int c)
```

CORRECT... (I)

Question No: 1 (Marks: 1) - Please choose one

What does STL stand for?

- ▶Source template library
- ▶**Standard template library**
- ▶Stream template library
- ▶Standard temporary library

Question No: 2 (Marks: 1) - Please choose one

Skill(s) that is/are needed by programmers _____.

- ▶Paying attention to detail
- ▶Think about the reusability
- ▶Think about user interface
- ▶**All of the given options**

Question No: 3 (Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array?

- ▶int
- ▶double
- ▶float
- ▶**char**

Question No: 4 (Marks: 1) - Please choose one

new and delete are _____ whereas malloc and free are _____.

- ▶Functions, operators
- ▶Classes, operators
- ▶**Operators, functions**
- ▶Operators, classes

Question No: 5 (Marks: 1) - Please choose one

Friend functions are _____ of a class.

- ▶Member functions
- ▶Public member functions
- ▶Private member functions
- ▶Non-member functions

Question No: 6 (Marks: 1) - Please choose one

The prototype of friend functions must be written ____ the class and its definition must be written ____

- ▶inside, inside the class
- ▶inside, outside the class
- ▶outside, inside the class
- ▶outside, outside the class

Question No: 7 (Marks: 1) - Please choose one

If overloaded plus operator is implemented as non-member function then which of the following statement will be true for the statement given below?

obj3 = obj1 + obj2 ;

- ▶obj2 will be passed as an argument to + operator whereas obj1 will drive the + operator
- ▶obj1 will drive the + operator whereas obj2 will be passed as an argument to + operator
- ▶Both objects (obj1, obj2) will be passed as arguments to the + operator
- ▶Any of the objects (obj1, obj2) can drive the + operator

Question No: 8 (Marks: 1) - Please choose one

Which one of the following is the declaration of overloaded pre-increment operator implemented as member function?

- ▶Class-name operator +() ;
- ▶Class-name operator +(int) ;
- ▶Class-name operator ++() ;
- ▶Class-name operator ++(int) ;

Question No: 9 (Marks: 1) - Please choose one

For cin, the source is normally a _____ and destination can be _____.

- ▶File, native data type
- ▶Disk, user-define type
- ▶**Keyboard, variable**
- ▶File, user-define type

Question No: 10 (Marks: 1) - Please choose one

We can also do conditional compilation with preprocessor directives.

- ▶**True**
- ▶False

Question No: 1 (Marks: 1) - Please choose one

The programs, in which we allocate static memory, run essentially on _____

- ▶Heap
- ▶System Cache
- ▶None of the given options
- ▶**Stack**

Question No: 2 (Marks: 1) - Please choose one

The default value of a parameter can be provided inside the _____

- ▶function prototype
- ▶**function definition**
- ▶both function prototype or function definition
- ▶none of the given options.

Question No: 3 (Marks: 1) - Please choose one

While calling function, the arguments are assigned to the parameters from _____.

- ▶left to right.
- ▶right to left
- ▶**no specific order is followed**
- ▶none of the given options.

Question No: 4 (Marks: 1) - Please choose one

When an operator function is defined as member function for a binary Plus (+) operator then

the number of argument it take is/are.

- ▶Zero
- ▶One
- ▶Two
- ▶N arguments

Question No: 5 (Marks: 1) - Please choose one

With user-defined data type variables (Objects), self assignment can produce _____.

- ▶Syntax error
- ▶Logical error
- ▶Link error
- ▶Non of the given options

Question No: 6 (Marks: 1) - Please choose one

Assignment operator is used to initialize a newly declared object from existing object.

- ▶True
- ▶False

Question No: 7 (Marks: 1) - Please choose one

When an object of a class is defined inside an other class then,

- ▶Constructor of enclosing class will be called first
- ▶Constructor of inner object will be called first
- ▶Constructor and Destructor will be called simultaneously
- ▶None of the given options

Question No: 8 (Marks: 1) - Please choose one

In the member initializer list, the data members are initialized,

- ▶From left to right
- ▶From right to left
- ▶In the order in which they are defined within class
- ▶None of the given options

Question No: 9 (Marks: 1) - Please choose one

new operator allocates memory from free store and return _____.

►A pointer

►A reference

►An integer

►A float

Question No: 10 (Marks: 1) - Please choose one

"new" and "delete" keywords are _____ in C++ language.

►Built-in- Function

►Operators

►Memory Allocation Function

►None of the given options

CS201 online solved Quiz no2 2013

Question # 1:-

Care must be taken about the correct _____ of operator while overloading. (Choose the most appropriate).

1. Semantic
2. Complexity
3. Both Semantic and Complexity
4. None of the given options

Question # 2:-

In functions, that returns reference use _____.

1. global or local variables
2. global or static variables
3. ordinary variables

Question # 3:-

In overloading the assignment (=) operator, which object(s) will call the operator function?

1. Left object of the assignment operator
2. Right object of the assignment operator
3. Both objects will call the operator function
4. No object will call the operator function

Question # 4:-

Friend functions are _____.

1. Unidirectional (not confirm)
2. bidirectional
3. like inline functions
4. private

Question # 5:-

We cannot increment _____.

1. pointers
2. arrays
3. references
4. Variables

Question # 6:-

A pointer is _____.

1. the address of a variable
2. an indication of the variable to be accessed next.
3. the data type of an address variable

Question # 7:-

Overloaded assignment operator must be

1. Member function of class
2. Non-member function of class (not confirm)
3. Friend function of class
4. Global function

Question # 8:-

The concept of friend function negates the concept of

_____.

1. inheritance
2. polymorphism
3. persistence
4. encapsulation

Question # 9:-

If class A is a friend of class B, and class B is a friend of class C. If class A wants class C to be a friend, _____

1. it has to declare, class C as a friend
2. it has to declare, class B as a friend
3. it has to declare , class A as a friend
4. it has to declare, class B and class A as friend classes

Question # 10:-

The difference between pointers and references is that

_____.

1. we cannot do arithmetic with pointers
2. we can do arithmetic with pointers
3. we cannot reassign pointers

4. we can assign references

Question # 11:-

A reference cannot be _____.

1. 1
2. zero
3. NULL
1. 4 integer

Question # 12:-

An address is a _____, while a pointer is a _____.

1. constant , variable
2. variable , constant
3. global , variable
4. non static variable , constant

Question # 13:-

The reference data types are used as _____ variables without any _____ operator

1. ordinary , deference
2. global , dot
3. static , deference
4. local , &

Question # 14:-

The syntax of declaration of a function that returns the reference to an integer is _____.

1. int & myfunc() ;
2. int myfunc();
3. int myfunc() &;
4. integer & myfunc();

Question # 15:-

References cannot be uninitialized. Because it is impossible to

1. reinitialize a pointer
 2. reinitialize a reference
 3. initialize a NULL pointer
- cast a pointer

- 1 - Application Softwares are use to
1. Type letters
 2. Control computer hardware
 3. Solve end user problems = Correct Choice
 4. Develop Graphics

- 2 - Computer can do,
1. More than what we tell it

- 2. Less than what we tell it
- 3. Like human being
- 4. Exactly what we tell it = Correct Choice

3 - we can control our program while it is running by using

- 1. Debugger = Correct Choice
- 2. Linker
- 3. Loader
- 4. Editor

4 - _____ are part of system software

- 1. Linker and loaders = Correct Choice
- 2. Operating System and Linker
- 3. Drivers
- 4. None of the Given

5 - The remainder (%) operator is,

- 1. An arithmetic operator = Correct Choice
- 2. A logical operator
- 3. A relational operator
- 4. A division operator

6 - `int x = 2 * 3 + 4 * 5;` What value will x contain in the sample code above?

- 1. 22
- 2. 26 = Correct Choice
- 3. 46
- 4. 50

7 - What is the correct value to return to the operating system upon the successful completion of a program?

- 1. -1
- 2. 1
- 3. 0 = Correct Choice
- 4. Programs do not return a value.

8 - What is the only function all C++ programs must contain?

- 1. start()
- 2. system()
- 3. main() = Correct Choice
- 4. program()

9 - What punctuation is used to signal the beginning and end of code blocks?

- 1. { } = Correct Choice
- 2. - > and < -

- 3. BEGIN and END
- 4. (and)

10 - What punctuation ends most lines of C++ code?

- 1. (dot)
- 2. (semi-colon) = Correct Choice
- 3. (colon)
- 4. (single quote)

CS201 Quiz No 2 | Date : May 29, 2014 : Time: 11:00 AM

1. Base address is the memory address of _____ element of an array.

1st element (Not Sure)

- 2ad element
- 3rd element
- none of above

2. In _____, we try to have a precise problem statement

Analysis

- Desing
- Coding
- None of the given

3. Each array declaration must provide the information about all these things except

- Name of the array
- Type of data stored in the array
- The location of the first element to be stored
- Number of elements of the array

4. Pointers work by pointing to a particular _____

- value
- variable
- data type**
- None of the given

5. are conventional names of the command line parameters of the 'main()' function.

- 'argb' and 'argv'
- 'argc' and 'argv'**
- 'argc' and 'argu'
- None of above

6.Which header file must be included to use the functions tolower() and toupper()?

iostream.h

conio.h

ctype.h (Not Sure)

7. The statement `cout << yptr` will show the _____ the `yptr` points to.

Value

memory address

8. In Analysis, we try to have a _____

Determined the inputs

Break of problem

Precise problem statement

None of the given

9. Pointers are a special type of _____ in which a memory address is stored

Variable

10. _____ Returns true if `c` is a digit and false otherwise.

`int isalpha( int c )`

`int isalnum( int c )`

`int isxdigit( int c )`

`int isdigit( int c )`

CS201 Introduction To Programming Solved MCQs from Quiz 2 November 30, 2013

Functions declared with the _____ specifier in a class member list are called friend functions of that class.

protected

private

public

friend

Functions declared with the `friend` specifier in a class member list are called *friend functions* of that class. Classes declared with the `friend` specifier in the member list of another class are called *friend classes* of that class.

Public or private keywords can be _____

written only for once in the class or structure declaration

written multiple times in the class or structure declaration

written only twice in the class declaration

written outside the class

good practice is to write **public** or **private** keywords only once in the class or structure declaration, though there is no syntactical or logical problem in writing them multiple times.

The friend keyword provides access _____.
in one direction only

in two directions

to all classes

to the data members of the friend class only

The *friend* keyword provides access in one direction only. This means that while *OtherClass* is a friend of *ClassOne*, the reverse is not true.

References cannot be uninitialized. Because it is impossible to _____.

reinitialize a pointer

reinitialize a reference

initialize a NULL pointer

cast a pointer

References cannot be uninitialized. Because it is impossible to reinitialize a reference,

new operator can be used for _____.

only integer data type

only char and integer data types

integer , float, char and double data types

dot operator

Similarly, new operator can be used for other data types like char, float and double etc.

The destructor is used to _____.

allocate memory

deallocate memory

create objects

allocate static memory

Reference is not really an address it is _____.
a synonym

an antonym

a value

a number

Difference Between References and Pointers

The reference in a way keeps the address of the data entity. But it is not really an address it is a synonym,

If we want to allocate memory to an array of 5 integers dynamically, the syntax will be _____.

int *iptr ; iptr = new int[5] ;

integer iptr** ; iptr= new int[5]

```
int iptr ; iptr= int [5]  
iptr= new[5]
```

Memory allocated from heap or free store _____.

can be returned back to the system automatically

can be allocated to classes only

cannot be returned back unless freed explicitly using malloc and realloc

cannot be returned back unless freed explicitly using free and delete operators

The memory allocated from **free store** or **heap** is a system resource and is not returned back to the system unless explicitly freed using **delete** or **free** operators.

Operator overloading is to allow the same operator to be bound to more than one

implementation, depending on the types of the _____.

Compilers

Operands

Function names

Applications

Operator overloading is to allow the same operator to be bound to more than one implementation, depending on the types of the operands.

The operator to free the allocated memory using new operator is

_____.

free

del

delete

remove

The operator to free the allocated memory using new operator is delete. So whenever, we use new to allocate memory, it will be necessary to make use of 'delete' to deallocate the allocated memory

My CS201 Solved Quiz No.2. 2013

Question # 1 of 10 (Start time: 02:17:54 PM) Total Marks: 1

By default, the starting index of an array in C++ is _____.

Select correct option:

2

-1

0

1

Question # 2 of 10 (Start time: 02:19:01 PM)

Total Marks: 1

We can define a matrix as_____ array.

Select correct option:

Sorted

Unsorted

Single dimensional

Multi dimensional

Question # 3 of 10 (Start time: 02:19:52 PM)

Total Marks: 1

We can access a global variable _____

Select correct option:

From the functions only

From the loops only

From the main() function only

From anywhere in the program

Question # 4 of 10 (Start time: 02:21:00 PM)

Total Marks: 1

A function's prototype is written _____the function call.

Select correct option:

After

Before

With

At the end of

Question # 5 of 10 (Start time: 02:22:23 PM)

Total Marks: 1

Which of the function call is call by value for the following function prototype? float add(int);

Select correct option:

add(&x);

add(x);

add(int x);

add(*x);

Question # 6 of 10 (Start time: 02:23:22 PM)

Total Marks: 1

+= , *= , /= , etc are called,

Select correct option:

Assignment operators

Logical operator

Compound assignment operator

Unary operator

Question # 7 of 10 (Start time: 02:24:02 PM) Total Marks: 1

What is the output of the following code if the 2nd case is true switch (var) { case 'a': cout<<"apple"<<endl; case 'b': cout<<"banana"<<endl; case 'm': cout<<"mango"<<endl; default: cout<<"any fruit"<<endl; }

Select correct option:

banana

banana any fruit

banana mango anyfruit

none of the above

Question # 8 of 10 (Start time: 02:25:00 PM) Total Marks: 1

In C/C++, by default arguments are passed by _____ to a function.

Select correct option:

Reference

Value

Size

Data

Question # 9 of 10 (Start time: 02:25:19 PM) Total Marks: 1

What will be the value of 'a' and 'b' after executing the following statements? int a = 9; int b = a++; cout<<p>

Select correct option:

10,9

9,10

9,9

10,10

Question # 10 of 10 (Start time: 02:26:43 PM) Total Marks: 1

What is the output of the following code if the 3rd case is true switch (var) { case 'a': cout<<"apple"<<endl; case 'b': cout<<"banana"<<endl; case 'm': cout<<"mango"<<endl; default: cout<<"any fruit"<<endl; }

Select correct option:

mango

mango any fruit
apple
none of the above

CS201 Quiz No 2 December 3, 2013

_____ operator is used to pass the address of a variable in call by reference method.

&

In C++, what will be the highest index of the following array? `int array[15];`

15

For breaking complex problems into smaller pieces we use _____.

Functions

Function prototype is written,

Before the return statement in main

When we call a function, its control

The compiler stops execution of whole program

`+=` , `*=` , `/=` , etc are called,

Compound assignment operator

What will be the result of the expression `k = ++m;` if initially `k = 0` and `m = 5`?

0

By default, the starting index of an array in C++ is _____.

0

What will be the size of the following character array? `char name[] = "Adeel";`

5

_____ statement is used to terminate the processing of a particular case and exit from switch structure.

continue

CS201 Solved Quiz No-1 December 13, 2015

1. We use _____ to open a file or stream for extraction

in

2. Null character is represented by _____ in C++.

/0

3. An object of _____ class can be created for saving the current position of any opened file before reading from the file.

Streampos

pg215

4. _____ Returns true if c is a digit or a letter and false otherwise.

int isalnum(int c)

5. We use _____ to open a file or stream for insertion.

out

6. Base address is the memory address of _____ element of an array.

1st

7. _____ allow us to have a memory location and use it as int or char interchangeably

union

8. To read command-line arguments, the main() function itself must be given _____ arguments.

2

9. Individual characters in a string stored in an array can be accessed directly using array _____.

subscript

10. To manipulate n-dimensional array _____ nested loops are required.

n-1

=====

Inno latest CS201 Solved Quizz No-1 Fall2015

1. A character is stored in the memory in _____

string

2. What will be the size of following array?
int arr[29];

29

3. An object of _____ class can be created for saving the current position of any opened file before reading from the file.

Streampos

pg215

4. We use _____ to open a file or stream for extraction.

in

5. We use _____ to open a file or stream for insertion.

out

6. _____ are conventional names of the command line parameters of the 'main()' function.

'argc' and 'argv'

7. In _____, we have different data members and all of these have their own memory space.

structures

8. How we declare an array of integer data whose size is 20 with array name "count".

int count[20];

9. A _____ is an array of characters that can store number of character specified.

String

File. seekg (-10L, ios:cur)

backward direction

CS201 FIRST QUIZ 2015

A function is a block of statements that can be defined once and used _____ in the program.

One time

Two times

Three times

As many times as user wants

What will be the output of the following while loop? `int counter = 0 ;
while(counter < 15) cout << counter << " "; counter++;`

1 2 3 4

1 2 3 4 5

Compile time error

Infinite loop

We can access a global variable _____

From the functions only

From the loops only

From the main() function only

From anywhere in the program

A repetition statement specifies that an action is to be continued while some _____ remains true.

Condition

Control

Assignment

Operator

Loops are _____ Structure.

Decision

Sequential

Repetition

None of the given options

_____ operator is used to pass the address of a variable in call by reference method.

%

+

@

&

How many times the following do-while loop will execute? int k = 10; do { cout << "Statements" << endl; k -= 2; } while(k>0);

4

5

6

7

What is the output of the following code if the 3rd case is true switch (var) { case 'a': cout<<"apple"<<endl; case 'b': cout<<"banana"<<endl; case 'm': cout<<"mango"<<endl; default: cout<<"any fruit"<<endl; }

mango

mango any fruit

Apple

none of the above

By default, the starting index of an array in C++ is _____.

2

-1

0

1

A variable declared within a code block becomes _____ variable for that block

Static

Integer

Local

Global

Quiz No. 1 of CS201 December 13, 2016

We use _____ to open a file or stream for extraction

in

Null character is represented by _____ in C++.

/0

An object of _____ class can be created for saving the current position of any opened file before reading from the file.

Streampos

pg215

_____ Returns true if c is a digit or a letter and false otherwise.

int isalnum(int c)

We use _____ to open a file or stream for insertion.

out

Base address is the memory address of _____ element of an array.

1st

_____ allow us to have a memory location and use it as int or char interchangeably

union

To read command-line arguments, the main() function itself must be given _____ arguments.

2

Individual characters in a string stored in an array can be accessed directly using array _____.

subscript

To manipulate n-dimensional array _____ nested loops are required.

n-1

=====

Inno latest Quizz..

A character is stored in the memory in _____

string

What will be the size of following array?

int arr[29];

29

An object of _____ class can be created for saving the current position of any opened file before reading from the file.

Streampos

pg215

We use _____ to open a file or stream for extraction.

in

We use _____ to open a file or stream for insertion.

out

_____ are conventional names of the command line parameters of the 'main()' function.

'argc' and 'argv'

In _____, we have different data members and all of these have their own memory space.

structures

How we declare an array of integer data whose size is 20 with array name "count".

int count[20];

A _____ is an array of characters that can store number of character specified.

String

File. seekg (-10L, ios:cur)

backward direction

CS201 Quiz No 2 2016

Q1- _____ are conventional names of the command line parameters of the 'main()' function.

'argc' and 'argv'

'argc' and 'argv'

'argc' and 'argv'

Q2-Suppose that an integer type pointer contains a memory address 0x22f220. What will be the new memory address if we increment this pointer by one?

0x22f221

0x22f222

0x22f223

0x22f224

Q3-Which header file must be included to use the functions tolower() and toupper()?

iostream.h

conio.h

ctype.h

stdlib.h

Q4-dereferencing operator is represented by

*

+

-

none

Q5-In Analysis, we try to have a_____

Determined the inputs

Break up of problem (I think not sure)

Precise problem statement

None of the given

Q6Base address is the memory address of _____ element of an array.

1st

2nd

3rd

4th

Q7-Pointers store the

value of a variable

memory address

characters

none

Q8-The name of the array is a constant pointer which contains the memory address of the _____ of the array.

first element

Last element

second element

none

Q9-Whenever some number is added in an array name, it will jump as many _____ as the added number.

rows

value

col

none

Q10- _____ Returns true if c is a digit and false otherwise

int isalpha(int c)

int isalnum(int c)

int isxdigit(int c)

int isdigit(int c)

CS201 Online Quiz No-2 2016

CS201 Quiz No 2 | Date : May 29, 2014 : Time: 11:00 AM

1. Base address is the memory address of _____ element of an array.

1st element(Not Sure)

2nd element

3rd element

none of above

2. In _____, we try to have a precise problem statement

Analysis

Design

Coding

None of the given

3. Each array declaration must provide the information about all these things except

Name of the array

Type of data stored in the array

The location of the first element to be stored

Number of elements of the array

4. Pointers work by pointing to a particular _____

value

variable

data type

None of the given

5. are conventional names of the command line parameters of the 'main()' function.

'argv' and 'argc'

'argv' and 'argc'

'argc' and 'argv'

None of above

6. Which header file must be included to use the functions tolower() and toupper()?

iostream.h

conio.h

ctype.h (not sure)

7. The statement cout << yptr will show the _____ the yptr points to.

Value

memory address

8. In Analysis, we try to have a _____

Determined the inputs

Break of problem

Precise problem statement

None of the given

9. Pointers are a special type of _____ in which a memory address is stored

variable

10. _____ Returns true if c is a digit and false otherwise.

int isalpha(int c)

int isalnum(int c)

int isxdigit(int c)

int isdigit(int c)

CS201 Quiz No 2 | 2016

Q1. At the _____, we try to break up the problem into functional units

analysis phase

design phase

Implementation phase

None of the given

Q2. The increment of a pointer depends on its _____.

variable

value

data type

none

Q3. We must include the header file _____ to convert the value of one type into another type using built-in functions.

conio.h

stdlib.h.

string.h

iostream.h

Q4. We must include the header file _____ to convert the value of one type into another type using built-in functions.

Q5. To get the value stored at a memory address, we use the _____

referencing operator

dereferencing operator

simple operator

None of the given

Q6. A character is stored in the memory in _____

byte

integer

string

none

Q7. char **argv can be read as _____

pointer to pointer(Not Sure)

pointer to char

pointer to pointer to char

None of the given

Q8. _____ Returns true if c is a letter and false otherwise.

int isalpha(int c)

int isalnum(int c)

int isxdigit(int c)

int isdigit(int c)

Q9. suppose we have int y[10]; To access the 4th element of the array we write _____

y[4];

y[3];

y[2];

none

Q10. Given a two dimensional array of integers, what would be the correct way of assigning the value 6 to the element at third row and fourth column?

array[3][4] = 6 ;

array[2][4] = 6 ;

array[4][3] = 6 ;

array[2][3] = 6 ;

Question # 1 of 10 (Start time: 01:10:11 PM)

Total Marks: 1

What is the output of the following code? `for (int i=0; i<5; i++) cout << i%2 << " ";`

Select correct option:

☐ 0 1 0 1 0

OK

Question # 2 of 10 (Start time: 01:11:39 PM)

Total Marks: 1

The ASCII code of null character is_____

Select correct option:

☐ 000

OK

Question # 3 of 10 (Start time: 01:13:01 PM)

Total Marks: 1

When the logical operator AND (&&) combine two expressions exp1 and exp2 then the result will be true only,

Select correct option:

☐ When both exp1 and exp2 are true

OK

Question # 4 of 10 (Start time: 01:13:41 PM)

Total Marks: 1

According to c++ norms; the first character of a variable name must be an alphabet or

Select correct option:

☐ Underscore

OK

Question # 5 of 10 (Start time: 01:14:11 PM) Total Marks: 1

To get the value stored at a memory address, we use the_____

Select correct option:

dereferencing operator

OK

Question # 6 of 10 (Start time: 01:15:08 PM)

Total Marks: 1

We comment code; as it makes program _____

Select correct option:

☐ Easy to understand.

OK

Question # 7 of 10 (Start time: 01:15:33 PM)

Total Marks: 1

+= , *= , /= , etc are called,

Select correct option:

Compound assignment operator

OK

Question # 8 of 10 (Start time: 01:16:07 PM) Total Marks: 1

X is an integer variable; what does X++ means,

Select correct option:

☐ Add 1 in X value

OK

Question # 9 of 10 (Start time: 01:16:38 PM) Total Marks: 1

At the design phase, we try to break up the problem into_____

Select correct option:

☐ functional units

OK

Question # 10 of 10 (Start time: 01:17:09 PM) Total Marks: 1

What will be the size of following array? `int arr[29];`

Select correct option:

☐ OK

Question # 1 of 10 (Start time: 01:18:29 PM) Total Marks: 1

Which of the following function call is “call by reference” for the following function prototype? `int add (int *)`;

Select correct option:

☐ OK

Question # 2 of 10 (Start time: 01:19:35 PM) Total Marks: 1

When the if statement consists more than one statement then enclosing these statement in curly braces is,

Select correct option:

☐ OK

Question # 3 of 10 (Start time: 01:20:08 PM) Total Marks: 1

From the following; which on is the correct syntax of an array declaration: array size is 5 and it is of float data type? **Select correct option:**

- ☐ `float [5] name;`
- ☐ `name[5] float;`
- ☐ `float name[5];`
- None of the given options

Question # 4 of 10 (Start time: 01:20:39 PM)

Total Marks: 1

Pointers are a special type of _____ in which a memory address is stored

Select correct option:

☐ variables

☐ Location

☐ Characters

☐ None of the given

OK

Question # 5 of 10 (Start time: 01:21:20 PM)

Total Marks: 1

Why we use "cout"?

Select correct option:

- ☐ To send data to printer
 - ☐ To read data from keyboard
 - ☐ To display message
 - ☐ To display output on the screen
- OK

Question # 6 of 10 (Start time: 01:21:45 PM)

Total Marks: 1

If `int sum = 54;` Then the value of the following statement is `sum = sum - 3 ;`

Select correct option:

- ☐ 52
 - ☐ 50
 - ☐ 51
 - ☐ 57
- OK

Question # 7 of 10 (Start time: 01:22:33 PM)

Total Marks: 1

suppose we have `int y[10]`; To access the 4th element of the array we write_____

Select correct option:

- ☐ `y[4];`
- ☐ `y[3];`
- `y[2];`
- ☐ none of given

OK

Question # 8 of 10 (Start time: 01:23:49 PM)

Total Marks: 1

The increment of a pointer depends on its_____.

Select correct option:

- ☐ variable

☐ value

☒ data type

☐ None of the given

OK

Question # 9 of 10 (Start time: 01:24:46 PM)

Total Marks: 1

While developing a program; should we think about the user interface?

Select correct option:

☒ Yes

☐ No

OK

Question # 10 of 10 (Start time: 01:25:35 PM)

Total Marks: 1

The name of the array is a constant pointer which contains the memory address of the _____ of the array.

Select correct option:

- ☒ first element
- ☐ Last element
- ☐ second element
- ☐ None of the given

Question # 1 of 10 (Start time: 01:27:41 PM)

Total Marks: 1

What will be the correct syntax for the following function call? float add (int &);

Select correct option:

- ☐ add(int x);
- ☐ add(&x);
- ☒ add(x);
- ☐ add (*x);

OK

Question # 2 of 10 (Start time: 01:29:05 PM)

Total Marks: 1

Which of the following function call is “call by reference” for the following function prototype? `int add (int *)`;

Select correct option:

- ☐ `add(&x);` OK
- ☐ `add(int x);`
- ☐ `add(x);`
- ☐ `add(*x);`

Question # 3 of 10 (**Start time: 01:30:25 PM**)

Total Marks: 1

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?

Select correct option:

- ☐ `arr[10] = {0.0};`
- ☐ `double arr[10]= 0.0;`
- ☒ `double arr[10] = {0.0};`
- ☐ `double arr[] = 0.0;`
- OK

Question # 4 of 10 (Start time: 01:31:46 PM)

Total Marks: 1

In C/C++; by default arguments are passed by _____ to a function.

Select correct option:

- ☐ Reference
- ☒ Value
- ☐ Type
- ☐ Data
- OK

Question # 5 of 10 (Start time: 01:32:35 PM)

Total Marks: 1

< , <= , > , >= are called _____ operators.

Select correct option:



Logical

☐

☒ Relational

☐ Conational

OK

Question # 6 of 10 (Start time: 01:33:05 PM)

Total Marks: 1

In C-language the string "AZMAT" is equal to _____

Select correct option:

Question # 6 of 10 (Start time: 01:33:05 PM)

Total
Marks: 1

In C-language the string "AZMAT" is equal to _____

Select correct option:

☐ Azmat

☐ azmat

☒ AZMAT

☐ None of the given

OK

Question # 8 of 10 (Start time: 01:33:56 PM)

Total Marks: 1

_____ are used to compile the code.

Select correct option:

☐ Editors

☐ Debugger

☐ Linker

☒ Compiler

OK

Question # 10 of 10 (Start time: 01:35:55 PM)

Total Marks: 1

char name [] = "Hello World" ; In the above statement, a memory of _____ characters will be allocated

Select correct option:

- ☐ 13
- ☐ 11
- ☒ 12
- ☐ 10

OK

Question # 1 of 10 (Start time: 01:38:16 PM)

Total Marks: 1

When $a = 26$; then the expression $a \% 5$; will calculate the value of a as,

Select correct option:

- ☐ 1
- ☐ 0
- ☐ 3
- ☐ 5

OK(remainder equal to 1)

Question # 2 of 10 (Start time: 01:39:07 PM)

Total Marks: 1

While developing a program; should we think about the reusability?

Select correct option:

☒ Yes

☐ No

OK

Question # 3 of 10 (Start time: 01:39:33 PM)

Total Marks: 1

C is widely known as development language of _____ operating system.

Select correct option:

☐ Linux

☒ Unix

☐ Windows

☐ Mac OS

OK

Question # 4 of 10 (Start time: 01:40:32 PM)

Total Marks: 1

Which of the following function call is “call by reference” for the following function prototype? `int add (int *)`;

Select correct option:

- ☒ `add(&x);` OK
- ☐ `add(int x);`
- ☐ `add(x);`
- ☐ `add(*x);`

Question # 5 of 10 (**Start time: 01:41:42 PM**)

Total Marks: 1

If a function has not been declared before its definition, It is a

Select correct option:

- ☐ logical error
- ☐ syntax error
- ☐ run time error
- ☒ None of these

Question # 7 of 10 (Start time: 01:43:18 PM)

Total Marks: 1

Transpose of a matrix means that when we interchange rows and columns_____

Select correct option:

the first row becomes the Last column

☐ the first row becomes the first column

☐ the Last row becomes the first column

☐ the first column becomes the first row

OK

Question # 8 of 10 (Start time: 01:44:02 PM)

Total Marks: 1

When we call a function, its control

Select correct option:

Question # 8 of 10 (Start time: 01:44:02 PM)

Total
Marks: 1

When we call a function, its control

Select correct option:

- ☐ transfers to its Prototype
- ☒ transfers to its definition
- ☐ returns to statement following function call
- ☐ The compiler stops execution of whole program

OK

Question # 9 of 10 (Start time: 01:44:42 PM)

Total Marks: 1

While loop executes at least,

Select correct option:

- ☒ Zero time
- ☐ One time
- ☐ N Time
- ☐ None of these

OK

Question # 10 of 10 (Start time: 01:46:05 PM)

Total Marks: 1

A _____ is a precise sequence of steps to solve a particular problem.

Select correct option:

☐ Code

☒ Program

☐ Statement

☐ None of the given options

OK

Question # 1 of 10 (Start time: 01:47:16 PM)

Total Marks: 1

In while loop the loop counter must be initialized,

Select correct option:

With in the loop

☐

☐ Before entering the loop OK

☐ At the end of the loop

☐ None of the given options

```
int  
counter  
= 0 ;
```

```
while(counter < 15) cout << counter << " ";
```

counter+
+;

ANS:
Infinite
loop

Question # 5 of 10 (**Start time: 01:49:51 PM**)

Total Marks: 1

Function prototype is written,

Select correct option:

- ☐ Within main function
- ☐ After the return statement in main

Before the return statement in main

Before call of that function

Time Left 66 sec(s)

Quiz Start Time: 01:47 PM

Question # 6 of 10 (Start time: 01:51:07 PM)

Total Marks: 1

From the following; which one is the range of Random number generator function rand()?

Select correct option:

- ☐ 0 – 32768
- ☐ 1 – 32768
- ☒ 0 – 32767
- ☐ 1 – 32767
- ☐ Decision

Click here to Save Answer & Move to Next Question

Question # 8 of 10 (Start time: 01:51:44 PM)

Total Marks: 1

Loops are _____ Structure

Select correct option:

Sequential

☐ Sequential

☐ Repetition

☐ None of the given options

OK

Question # 1 of 10 (Start time: 01:55:11 PM)

Total Marks: 1

Why we use "cin"?

Select correct option:

☐ To send data to printer

☒ To read data from keyboard

☐ To display message

☐ To display output on the screen

OK

Question # 3 of 10 (Start time: 01:56:43 PM)

Total Marks: 1

The data type before a function name represents its,

Select correct option:

☒ Return Type

☐ Function data

☐ Function arguments

☐ Function name

OK

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CS201 MID Term 2012 & 2011 SOLVED MCQS

MCQS

Syntax of a union is identical to _____ .

structure Class

Function

Oop

A union is a user-defined data type that contains only _____ from its list of members at a time.

one object

two objects

three

objects

four objects

Which of the given file handling modes are similar in their functionality ?

ios::out, ios::trunc
ios::trunc, ios::ate
ios::trunc,
ios::nocreate
ios::trunc, ios::ate

Which one of the given option is not a mode for reading/writing the data from a file?

In
Out
Trunk
Get

In C/C++, the header file used for string manipulation is _____.

stdlib.h
string.h
strings.h
stype.h

A 2D array multi[5][10] can be accessed using the array name as **multi , this technique is called _____.

Single referencing
Single dereferencing
Double referencing
Double dereferencing

C language was evolved from _____ language(s).

BASIC
C++
B and BCPL
FORTRAN

The _____ statement forces the immediate next iteration of the loop.

Switch
Goto
Continue
Break

_____ are very good tools for code reuse.

Operators

Loops

Functions

Variables

When an argument is passed by reference, _____

the function cannot access the argument's value. a variable is created in the function to hold the argument's value.

a temporary variable is created in the calling program to hold the argument's value.

the function accesses the argument's original value in the calling program.

_____ executes all the lines before error and stops at the line which contains the error.

Interpreter

Compiler

Linker

Debugger

Analysis is the ----- step in designing a program.

Middle

Post design

First

Last

Which of the following is the correct function call, having array named student of 10 elements as a parameter? addRecord(student[]); **addRecord(student);**
addRecord(student[10]); addRecord(*student);

When an array element is passed to a function, it is passed by _____.

Reference data type value
data

What is the correct syntax to declare an array of size 10 of int data type?

int [10] name ;

name[10] int ;

int name[10] ;

int name[] ;

If we want to copy an array, both arrays need to be of same _____.

Elements and size

Data and size

Data type and size

Data and data type

Which of the following is the correct syntax to print multiple values or variables in a single command using cout?

cout << "H" << x << "\n";

cout << "Hello" + x + "\n";

cout << "H", x, "\n";

cout << ("H" & x & "\n");

Which one of the statements given below is equivalent to $x \% = 5$?

$x = \% x 5$ **$x = x \% 5$** $x = \% 5$

$x \% x = 5$

The condition in loop should be a(n) _____.

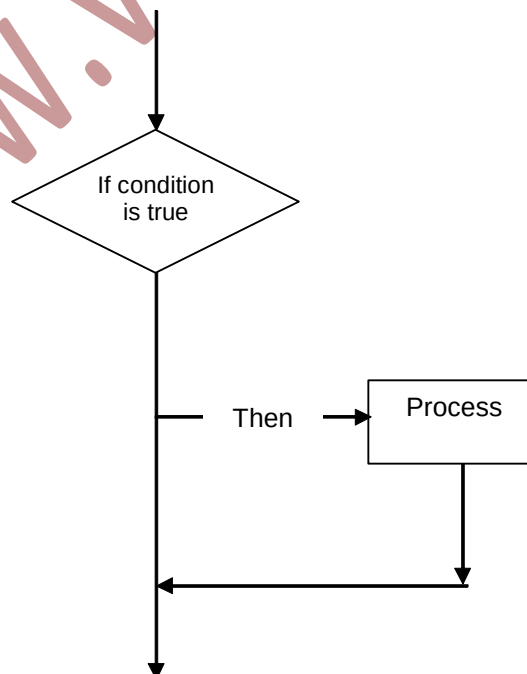
Arithmetic Expression

Constant Expression

Boolean Expression

Primary Expression

Which structure is represented by following flow chart ?



if-else structure else-if structure switch structure

if structure

MCQS

Stream which sends data to the program is called _____.

Input stream

Output stream

Inline stream

Function stream

Syntax of a union is identical to _____ .

Structure

Class

Function

Loop

When accessing a structure member, the identifier to the left of the dot operator is the name of _____.

a structure member a

structure tag **a**

structure variable

the keyword struct

The parameter passed to isdigit() function is _____.

a character variable

a boolean variable an

integer variable

a character string

TWAIN stands for _____ .

Technology With An Interesting Name

Technology Without An Informative Name

Technology Without An Interesting Name

Technology With An Informative Name

_____ translates high level language program into machine language code.

Compiler

Linker

Debugger

Editor

From the option given below, what will be the correct output of the code?

```
for (int a = 1; a <= 3; a++)      cout<<a*3-  
1<<" ";  
2 4 6  
2 5 8 no output is  
displayed  
1 2 3
```

If the return type of a function is void then it means that it will _____.

return any type of data

return some specific type of data

return no data

return just character data

The functions that have already been defined as a part of the language are called _____.

user-defined functions

programmer-defined functions

inner functions

built-in functions

Given that doubleArray is an array of 7 integers. Which of the below is the correct statement to access the 5th element of the array?

doubleArray[7] **doubleArray[4]**

doubleArray{7}

doubleArray(4)

The symbol which is used to represent a process in a flow chart is _____.

Rectangle

Arrow

Oval

Circle

When an array is passed to a function, by default it will be passed by_____.

Data

Reference

Value

Data type

What is the range of Random number generator function rand()?

0 – 32768

1 – 32768

0 – 32767

1 – 32767

The first character of a variable name must be an alphabet or _____.

Underscore

Digit

Special character

Comma

In _____, the first pointer stores the address of the some other pointer, which contains the address of any variable.

single dereference

double dereference

single reference

double reference

Initialization of variable at the time of definition is -----practice.

Bad Programming

Necessary

Good Programming

Not a necessary

Which looping process checks the test condition at the end of the loop?

For

While

do-while

no looping process checks the test condition at the end

You can use a _____ statement to transfer control elsewhere out of the nested structure.

Continue

Goto

Pause

Break

Which of the following array is the most suitable for storing a matrix structure?

Single-dimensional array

Two-dimensional array

Three-dimensional array

Four-dimensional array

The microsoft word document(.doc) is a kind of _____.

Sequential File

Random Access File

Binary Access File

Executable File

A union is a user-defined data type that contains only _____ from its list of members at a time. **one object** two objects three objects

four objects

In C/C++, _____ are the doors through which data can enter and come out of a program.

Streams

Fields

Variables

Header files

Which one of the given option is not a mode for reading/writing the data from a file?

In

Out

Trunk

Get

C++ views each file as a sequential stream of _____.

Bits

Bytes

Numbers

Words

In 2D array, the technique used to access the array elements is called _____

Single referencing

Double referencing

Double dereferencing

Single dereferencing

From the options given below, identify the correct option which is used for calling the function float square (int &);

square (int num);

square (&num);

square (num);

square (*num);

Identify the correct option which is used for calling the function float area (int).

area(&num) ;

area(num) ;

area(int num) ;

area(*num) ;

Which kind of error occurs in the code below to access the variable num in the main function?

```
int num =10;
int main(){
int x ; x =
num ;
}
```

Syntax error

Logical error

Run time error

No error

A program statement that invokes a function is called _____.

function declaration

function call

function definition

function prototype

What will be the output of the following code segment?

```
main(){
    int a = 10 ;
    int b =0;
    int *x = &a; b
    = (*x)+3 ;
    cout << a << " , " << b ;
}
```

10,0

10,3

10,13

0,13

When the logical operator AND (&&) combines two expressions exp1 and exp2 then the result will be true only _____ **When both exp1 and exp2 are true**

When both exp1 and exp2 are false

When exp1 is true and exp2 is false

When exp1 is false and exp2 is true

For which array, the size of the array should be one more than the number of elements in an array? int

double

float

char

What is the range of Random number generator function rand()?

0 – 32768

1 – 32768

0 – 32767

1 – 32767

To assigned a value to a character type variable, _____ are used around the value.
parenthesis () **single quotes ' '** double quotes " "
curly braces { }

In C/C++, the #include is called_____.

Header file

Preprocessor Directive

Statement

Function

The number 544.53 must be stored in _____ data type.

Int

Short

Float

Char

Use of the _____ statement violates the rules of structured programming.

Break

Continue

Goto

Switch

In Flow Chart, flow of control is represented by _____.

Rectangle

Circle

Diamond

Arrow

What will be the correct syntax for initialization of pointer **ptr** of type int with variable x?
int ptr = &x ; int ptr = x ;

int *ptr = &x ;

```
int ptr* = &x ;
```

MCQS

Syntax of a union is identical to _____ .

structure Class

Function

Oop

A union is a user-defined data type that contains only _____ from its list of members at a time.

one object

two objects

three

objects

four objects

Which of the given file handling modes are similar in their functionality ?

ios::out, ios::trunc

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ios::trunc,

ios::nocreate

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Out

Trunk

Get

MCQS

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Class
Function
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structure tag a

structure variable

the keyword struct

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integer variable a

character string

TWAIN stands for _____.

Technology With An Interesting Name

Technology Without An Informative Name

Technology Without An Interesting Name

Technology With An Informative Name

_____ translates high level language program into machine language code.

Compiler

Linker
Debugger
Editor

From the option given below, what will be the correct output of the code?

```
for (int a = 1; a <= 3; a++)      cout<<a*3-  
1<<" ";  
2 4 6 2  
5 8  
no output is displayed  
1 2 3
```

If the return type of a function is void then it means that it will _____. return

any type of data return some specific type of data

return no data return

just character data

The functions that have already been defined as a part of the language are called _____.
user-defined functions programmer-defined

functions

inner funtions

built-in functions

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Arrow

Oval

Circle

When an array is passed to a function, by default it will be passed by _____. Data

Reference

Value

Data type

The first character of a variable name must be an alphabet or _____.
Underscore

Digit

Special character

Comma

In _____, the first pointer stores the address of the some other pointer, which contains the address of any variable.

single dereference

double dereference

single reference

double reference

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Necessary

Good Programming

Not a necessary

Which looping process checks the test condition at the end of the loop?

For

While

do-while

no looping process checks the test condition at the end

You can use a _____ statement to transfer control elsewhere out of the nested structure.

Continue

Goto

Pause

Break

MCQS:

An object of _____ class can be created for saving the current position of any opened file before reading from the file

Filepos

Streampos

Stream

Filestream

The value returned by the eof() function is of _____ type.

Integer

Float

Character

Boolean

If a file is not properly closed in a program then what is the status of the program ?

Runtime error will be generated in the program

The program will terminate normally

Compiler will generate syntax error

The Program will crash

The parameter passed to isdigit() function is _____.

a character variable

a boolean variable an

integer variable a

character string

In C/C++, the header file used for string manipulation is _____.

stdlib.h

string.h

strings.h

stype.h

Arrays are best data structures _____.

they take least space in memory

for the size of the structure and the data in the structure are constantly changing

for relatively permanent collections of data they

take much space in memory

Each array declaration must provide the information about all these things except _____.

Name of the array

Type of data stored in the array

The location of the first element to be stored

Number of elements of the array

The First step for developing a program is _____.

Linking

Debugging

Analysis

Loading

_____ transfers the executable code from hard disk to main memory.

Linker

Loader

Editor

Interpreter

_____ operator is used to pass the address of a variable to the called function.

*

**

&& **&**

In call by reference, _____ of a variable is passed to the called function.

Address

Size

Type

Value

_____ of a function is also known as signature of a function.

Definition

Declaration

Calling

Invoking

Preprocessor program performs its function before _____ phase takes place.

Editing

Linking

Compiling

Loading

Which of the following is the correct function call, having array named student of 10 elements as a parameter?

addRecord(student[]); addRecord(student);

addRecord(student[10]);

addRecord(*student);

The remainder (%) operator is a _____ operator.

Logical

Arithmetic

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Relational
Conditional

Which of the following array is the most suitable for storing a matrix structure?

Single-dimensional array

Two-dimensional array

Three-dimensional array

Four-dimensional array

Question # 1 of 10 (**Start time: 12:27:31 AM**) Total Marks: 1

$+=$, $*=$, $/=$, etc are called,

▶ Select correct option:

- ☐ Assignment operators
- ☐ Logical operator
- ☐ Compound assignment operator
- ☐ Unary operator

OK

Question # 2 of 10 (**Start time: 12:28:02 AM**) Total Marks: 1

_____ statement interrupts the flow of control.

☐

☐ Select correct option:

☐

switch

continue

☐

goto

OK

☐

break

Question # 4 of 10 (Start time: 12:29:18 AM)

Total Marks: 1

According to c++ norms; the first character of a variable name must be an alphabet or

 Select correct option:

☐ Underscore

☐ Special character

☐ Digit

☐ None of the given options

Question # 5 of 10 (Start time: 12:29:56 AM)

Total Marks: 1

What is the output of the following code if the 3rd case is true switch (var) { case _a': cout<<"apple"<<endl; case _b': cout<<"banana"<<endl; case _m': cout<<"mango"<<endl; default: cout<<"any fruit"<<endl; }

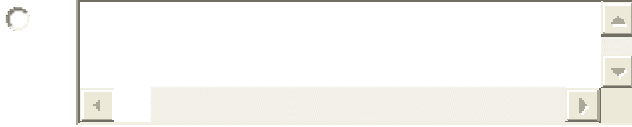
 Select correct option:



mango

OK

mango
any fruit



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apple

Total Marks: 1

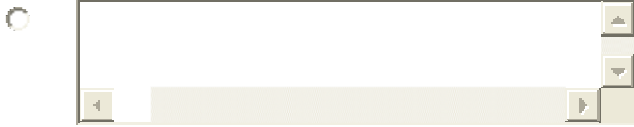
☐

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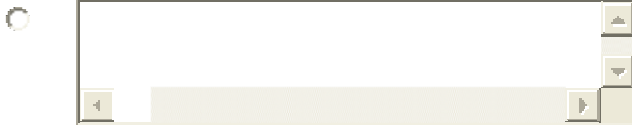
☐

none of the above

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☐

X is an integer variable; what does X++ means,

▶ Select correct option:

☐ ☐

OK

☐ ☐

Question # 8 of 10 (Start time: 12:32:40 AM)

Total Marks: 1

_____ will explain the function of a program.

▶ Select correct option:

☐

OK

☐ ☐

☐

Linker

Question # 10 of 10 (Start time: 12:33:19 AM)

Total Marks: 1

_____ transfers the executable code from main memory to hard disk.

▶ Select correct option:

☐ Loader

☐ Debugger

☐ Compiler

☐ Linker

OK

Question # 1 of 10 (Start time: 10:08:10 AM)

Total Marks: 1

the sizeof operator is used to determine the size of _____.

☐

 Select correct option:

☐ data

☐ variable

☒ data type

OK

None of the given

☐

☐

Question # 2 of 10 (Start time: 10:08:44 AM)

Total Marks: 1

Structures use _____ allocation.

▶ Select correct option:

- ☐ Queue
- ☐ Heap
- ☐ Cache
- ☒ Stack
- Ok

Question # 3 of 10 (Start time: 10:09:22 AM)

Total Marks: 1

char name [] = "Hello World" ; In the above statement, a memory of _____ characters will be allocated

▶ Select correct option:

- ☐ 13
- ☐ 11
- ☐ 12
- Ok

☐

☐

Question # 4 of 10 (Start time: 10:09:54 AM)

Total Marks: 1

Which header file must be included to use the functions tolower() and toupper()?

▶ Select correct option:

- ☐

iostream.h
- ☐

conio.h
- ☒

ctype.h
- ☐

stdlib.h

OK

Question # 5 of 10 (Start time: 10:10:53 AM)

Total Marks: 1

In Analysis, we try to have a _____

☐

 **Select correct option:**

☐

Determined the inputs

☐

Break up of problem

☒

Precise problem statement

Ok

☐

None of the given

☐

Question # 6 of 10 (Start time: 10:11:50 AM)

Total Marks: 1

Pointers store the _____

▶ Select correct option:

☐ ☒

Ok

☐ ☐

Question # 7 of 10 (Start time: 10:12:09 AM)

Total Marks: 1

☐

☐

____ Returns true if c is a digit and false otherwise.

 **Select correct option:**

☐

```
int isalpha( int c )
```

☐

```
int isalnum( int c )
```

☐

☐

☒

Ok

Question # 8 of 10 (Start time: 10:12:43 AM)

Total Marks: 1

eof is used to check for the _____ of file when a file is being read.

▶ Select correct option:

☐

☒

☐

☐

Ok

Question # 9 of 10 (Start time: 10:13:03 AM)

Total Marks: 1

The statement cout << yptr will show the _____ the yptr points to.

Select correct option:

☐ Value

☒ memory address

Ok

Variable

☐ None of the given

Which of the following is true about streams?

A. It is a sequence of bytes B.

It is an ordered sequence

C. All bytes can go through the stream simultaneously D.

Bytes that enters first into the stream will go out at last

ANS:

A& B

☐

☐

Question # 1 of 10 (Start time: 10:55:29 AM)**Total Marks: 1**

While handling files, one can have _____ options

 **Select correct option:**

☐ read the file

☐ write in some file

☐ read and write in the same file

☒ All of the given

Ok

Question # 2 of 10 (Start time: 10:55:55 AM)**Total Marks: 1**

If an array has 50 elements, what is allowable range of subscripts?

 **Select correct option:**

☐

☐

0 – 49

OK

1 – 49

☐

0 – 50

☐

1 – 50

Question # 4 of 10 (Start time: 10:56:40 AM)

Total Marks: 1

A structure is a collection of _____ under a single name.

▶ Select correct option:

☐ values

☒ variables

☐ data

☐ None of the given

☐

☐

Question # 5 of 10 (Start time: 10:57:09 AM)

Total Marks: 1

Ifstream is used for_____

▶ Select correct option:

☐ Input file stream

☐ Output file stream

☐ Input and output file stream

☐ All of the given

ok

Question # 6 of 10 (Start time: 10:57:55 AM)

Total Marks: 1

The ASCHI code of null character is_____

☒ ☐

Select correct option:

☒ 000 ☐ 010 ☐ 111 ☐ 110

OK

Question # 7 of 10 (Start time: 10:59:12 AM) **Total Marks: 1**

dereferencing operator is represented by _____

Select correct option:

☒

☐

☐ *

☐ Ok

☐ +

☐ -

☐ None of the given

Question # 8 of 10 (Start time: 10:59:26 AM)

Total Marks: 1

Whenever some number is added in an array name, it will jump as many _____ as the added number.

▶ Select correct option:

☒ rows OK

☐ value

☐ column

☐ None of the given

Question # 9 of 10 (Start time: 11:00:25 AM)

Total Marks: 1

To access the data members of structure, _____ is used.

▶ Select correct option:

☐

Logical operator

☐

Dereference operator

☒

Dot operator

OK

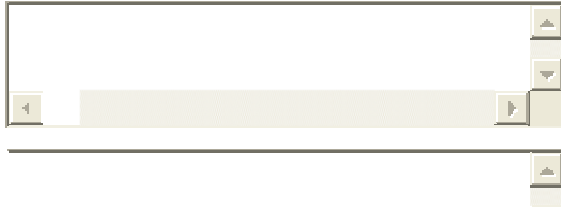
☐

Address operator

Question # 10 of 10 (Start time: 11:01:00 AM)

Total Marks: 1

Which of the following is true about streams? A. It is a sequence of bytes B. It is an ordered sequence C. All bytes can go through the stream simultaneously D. Bytes that enters first into the stream will go out at last



▶ Select correct option:

- ☐ A only
- ☐ C only
- ☒ A and B
- ☐ A and D

OK

Question # 4 of 10 (Start time: 11:05:34 AM)

Total Marks: 1

We use _____ to open a file or stream for extraction

▶ Select correct option:

☒ in

OK

☐ out

☐ app

☐ ate

Question # 8 of 10 (**Start time: 11:06:20 AM**) Total Marks: 1

char **argv can be read as _____.

▶ Select correct option:

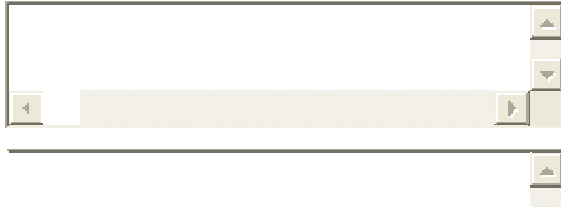
☐ pointer to pointer

☐ pointer to char

☒ pointer to pointer to char

OK

☐ None of the given



Question # 10 of 10 (Start time: 11:07:07 AM)

Total Marks: 1

From following; which one is the correct syntax of an array initialize: Array size is 10 and it is of double data type to value 0?

▶ **Select correct option:**

☐

arr[10] = {0.0};

☐

double arr[10]= 0.0;

☒

double arr[10] = {0.0};

Ok

☐

double arr[] = 0.0;

Pointers work by pointing to a particular _____

 **Select correct option:**

☐

Value

☐

variable

☒

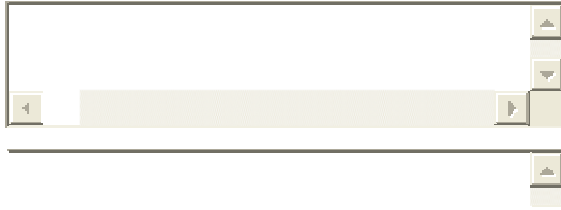
data type

ok

☐

None of the given

 [Click here to Save Answer & Move to Next Question](#)



Question # 2 of 10 (Start time: 12:21:44 PM)

Total Marks: 1

_____function give the position of the next character to be read from that file.

▶ Select correct option:

☐

tellp()

☒

tellg()

OK

☐

seekg()

☐

seekp()

Question # 4 of 10 (**Start time: 12:22:40 PM**) Total Marks: 1

aFile. seekg (-10L, ios:cur)

▶ Select correct option:

☐

forward direction

☒

backward direction

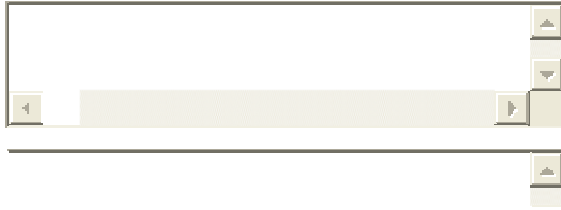
Ok

☐

both direction

☐

none of the given



Question # 6 of 10 (Start time: 12:23:34 PM)

Total Marks: 1

An object of _____ class can be created for saving the current position of any opened file before reading from the file.

▶ Select correct option:

☒ Stream

☐ Filepos

☐ Streampos

☐ Filestream

Question # 7 of 10 (Start time: 12:24:46 PM)

Total Marks: 1

Structures are syntactically defined with the word_____.

[illegible]

 **Select correct option:**

- ☐ struc

☐ struct

☐ structure

☐ None of the given

Question # 8 of 10 (Start time: 12:25:12 PM)

Total Marks: 1

_____ allow us to have a memory location and use it as int or char interchangeably

Select correct option:

☐

structures

☒

union

☐

construct

☐

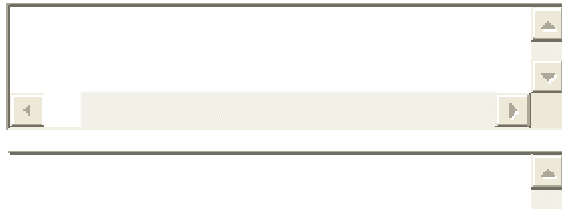
None of the given

OK

Question # 9 of 10 (Start time: 12:25:41 PM)

Total Marks: 1

A hierarchy of classes which are used to deal with console and disk files are called _____.



 **Select correct option:**

- ☐  Stream classes
- ☐  Simple classes
- ☐  Binary classes
- ☒  IO classes

Question # 10 of 10 (**Start time: 12:26:41 PM**)

Total Marks: 1

_____ function is used to determine the next position to write a character while writing into a file.

Select correct option:

☐ tellg()

☐ seekg()

☐ seekp()

☒ tellp()

Ok

Question No: 1 (Marks: 1) - Please choose one

*.doc is _____ by type.

- ▶ Sequential File
- ▶ Random Access File
- ▶ Data File
- ▶ Record File

Question No: 2 (Marks: 1) - Please choose one

Which of the following is NOT a preprocessor directive?

- ▶ #error
- ▶ #define
- ▶ #line
- ▶ #undef

Question No: 3 (Marks: 1) - Please choose one

The return type of operator function must always be void.

- ▶ True
- ▶ False

Question No: 4 (Marks: 1) - Please choose one

What does (*this) represents?

- ▶ The current function of the class
- ▶ The current pointer of the class
- ▶ The current object of the class
- ▶ A value of the data member

Question No: 5 (Marks: 1) - Please choose one

The statement **cin.get ()**; is used to,

- ▶ Read a string from keyboard
- ▶ Read a character from keyboard
- ▶ Read a string from file
- ▶ Read a character from file

Question No: 6 (Marks: 1) - Please choose one

When we do dynamic memory allocation in the constructor of a class, then it is necessary to provide a destructor.

- ▶ True
- ▶ False

Question No: 7 (Marks: 1) - Please choose one

Overloaded new operator function takes parameter of type *size_t* and returns

- ▶ void (nothing)
- ▶ void pointer
- ▶ object pointer
- ▶ int pointer

Question No: 8 (Marks: 1) - Please choose one

The second parameter of operator functions for << and >> are objects of the class for which we are overloading these operators.

- ▶ True
- ▶ False

Question No: 9 (Marks: 1) - Please choose one

C++ is a case-sensitive language

- ▶ True
- ▶ False

Question No: 10 (Marks: 1) - Please choose one

To include code from the library in the program, such as *iostream*, a directive would be called up using this command.

- ▶ `#include —iostream.h`
- ▶ `include <iostream.h>`
- ▶ `include <iostream.h>`
- ▶ `#include <iostream.h>`

Question No: 11 (Marks: 1) - Please choose one

A template function must have only generic data types.

- ▶ True
- ▶ False

Question No: 12 (Marks: 1) - Please choose one

Template class can not have static variables.

- ▶ True
- ▶ False

Question No: 13 (Marks: 1) - Please choose one

What will be the correct syntax to assign an array named **arr** of 5 elements to a pointer **ptr**?

- ▶ *ptr = arr ;
- ▶ ptr = arr ;
- ▶ *ptr = arr[5] ;
- ▶ ptr = arr[5] ;

Question No: 14 (Marks: 1) - Please choose one

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

- ▶ ptr[3]
- ▶ (ptr+3)
- ▶ *(ptr+3)

- ▶ Both 1 and 3

Question No: 15 (Marks: 1) - Please choose one

If most significant bit of un-signed number is 1 then it represents a positive number.

- ▶ True
- ▶ False

Question No: 16 (Marks: 1) - Please choose one

If there is a symbol (& sign) used with the variable name followed by data type then it refers to _____ and if & is being used with variable name then it refers to _____.

- ▶ Address of variable, reference variable
- ▶ Reference variable, value of variable
- ▶ Reference variable, address of variable
- ▶ Address of variable, value of variable

Question No: 17 (Marks: 1) - Please choose one

We can also do conditional compilation with preprocessor directives.

- ▶ True
- ▶ False

Question No: 18 (Marks: 1) - Please choose one

The default value of a parameter can be provided inside the _____

- ▶ function prototype
- ▶ **function definition**
- ▶ both function prototype or function definition
- ▶ none of the given options.

Question No: 19 (Marks: 1) - Please choose one

Classes defined inside other classes are called _____ classes

- ▶ looped
- ▶ **nested**
- ▶ overloaded
- ▶ none of the given options.

Question No: 20 (Marks: 1) - Please choose one

What purpose do classes serve?

- ▶ Data encapsulation
- ▶ Providing a convenient way of modeling real-world objects
- ▶ Simplifying code reuse
- ▶ **All of the given options**

Question No: 21 (Marks: 1) - Please choose one

Every class contains _____.

- ▶ Constructor
- ▶ Destructor
- ▶ Both a constructor and a destructor
- ▶ None of the given options

Question No: 22 (Marks: 1) - Please choose one

new operator is used to allocate memory from the free store during

- ▶ Compile Time
- ▶ Run Time
- ▶ Link Time
- ▶ None of the given options

Question No: 23 (Marks: 1) - Please choose one

When an object of a class is defined inside another class then,

- ▶ Destructor of enclosing class will be called first
- ▶ Destructor of inner object will be called first
- ▶ Constructor and Destructor will be called simultaneously
- ▶ None of the given options

Question No: 24 (Marks: 1) - Please choose one

It is possible to define a class within another class.

- ▶ True
- ▶ False

Question No: 25 (Marks: 1) - Please choose one

New and Delete are also used with _____ and data types as well.

- ▶ Class, Objects
- ▶ Structures, Pointers
- ▶ Both Class and structures
- ▶ None of above

Question No: 26 (Marks: 1) - Please choose one

With New keyword, data types and class members are initialized with meaningful values instead of garbage.

► True

► False

Question No: 27 (Marks: 2)

How many arguments a Unary Operator take? Can we make a binary operator as unary operator?

Ans: Unary operator takes only one argument like `i++` or `i--` (Post increment or post decrement operators for integers) or `++i`, `--i` (Pre increment or pre decrement operators for integers), we can not make Unary operator as binary or binary as Unary operator.

Question No: 28 (Marks: 2)

Which arithmetic operators cannot have a floating point operand?

Ans:

Modulus operator

This operator can only be used with integer operands ONLY

Question No: 1 (Marks: 1) - Please choose one

C language is developed by

► Bill Gates

► Robert Lafore

► Dennis Ritchie

► Deitel & Deitel

Dennis Ritchie developed a general purpose language, called C language
pag no 12

Question No: 2 (Marks: 1) - Please choose one

Which of the following choice is not an example of an int data type?

- ▶ 0
- ▶ -32
- ▶ 65531
- ▶ -4.0

Question No: 3 (Marks: 1) - Please choose one

In flow chart, the symbol used for decision making is,

- ▶ Rectangle
- ▶ Circle
- ▶ Arrow
- ▶ **Diamond**

Then draw

a line to its right

and use the decision symbol i.e. diamond diagram. Pag no 51

Question No: 4 (Marks: 1) - Please choose one

Switch statement deals with,

- ▶ Integer data only
- ▶ float data only
- ▶ character data only
- ▶ **Integer and character data**

Question No: 5 (Marks: 1) - Please choose one

Default case in switch statement is,

- ▶ Must
- ▶ **Optional**
- ▶ syntax error
- ▶ Necessary

The *default* statement is optional. If there is no *case* which matches the value of the *switch* statement, then the statements of *default* are executed pag no 68

Question No: 6 (Marks: 1) - Please choose one

`http://vustudents.ning.com *.doc`
is _____ by type.

- ▶ **Sequential File**
- ▶ Random Access File
- ▶ Data File
- ▶ Record File

Question No: 7 (Marks: 1) - Please choose one

Member function tellg() returns the current location of the _____ pointer.

▶ tellptr()

▶ write()

▶ seekg()

▶ get()

Question No: 8 (Marks: 1) - Please choose one

s

Dealing with structures and functions passing by reference is the most economical method

<http://vustudents.ning.com>

▶ True

▶ False

Question No: 9 (Marks: 1) - Please choose one

In C/C++ all character strings are terminated with,

▶ Null character

▶ String

▶ Zero

▶ Full stop

Question No: 10 (Marks: 1) - Please choose one

Word processor is <http://vustudents.ning.com>

- ▶ Operating system
- ▶ **Application software**
- ▶ Device driver
- ▶ Utility software

Question No: 11 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

- ▶ area
- ▶ _area
- ▶ **10area**
- ▶ area2

Question No: 12 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known?

- ▶ for
- ▶ while
- ▶ do-while
- ▶ all looping processes require that the iterations be known

Question No: 13 (Marks: 1) - Please choose one

By default an array of characters is passed by value to a function,

- ▶ True
- ▶ False

Question No: 14 (Marks: 1) - Please choose one

Which of the following operator is used to access the address of a variable?

- ▶ * operator
- ▶ -> operator
- ▶ && operator
- ▶ & operator

Question No: 15 (Marks: 1) - Please choose one

The name of an array represents address of first location of array element.

- ▶ True
- ▶ **False**

Compiler is a

- ▶ System software
- ▶ **Application Software**
- ▶ Driver
- ▶ Editor

Question No: 2 (Marks: 1) - Please choose one

If Num is an integer variable then Num++ means,

- ▶ Add 1 two times with Num
- ▶ **Add 1 with Num**
- ▶ Add 2 with Num
- ▶ Subtract 2 from Num

Question No: 3 (Marks: 1) - Please choose one

For one byte there are _____ combinations of values that can be stored in computer.

▶ 2^6

▶ 2^7

▶ 2^8

▶ 2^4

http://vuzs.net/index.php?option=com_content&view=article&id=431:cs201-mid-forvuzs&catid=315&Itemid=54

Question No: 4 (Marks: 1) - Please choose one

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

▶ cplex.h

▶ ctype.h

▶ stdio.h



delay.h

The function toupper and islower are part of the character handling library <ctype.h>

Question No: 5 (Marks: 1) - Please choose one

Default case in switch statement is,

- ▶ Must
- ▶ **Optional**
- ▶ syntax error
- ▶ Necessary

Question No: 6 (Marks: 1) - Please choose one

When break statement is encountered in switch statement, it

- ▶ Stops the entire program
- ▶ Stops the execution of current statement
- ▶ **Exits from switch statement**
- ▶ None of the given options

Question No: 7 (Marks: 1) - Please choose one



What will be the result of arithmetic expression $6+27/3*3$? <http://vustudents.ning.com>

▶ 33

▶ 45

▶ 9
30

Question No: 8 (Marks: 1) - Please choose one

What is the correct syntax to declare an array of size 10 of int data type?

▶ `int [10] name ;`

▶ `name[10] int ;`

▶ `int name[10] ;`

▶ `int name[] ;`

Question No: 9 (Marks: 1) - Please choose one

How many dimensions does n-dimensional array has?

- ▶
- ▶ **n dimensions**
- ▶ 2n dimensions
- ▶ (n+1) dimensions
- ▶ (n-1) dimensions (Array starts from 0th element)

Question No: 10 (Marks: 1) - Please choose one

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

- ptr[3]**
- ▶ (ptr+3)
- ▶ *(ptr+3)
- ▶ Both 1 and 3

Question No: 11 (Marks: 1) - Please choose one

Which of the following values C++ use to represent true and false?
<http://vustudents.ning.com>

- ▶ **1 and 0**
- ▶ 1 and -1

- ▶
- ▶ 11 and 00
- ▶ Any numerical value

Question No: 12 (Marks: 1) - Please choose one

Declaring structures does not mean that memory is allocated.

- ▶ True
- ▶ False

Question No: 13 (Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array?

- ▶ int
double
- ▶ float
- ▶ char

Question No: 14 (Marks: 1) - Please choose one



If a variable is passed by value to a function and the function makes some changes to that variable then it

- ▶ **does not affect the original variable**
- ▶ *affects the original variable*
- ▶ causes syntax error
- ▶ None of the given options

Question No: 15 (Marks: 1) - Please choose one

In C/C++ the #include is called,

- ▶ Header file
- ▶ **Preprocessor Directive**
- ▶ Statement
- ▶ Function

<http://vustudents.ning.com>

Question No: 16 (Marks: 1) - Please choose one

Loops are ----- Structure.

- ▶ Decision
- ▶ **Repetition**
- ▶ Sequential
- ▶ Hierarchical

To show the parts of an object, you would use a...

▶ **Select correct option:**

☐ diagram.

☐ bar graph.

☐ line graph.

☐ ok pie chart.

Which term is used for the sentences missing a subject, a verb, or both but even then it is punctuated as if it were a complete sentence?

☐

☐

▶ Select correct option:

☒ ok

☐

☐

☐

Which type of visual aid is three-dimensional?

▶ Select correct option:

- ☐
- ☐
- ☐

Objects
- ☐

Graphs
- ☐

Graphics
- ☐

Pictures



Click here to Save Answer & Move to Next Question

Question # 4 of 10 (Start time: 02:50:19 PM)

Total Marks: 1

What is the use of Flow Charts?



Select correct option:

- ☒

Flow charts are an excellent means of representing t
- ☐

Flow charts are used to represent the predictions re
- ☐

Flow charts are used inside the organization for writi
- ☐

Flow charts are simply used to draw picture.

☐

☐

Question # 5 of 10 (Start time: 02:50:59 PM)

Total Marks: 1

What is the most important aspect in using visual aids?

▶ Select correct option:

make the diagrams attractive

☐

slides should be colourful

☐

☒ ok your message should be understandable for your au

☐ language should be idiomatic

☐

☐

In how many categories, Specifications can be divided?

▶ Select correct option:

☐

☐

☐

☐

Question # 7 of 10 (Start time: 02:51:57 PM)

Total Marks: 1

What is the optional part of analysis reports?

▶ Select correct option:

☐

☐

☐ Discussion

☐ Conclusion

☐ Recommendations

'Analogy' can be defined as:

▶ Select correct option:

☐ Explanation of one object or process in terms of another

☐ Association of similar things or processes by grouping

☐ Establishment of a series of events that tells the reader

☐ None of the above

Question # 9 of 10 (Start time: 02:53:45 PM)

Total Marks: 1

While using specialized visual aids, you need to consider.....

☐

☐

▶ Select correct option:

☐ ok

☐

☐

☐

Which one of the following should be placed immediately either before or after the noun?

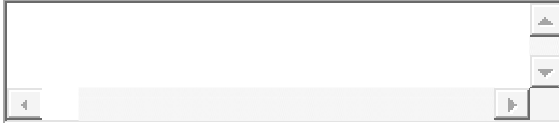
▶ Select correct option:

☐

☒ ok

☐

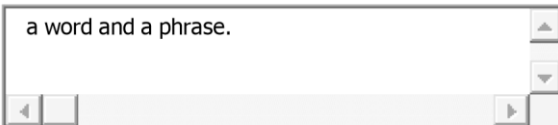
☐

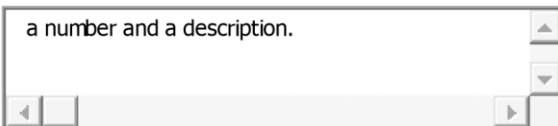
☐ 

☐ 

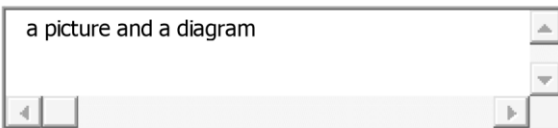
Titles typically include both

▶ Select correct option:

☐ 

☐ 

OK

☐ 

☐

☐

☐ numbers and digits

For what purposes colons are used?

▶ Select correct option:

☐ to separate titles from subtitles

☐ to express ratios

☐ to introduce and emphasize lists, quotations and exp

☐ All of the above

OK

In how many cases a pronoun can appear?

▶ Select correct option:

☐ 1

☐ 2

☐ 3

ok

☐ 4

Apostrophes are used to form.....

▶ Select correct option:

www.vuplanet.com



www.vuplanet.com

☐

☐

the nominative case of nouns

the objective case of nouns

the possessive case of nouns

ok

All of the above

Which one of the following; is the Hyphen Mark?

 Select correct option:

☐

☐

☐

☐

Question # 7 of 10 (Start time: 03:08:28 PM)

Total Marks: 1

How many types does a sentence structure have?

☐

☐ |

▶ Select correct option:

☐ One

☐ Two

☐ Three

ok ☐ Four

What is meant by Paragraph Unity?

▶ Select correct option:

☐ All ideas should relate the topic sentence

ok ☐ There should be a sequence

☐ Well organized words

☐ Precise language

☐

☐

Question #

Total Marks: 1

\ 10 of 10 (Start time: 03:10:04 PM)

Which of the following is discovered during the Editing Phase?

▶ Select correct option:

☐ Gunning's Fog Index

☐ Writer's Block

Organizational Problems

ok

☐ Situational Problems

MC100404032 : Nadia Kanwal

Time Left 15 sec(s)

Quiz Start Time: 04:36 PM

Question # 1 of 10 (Start time: 04:36:36 PM)

Total Marks: 1

What type of sentence requires a question mark?

☐

☐

Select correct option:

- ☐ a sentence having request
- ok ☐ a sentence having command
- ☐ a sentence having inquiry
- ☐ a sentence having entreaty

Click here to Save Answer & Move to Next Question

MC100404032 : Nadia Kanwal

Time Left **9**
sec(s)

Quiz Start Time: 04:36 PM

Question # 2 of 10 (Start time: 04:38:02 PM)

Total Marks: 1

Where do we not use comma?

Select correct option:

- ☒ to separate a dependent clause from a main clause
- ☐ to separate two independent clauses
- ☐ within the letters of abbreviation that can not be pronounced
- ☐ to separate a list

[Click here to Save Answer & Move to Next Question](#)

MC100404032 : Nadia Kanwal

Time Left **18**
sec(s)

Quiz Start Time: 04:36 PM

Question # 3 of 10 (Start time: 04:39:27 PM)

Total Marks: 1

Writers can motivate their readers to follow the instructions by:

Select correct option:

☐ using an inviting and supportive tone.

☐ telling them the importance of reading manual.

☐ using an attractive appearance.

☒ All of the above

ok

[Click here to Save Answer & Move to Next Question](#)

MC100404032 : Nadia Kanwal

Time Left **53**
sec(s)

Quiz Start Time: 04:36 PM

Question # 5 of 10 (Start time: 04:42:22 PM)

Total Marks: 1

Which one of the following options forms the basis for the highly precise design specifications?

Select correct option:

☐ Configuration specification

☐ Functional description

☒ Functional Specification

☐ Resource requirements

Click here to Save Answer & Move to Next Question

MC100404032 : Nadia Kanwal

Time Left 21
sec(s)

Quiz Start Time: 04:36 PM

Question # 6 of 10 (Start time: 04:43:12 PM)

Total Marks: 1

Choose the option that best describes the given statement: Working far into the night in an effort to salvage her little boat.

Select correct option:

☐ Sentence fragment

☐ Comma splice

☐ Fused sentence

☐ Run- on sentence

Click here to Save Answer & Move to Next Question

MC100404032 : Nadia Kanwal

Time Left **80**
sec(s)

Quiz Start Time: 04:36 PM

Question # 7 of 10 (Start time: 04:44:35 PM)

Total Marks: 1

How many types does a sentence structure have?

Select correct option:

www.vuplanet.com

○

One		▲
		▼
◀		▶

www.vuplanet.com

Two

Three

Four

ok

Click here to Save Answer & Move to Next Question

MC100404032 : Nadia Kanwal

Time Left **33**
sec(s)

Quiz Start Time: 04:36 PM

Question # 8 of 10 (Start time: 04:44:55 PM) **Total Marks: 1**

Which sign of punctuation is used to link certain prefixes, suffixes, letters and numbers with nouns?

Select correct option:

.

☐ Apostrophes

☐ Semicolons

☐ Quotation marks

ok ☐ Hyphens

[Click here to Save Answer & Move to Next Question](#)

MC100404032 : Nadia Kanwal

Time Left **45**
sec(s)

Quiz Start Time: 04:36 PM

Question # 9 of 10 (Start time: 04:46:01 PM)

Total Marks: 1

Choose the correct option: 'Appendix' of an analysis report usually includes...

Select correct option:

☐ derivation of equations

☐ tables of raw data

☐ sample equations

ok ☐ All of the above

[Click here to Save Answer & Move to Next Question](#)

MC100404032 : Nadia Kanwal

Time Left
11
sec(s)

Quiz Start Time: 04:36 PM

Question # 10 of 10 (Start time: 04:46:58 PM)

Total Marks: 1

Line graphs always show the independent variable on the vertical axis.

Select correct option:

OK ☐ True



[Click here to Save Answer & Move to Next Question](#)

MC100404033 : Noreen Akram

Time Left
57
sec(s)

Quiz Start Time: 04:51 PM

Question # 1 of 10 (Start time: 04:51:00 PM)**Total Marks: 1**

Which of the following are used as the basis for test plans and user documentation?

Select correct option:

- ☐ Requirement specs
- ☐ Functional specs
- ☐ Design specs
- ☐ Test specs

[Click here to Save Answer & Move to Next Question](#)

MC100404033 : Noreen Akram

Time Left
69
sec(s)

Quiz Start Time: 04:51 PM

Question # 2 of 10 (Start time: 04:51:50 PM)**Total Marks: 1**

Apostrophes are used to form.....

Select correct option:

- ☐ the nominative case of nouns
- ☐ the objective case of nouns
- ☒ the possessive case of nouns
- ☐ All of the above

[Click here to Save Answer & Move to Next Question](#)**MC100404033 : Noreen Akram**Time Left **31**
sec(s)

Quiz Start Time: 04:51 PM

Question # 3 of 10 (Start time: 04:52:27 PM)**Total Marks: 1**

Where should we use commas in digits, counting from the right?

Select correct option:

☐ before one digit

☐ before groups of two digits

ok ☐ before groups of three digits

☐ before groups of four digits

[Click here to Save Answer & Move to Next Question](#)

MC100404033 : Noreen Akram

Time Left **68**
sec(s)

Quiz Start Time: 04:51 PM

Question # 4 of 10 (Start time: 04:53:38 PM) **Total Marks: 1**

In how many ways a comma splice error can be corrected?

Select correct option:

- ☐ 1
- ☐ 2
- ☐ 3
- ok ☐ 4

[Click here to Save Answer & Move to Next Question](#)

MC100404033 : Noreen Akram

Time Left **3**
sec(s)

Quiz Start Time: 04:51 PM

Question # 5 of 10 (Start time: 04:54:11 PM)

Total Marks: 1

Which one of the following options produces a fused sentence?

Select correct option:

- ok ☒ Two independent clauses run together without punc

☐ Two independent clauses linked with just a comma

☐ Replace the comma with a coordinating conjunction

☐ All of the above

[Click here to Save Answer & Move to Next Question](#)

MC100404033 : Noreen Akram

Time Left
49
sec(s)

Quiz Start Time: 04:51 PM

Question # 6 of 10 (Start time: 04:55:40 PM)

Total Marks: 1

How many types does a sentence structure have?

Select correct option:

☐ One

☐ Two

☐ Three

☐ Four

[Click here to Save Answer & Move to Next Question](#)

MC100404033 : Noreen Akram

Time Left **11**
sec(s)

Quiz Start Time: 04:51 PM

Question # 7 of 10 (Start time: 04:56:36 PM)

Total Marks: 1

How can you integrate your visual aids with your prose so that they work together harmoniously to create a single, unified message?

Select correct option:

☐ by introducing your visual aids in your prose

☐ by stating the conclusions you want your readers to

☐ by making your visual aids easy to find

☐ All of the above

[Click here to Save Answer & Move to Next Question](#)

MC100404033 : Noreen Akram

Time Left **77**
sec(s)

Quiz Start Time: 04:51 PM

Question # 8 of 10 (Start time: 04:57:57 PM)

Total Marks: 1

Which of the following is discovered during the Editing Phase?

Select correct option:

☐ Gunning's Fog Index

Writer's Block

ok

Organizational Problems

Situational Problems

[Click here to Save Answer & Move to Next Question](#)



MC100404033 : Noreen Akram

Time Left
67
sec(s)

Quiz Start Time: 04:51 PM

Question # 9 of 10 (Start time: 04:58:25 PM)**Total Marks: 1**

Writers can motivate their readers to follow the instructions by:

Select correct option:

- ☐ using an inviting and supportive tone.
- ☐ telling them the importance of reading manual.
- ☐ using an attractive appearance.
- ☐ All of the above

[Click here to Save Answer & Move to Next Question](#)

MC100404033 : Noreen Akram

Time Left
82
sec(s)

Quiz Start Time: 04:51 PM

Question # 10 of 10 (Start time: 04:58:59 PM)

Total Marks: 1

What is meant by Paragraph Unity?

Select correct option:

☒ All ideas should relate the topic sentence

☐ There should be a sequence

☐ Well organized words

☐ Precise language

[Click here to Save Answer & Move to Next Question](#)

_____ are conventional names of the command line parameters of the 'main()' function.

Select correct option:

'argv' and 'argc'

'argc' and 'argv'

'argc' and 'argv'

None of the given

In _____, we try to have a precise problem statement

Select correct option:

Analysis

Design

Coding

None of the given

Pointers are a special type of _____ in which a memory address is stored

Select correct option:

variables

Location

Characters

None of the given

At the design phase, we try to break up the problem into _____

Select correct option:

functional units

non-functional units

small units

None of the given

char name [] = "Hello World" ; In the above statement, a memory of _____ characters will be allocated

Select correct option:

13

11

12

10

Pointers work by pointing to a particular_____

Select correct option:

Value

variable

data type(doubtful)

None of the given

_____ Returns true if c is a digit and false otherwise.

Select correct option:

int isalpha(int c)

int isalnum(int c)

int isxdigit(int c)

int isdigit(int c)

The ASCII code of null character is_____

Select correct option:

000

010

111

110

The increment of a pointer depends on its_____.

Select correct option:

variable

value

data type

None of the given

At the_____, we try to break up the problem into functional units

Select correct option:

analysis phase

design phase

Implementation phase

None of the given

To get the value stored at a memory address, we use the_____

Select correct option:

referencing operator

dereferencing operator

simple operator

None of the given

suppose we have int y[10]; To access the 4th element of the array we write_____

Select correct option:

y[4];

y[3];

y[2];

none of given

A character is stored in the memory in _____

Select correct option:

byte

integer

string

None of the given

CS201 Mid Term Past Paper 2013

1. Overflow condition occurs when we try to assign a value to a variable which is _____.

Greater than its maximum size

Within its range

Equal to its size

Less than its maximum size

2. The **break** _____ statement interrupts the flow of control.

Switch/loop

continue

goto

break

3. Which of the following operators is used to access the value of variable pointed by a pointer?

*** operator**

-> operator

&& operator

& operator

4. Which of the following is not a reserve word for data types in standard C/C++?

int

float

real

double

5. To assigned a value to a character type variable, _____ are used around the value.

parenthesis ()
single quotes ' '
double quotes " "
curly braces { }

6. When $x = 7$; then the expression $x\% = 2$; will calculate the value of x as _____.

- 1**
- 3
- 7
- 2

7. What is the highest legal index for the following array?

int arr[4]
4
3
2
1

8. For which array, the size of the array should be one more than the number of elements in an array?

int
double
float
char

9. In programming, comments are used to explain the functioning of the _____.

Debugger
Editor
Program
Linker

10. Operating System is a type of a/an _____.

application software
system software
computer language
interpreter

11. _____ are very good tools for code reuse.

operators
loops
functions
variables

12. Identify the correct option which is used for calling the function int square (int *).

square(int &num) ;

square(&num) ;
 square(*num) ;
 square(num) ;

13. The _____ statement allows us to select from multiple choices based on a set of fixed values for a given expression.

switch

break

continue

goto

14. The file-open mode _____ is used to open a file for output and move to the end of the file.

ios::out

ios::app

ios::trunc

ios::binary

15. A function's single most important role is to _____.

give a name to a block of code

increases program size

accept arguments and provide a return value

help in organizing a program into conceptual units

16. In C++, Integer calculation occurs in _____ bytes.

1 byte

2 bytes

4 bytes

8 bytes

17. The function write() takes _____ as parameter(s).

String of pointer type

String of variable lengths, no. of bytes to be read and flags

Pointer array of characters and a delimiter

String and no. of bytes to be written

18. A _____ name includes a primary name and an optional period with an extension.

File

Disk

Data

Database

19. In case of pass by reference, _____.

The values of the variables are passed to the function so that it can manipulate them

The location of variable in memory is passed to the function

The function declaration should contain ampersand (&) in its type declaration

Temporary variables are created to store the values of the variables passed

20. There is a pointer variable named **ptr** of type float then address of which type of variable the **ptr** will store in it?

int

float

char

double

MIDTERM EXAMINATION

Fall 2008

CS201- Introduction to Programming (Session - 2)

Time: 60 min

Marks: 38

Question No: 1 (Marks: 1) - Please choose one

What is the output of the following statement?

int i = 2.5; do { cout << i * 2; } while (i > 3 && i < 10);

(a) 510

(b) 5

(c) 48

(d) **error**

Question No: 2 (Marks: 1) - Please choose one

What does !(7) evaluate to in decimal where ! is a NOT operator?

(a) 7

(b) 8

(c) 9

(d) 10

Question No: 3 (Marks: 1) - Please choose one

The condition in while loop may contain logical expression but not relational expression. (a) True

(b) False

Question No: 4 (Marks: 1) - Please choose one

Searching is easier when an array is already sorted

- (a) True
- (b) False

Question No: 5 (Marks: 1) - Please choose one

If an array has 100 elements, what is allowable range of subscripts?

- (a) 0 - 99
- (b) 1 - 99
- (c) 0 - 100
- (d) 1 - 100

Question No: 6 (Marks: 1) - Please choose one

What will be the value of 'a' and 'b' after executing the following statements?

a = 3;

b = a++;

- (a) 3, 4
- (b) 4, 4
- (c) 3, 3
- (d) 4, 3

Question No: 7 (Marks: 1) - Please choose one

What will be the correct syntax to initialize all elements of two-dimensional array to value 0?

- (a) `int arr[2][3] = {0,0} ;`
- (b) `int arr[2][3] = {{0},{0}} ;`
- (c) `int arr[2][3] = {0},{0} ;`
- (d) `int arr[2][3] = {0} ;`

Question No: 8 (Marks: 1) - Please choose one

Which of the following function returns the size of a string variable?

- (a) strlen()
- (b) stringlen()
- (c) **strlen()**
- (d) strLength()

Question No: 9 (Marks: 1) - Please choose one

What will be the range of numbers generated by function `rand () % 9`?

- (a) 0 to 9
- (b) 1 to 9
- (c) 0 to 8
- (d) 1 to 8

Question No: 11 (Marks: 1) - Please choose one

Computer can understand only machine language code.

- (c) **True**
- (d) **False**

Question No: 13 (Marks: 1) - Please choose one

What does $5 \wedge 6$, evaluate to in decimal where '^' is Exclusive OR operator?

- (a) True
- (b) **False**

Detail:- It
mean

5 = 0101
6 = **0110**
 $5 \wedge 6 = 0011$

If both input is same then the output is 0 and if different then output is 1

Question No: 14 (Marks: 1) - Please choose one

If the file is not properly closed in the program, the program _____.

- (a) **Terminate normally**
- (b) Indicate Runtime error

- (c) Indicate Compile time error
- (d) Crashes

Question No: 15 (Marks: 1) - Please choose one

Which of the following header file include string conversion functions?

- (a) string.h
- (b) stdlib.h
- (c) ctype.h
- (d) sconvert.h

Question No: 16 (Marks: 1) - Please choose one

In Program commenting the code liberally is

Solution:-

It need to be self-contained and understandable. Comments should be placed liberally. The comments should explain the logic, not the mechanics. Try to avoid fancy programming.

Question No: 17 (Marks: 1)

Which header file must be included while handling files?

Solution:- <fstream.h>

Question No: 18 (Marks: 1)

What is meant by C++ statement: `const int *ptr = &x;` Solution:-

ptr is a pointer to data of type const int type. And to assign the address of x to pointer ptr

Question No: 19 (Marks: 2)

What is a truth Table?

Solution:-

We know the concept of truth table. The truth tables are very important. These are still a tool available for analyzing logical expressions. We will read logic design in future, which is actually to do with chips and gate. We find it difficult to evaluate a complicated logical expression. Sometimes the logic becomes extremely complicated so that even writing it as a simple syntax statement in any language.

Question No: 20 (Marks: 3)

(1) An array day is declared as: `int day[] = {1, 2, 3, 4, 5, 6, 7};`

How many elements does array 'day' has?

Solution:-

7 elements

(2) If the declaration is changed as: `int day[7] = {1, 2, 3, 4, 5, 6, 7};`

How many elements does array 'day' has?

Solution:-

7 elements

Question No: 21 (Marks: 5)

What are similarities and differences between Structures and Unions?

In structures, we have different data members and all of these have their own memory space. In union, the memory location is same while the first data member is one name for that memory location. However, the 2nd data member is another name for the same location and so on. Consider the above union (i.e. `intOrChar`) that contains an integer and a character as data members. What will be the size of this union? The answer is the very simple. The union will be allocated the memory equal to that of the largest size data member. If the `int` occupies four bytes on our system and `char` occupies one byte, the union `intOrChar` will occupy four bytes

Question No: 22 (Marks: 10)

Write a void function(); that takes integer numbers from the user and then displays the sum of odd and even numbers entered by the user. Your program

should terminate if user enters a negative number

Solution:-

```
#include<iostream.h>
#include<conio.h> void
function(void);

main()
{
    function();
```

```
    getch();
}
void function(void)
{   int n[5];
    for(int i=0; i<=5; i++)
    {
        cout <<"Enter Element = ";
        cin >>n[i];
    }
    cout <<"\nODD Inputs are = \n";
    for(int i=0; i<=5; i++)
    {
        if(n[i]%2==0)
        {
            cout <<n[i]<<endl;
        }
    }
    cout <<"\nEVEN Inputs are = \n";
    for(int i=0; i<=5; i++)
    {
        if(n[i]%2==1)
        {
            cout <<n[i]<<endl;
        }
    }
}
```

```
}  
}
```

MIDTERM EXAMINATION
Spring 2009
CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

The function of cin is

- (a) To display message
- (b) To read data from keyboard
- (c) To display output on the screen
- (d) To send data to printer

Question No: 2 (Marks: 1) - Please choose one

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

- (a) cplex.h
- (b) ctype.h
- (c) stdio.h
- (d) delay.h

Question No: 3 (Marks: 1) - Please choose one

How many parameter(s) function getline() takes?

- (a) 0
- (b) 1
- (c) 2
- (d) 3

Question No: 4 (Marks: 1) - Please choose one

Word processor is

- (a) Operating system

- (b) Application software
- (c) Device driver
- (d) Utility software

Question No: 5 (Marks: 1) - Please choose one

For which values of the integer _value will the following code becomes an infinite loop?

```
int number=1;
while (true) {
    cout << number;
    if (number == 3) break;
    number += integer_value; }
```

- (a) any number other than 1 or 2
- (b) only 0
- (c) only 1
- (d) only 2

Question No: 6 (Marks: 1) - Please choose one

Each pass through a loop is called a/an

- (a) enumeration
- (b) Iteration
- (c) culmination
- (d) pass through

Question No: 7 (Marks: 1) - Please choose one

A continue statement causes execution to skip to

- (a) the return 0; statement
- (b) the first statement after the loop
- (c) the statements following the continue statement
- (d) the next iteration of the loop

Question No: 8 (Marks: 1) - Please choose one

What is the correct syntax to declare an array of size 10 of int data type?

- (a) `int [10] name ;`
- (b) `name[10] int ;`
- (c) `int name[10] ;`
- (d) `int name[] ;`

Question No: 9 (Marks: 1) - Please choose one

Consider the following code segment. What will the following code segment display?

```
int main(){ int age[10] = {0};  
cout << age ;  
}
```

- (a) Values of all elements of array
- (b) Value of first element of array
- (c) Starting address of array
- (d) Address of last array element

Question No: 10 (Marks: 1) - Please choose one

What will be the correct syntax to initialize all elements of two-dimensional array to value 0?

- (a) `int arr[2][3] = {0,0} ;`
- (b) `int arr[2][3] = {{0},{0}} ;`
- (c) `int arr[2][3] = {0},{0} ;`
- (d) `int arr[2][3] = {0} ;`

Question No: 11 (Marks: 1) - Please choose one

How many bytes will the pointer `intPtr` of type `int` move in the following statement?

```
intPtr += 3 ;
```

- (a) 3 bytes

- (b) 6 bytes
- (c) 12 bytes
- (d) 24 bytes

Question No: 12 (Marks: 1) - Please choose one

If there are $2^{(n+1)}$ elements in an array then what would be the number of iterations required to search a number using binary search algorithm?

- (a) n elements
- (b) $n+1$ elements
- (c) $2(n+1)$ elements
- (d) $2^{(n+1)}$ elements

Question No: 13 (Marks: 1) - Please choose one

Which of the following operator is used to access the value of variable pointed to by a pointer?

- (a) * operator
- (b) -> operator
- (c) && operator
- (d) & operator

Question No: 14 (Marks: 1) - Please choose one

The _____ statement interrupts the flow of control.

- (a) switch
- (b) continue
- (c) goto
- (d) break

Question No: 15 (Marks: 1) - Please choose one

Analysis is the ----- step in designing a program

- (a) Last
- (b) Middle
- (c) Post Design
- (d) **First**

Question No: 16 (Marks: 1) - Please choose one

Paying attention to detail in designing a program is _____

- (a) Time consuming
- (b) Redundant
- (c) **Necessary**
- (d) Somewhat Good

Question No: 17 (Marks: 1)

Which programming tool is helpful in tracing the logical errors?

Debugger tool is helpful in tracing the logical errors.

Question No: 18 (Marks: 1)

Give the syntax of opening file 'myFile.txt' with 'app' mode using ofstream variable 'out'.

```
ofstream outfile; outfile.open ("myFile.txt "); //
```

Open the file Question No: 19 (Marks: 2)

What is the difference between switch statement and if statement.

In switch statement only one variable can be tested on various condition but using if we can tested multi variables in single statement.

Question No: 20 (Marks: 3)

Identify the errors in the following code segment and give the reason of errors.

```
main(){ int  
x = 10  
const int *ptr = &x ;  
*ptr = 5 ;  
}
```

```
main()
{ int x = 10; const int
*ptr = &x ;

cout <<ptr;

}
```

Question No: 21 (Marks: 5)

If `int array[10];` is an integer array then write the statements which will store values at Fifth and Ninth location of this array,

```
cout <<"Enter fifth postion "; cin >>
array[4]; cout <<"Enter Ninth
postion "; cin >> array[8];
```

Question No: 22 (Marks: 10)

Write a function `BatsmanAvg` which calculate the average of a player (Batsman), Call this function in main program (Function). Take the input of Total Runs made and Total number of matches played from the user in main function

Q1

When the if statement consists more than one statement then enclosing these statement in curly braces is,

- (a) Not required
- (b) Good programming
- (c) Relevant
- (d) **Must**

Q2

The while loop becomes infinite,

- (a) When the condition is always false
- (b) . When the condition is less than zero
- (c) When the condition is always true
- (d) When the condition contains a logical operator

Q3

Which of the following function(s) is/are included in stdlib.h header file?

- (a) double atof(const char *nptr)
- (b) int atoi(const char *nptr)
- (c) char *strcpy (char *s1, const char *s2)
- (d) 1 and 2 only

Q4

If we want to store a string "abc" in an array str then the size of this array must be at least,

- (a) 2
- (b) 3
- (c) 4
- (d) 5

Q5

No executable code will be generated if error is found during translation of the program using interpreter.

- (a) True
- (b) False

Q6

Word processor is

- (a) Operating system

- (b) Application software
- (c) Device driver
- (d) Utility software

Q7

Which of the following is the correct syntax to print multiple values or variables in a single command using cout?

- (a) `cout << "Hello" + x + "\n";`
- (b) `cout << "H" << x << "\n";`
- (c) `cout << "H", x, "\n";`
- (d) `cout << ("H" & x & "\n");`

Q8

Which of the following is correct way to initialize a variable x of int type with value 10?

- (a) `int x ; x = 10 ;`
- (b) `int x = 10 ;`
- (c) `int x, x = 10;`
- (d) `x = 10 ;`

Q9

If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block? (a) parentheses ()

- (b) braces { }
- (c) brackets []
- (d) arrows < >

Q10

Name of an array is a constant pointer.

- (a) True
- (b) False

Q11

How many bytes will the pointer intPtr of type int move in the following statement?

intPtr += 3 ;

- (a) 3 bytes
- (b) 6 bytes
- (c) 12 bytes
- (d) 24 bytes

Q12

What will be the value of 'a' and 'b' after executing the following statements? a = 3; b = a++;

- (a) 3, 4
- (b) 4, 4
- (c) 3, 3
- (d) 4, 3

Q13

Loader loads the executable code from hard disk to main memory. (a) True

(b) False

Q14

Which of the following is used with bit manipulation?

- (a) Signed integer
- (b) Un-signed integer
- (c) Signed double
- (d) Un-signed double

Q15

Which of the following values C++ use to represent true and false? (a) 1 and 0

- (b) 1 and -1
- (c) 11 and 00
- (d) Any numerical value

Q16

The argument of the isdigit() function is _____

- (a) a character,
- (b) a C-string,
- (c) a C++ string class variable
- (d) None of the given options.

Q17

Which data type should be used to store the value 50.7 ?

Float

Q18

Why should goto statement be avoided in C/C++?

When structured programming was started, it was urged not to use the goto statement. Though goto is there in C language but we will not use it in our programs. It will adopt the structured approach. All of our programs will consist of sequences, decisions and loop. Because loop provide best platform to manipulate the data.

Q19

What operator do you use to assign a pointer the address of another variable or constant?

Marks: 2

& sige

i.e. int i;

int * ptri;

ptri = &i;

Q20

If there are 2^n elements in an array then what would be the number of iterations required to search a number using binary search and linear search? Marks: 3

Q21

Convert the following switch statement into if statements. Marks: 5


```
switch (operator) { case '+':  
    result = op1 + op2;  
    break; case '-':  
    result = op1 - op2;  
    break;  
case 'x': case '*':  
    result = op1 * op2;  
    break; case '/':  
    result = operand1 / operand2;  
    break; default:  
    cout << "Unknown operator" ;  
}  
  
if(operator==' +')  
    {  
        result = op1 + op2;  
    }  
else if(operator==' -')  
    {  
        result = op1 - op2;  
    }  
else  
    if (operator==' *')  
    {  
        result = op1 * op2;  
    }  
else if (operator==' /')  
    {
```

```
        result = op1 / op2;
    }
else
{
    cout << "Unknown operator" ;
}
```

Q22

Write a recursive function that takes character array and starting subscript as arguments. In each recursive call, the function should display the string from subscript to the end of string. The starting subscript in first call should be 0. In each successive call, the subscript should increase by one and function should print the array from subscript to the end of string. The function should stop processing and return when null character encounters. Suppose the char string passed to the function is,

"SampleString", then the function will print output as follows,

SampleString
ampleString
mpleString
pleString so
on....

Marks: 10

MIDTERM EXAMINATION
Spring 2009
CS201- Introduction to Programming

Question No: 1 (Marks: 1) - Please choose one

A precise sequence of steps to solve a problem is called

Statement

Program

Utility

Routine

Question No: 2 (Marks: 1) - Please choose one

The Compiler of C language is written in

Java Language

UNIX

FORTRON Language

C Language

Question No: 3 (Marks: 1) - Please choose one

Initialization of variable at the time of definition is,

Must

Necessary

Good Programming

None of the given options

Question No: 4 (Marks: 1) - Please choose one

In if structure the block of statements is executed only,

When the condition is false

When it contain arithmetic operators

When it contain logical operators

When the condition is true

Question No: 5 (Marks: 1) - Please choose one

Which of the following function(s) is/are included in stdlib.h header file?

double atof(const char *nptr)

int atoi(const char *nptr)

char *strcpy (char *s1, const char *s2)

1 and 2 only

Question No: 6 (Marks: 1) - Please choose one

Dealing with structures and functions passing by reference is the most economical method

True

False

Question No: 7 (Marks: 1) - Please choose one

Pointer is a variable which store,

Data

Memory Address

Data Type

Values

Question No: 8 (Marks: 1) - Please choose one

Preprocessor program perform its function before _____ phase takes place.

Editing

Linking

Compiling

Loading

Question No: 9 (Marks: 1) - Please choose one

Which of the following can not be a variable name?

area
_area
10area
area2

Question No: 10 (Marks: 1) - Please choose one

Which looping process is best, when the number of iterations is known?

for while do-while all looping processes require
that the iterations be known

Question No: 11 (Marks: 1) - Please choose one

Which character is inserted at the end of string to indicate the end of string?

new line
▶ tab
▶ **null**
▶ carriage return

Question No: 12 (Marks: 1) - Please choose one

How many bytes are occupied by declaring following array of characters?

char str[] = "programming";

10
11
12
13

Question No: 13 (Marks: 1) - Please choose one

Which of the following header file defines the rand() function?

iostream.h
conio.h
stdlib.h
stdio.h

Question No: 14 (Marks: 1) - Please choose one

Commenting the code _____

Makes a program easy to understand for others.

Make programs heavy, i.e. more space is needed for executable.

Makes it difficult to compile

All of the given options.

Question No: 15 (Marks: 1) - Please choose one

What's wrong with this for loop?

```
for (int k = 2, k <=12, k++)
```

the increment should always be ++k

the variable must always be the letter i when using a for loop

there should be a semicolon at the end of the statement

the commas

should be semicolons

Question No: 16 (Marks: 1) - Please choose one

For which array, the size of the array should be one more than the number of elements in an array? int double float char

Question No: 17 (Marks: 1)

To Which category of the software "Compiler and Interpreter" belongs?

Question No: 18 (Marks: 1)

What is the result of the expression $x = 2 + 3 * 4 - 4 / 2$

Question No: 19 (Marks: 2)

Write a declaration statement for an array of 10 elements of type float. Include an initialization statement of the first four elements to 1.0, 2.0, 3.0 and 4.0.

Question No: 20 (Marks: 3)

Write down the output of the following code?

```
int array[7], sum = 0;
```

```

for(int i=0;i<7;i++)
{
    array[i] = i;
    sum+= array[i];
}
cout<< " Sum = " <<sum;

```

ANS

Sum = 21

What will be the output of the following segment of C++ code?

```

int A[5] = {1 , 2, 3, 4}; int i;
for (i=0; i<5; i++)
{
    A[i] = 2*A[i];
    cout << A[i] << " ";
}

```

ANS

2 4 6 8 0

Question No: 22 (Marks: 10)

Write a C++ program that will determine if a departmental store customer has exceeded the credit limit on a charge account.

Program should input the following facts in five variables

1. Account number
2. Balance at the beginning of month (Beginning balance)
3. total of all items charged by customer this month (charges)
4. total of all credits (credits)
5. allowed credit limit

Calculate the new balance

New balance = Beginning balance + charges – credits

Determine if new balance exceeds the allowed credit limit. For those customers whose credit limit is exceeded. The program should display the message "Credit Limit exceeded."

Q1

In C/C++ the string constant is enclosed

- (a) In curly braces
- (b) In small braces
- (c) In single quotes
- (d) In double quotes

Q2

In flow chart, the symbol used for decision making is,

- a) Rectangle
- b) Circle
- c) Arrow
- d) Diamond

Q3

The data type before a function name represents its,

- (a) Return Type
- (b) Function data
- (c) Function arguments
- (d) Function name

Q4

The operator used to take the address of a variable is,

- (a) &&
- (b) ++
- (c) -
- (d) &

Q5

The header file which is used for input and output is

- (a) maths.h
- (b) string.h
- (c) iostream.h
- (d) ctype.h

Q6

When we are using command line argument(s), the default argument in C/C++ is/are

_____.

- a) argc
- b) argd

- c) argv
- d) argc and argv

Q7

In C++, Integer calculation occurs in _____ bytes.

- a) 1 byte
- b) 2 bytes
- c) 4 bytes
- d) 8 bytes

Q8

In the declaration of two dimensional array,

- (a) First index represents row and second represents column
- (b) First index represents column and second represents row
- (c) Both indexes represent rows
- (d) Both indexes represent column

The address operator (&) can be used with,

- a) Statement
- b) Expression
- c) Variable
- d) Constant

Q10

_____ translates high level language program into machine language code (a) Debugger

- (b) Editor
- (c) Compiler
- (d) Linker

Q11

Which of the following data type(s) can operate on modulus operator '%'? a) float, int

- b) float, double
- c) int
- d) char

Q12

What will be the result of the expression $z = x \% y$, if $x = 19$ and $y = 4$?

- a) 3
- b) 4
- c) 15
- d) 19

Q13

Which character is inserted at the end of string to indicate the end of string?

- a) new line
- b) tab
- c) null
- d) carriage return

Q14

What will be the value of i and j in the following code segment? int i, j ;

```
int x[5] = {2, 3, 4, 8, 9}; int
```

```
*ptr = &x[2]; i = (*ptr)++ ;
```

```
j = *ptr++ ;
```

- a) i = 5, j = 5
- b) i = 5, j = 8
- c) i = 4, j = 8
- d) i = 5, j = 9

Q15

Syntax of union is identical to _____

- a) Structure
- b) Class
- c) Function
- d) None of the given options

Q16

Let suppose

```
Union intorDouble{  
    Int ival;  
    Double charvar;  
};
```

```
main(){   intorDouble
VAZ; int size ; size =
sizeof(VAZ);
}
```

What will be the value of variable "size", if int occupies 4 bytes and double occupies 8 bytes?

- a) 2
- b) 4
- c) 8
- d) 12

Q17

To Which category of the software "Compiler and Interpreter" belongs? (1)

System software

Q18

Give the general syntax of definition of structure. (1)

ANS struct

Name

```
{
// body of the structure
};
```

Q19

Write the General syntax for the definition of a user defined function. (2)

ANS

return data type Function Name (parameter list with data type)

```
{
// definition body
}
```

Q20

What will be the output of following code segment?

```
4, 5, 7, 1}; int *ptr =&x[2];
```

```
cout << (*ptr)++ <<" " ;
```

```
cout << *ptr++ ;
```

(3) int x[5] = {2,

ANS

5 6

Q21

Detect and correct compile time error(s) in the following code.

Hints: The following code pass a value to a function by Reference and print the value before and after pass. (5)

ANS

```
int test (int &x)
{
    *x = *x + 200;    return
    x;
}

main()
{
    int x = 100;

    cout <<" x = " <<x;

    test (*x); // //invalid type of argument uniary

    cout<<endl<< " x = " <<x;

    getch(); return
    0;
}
```

ANS

The following function pass a reference to the function but in the main body the call mechanism is wrong. The * sign is not used with it .

X = 100 after the function completion x = 300;

Q22

Write a C/C++ program which calculates the aggregate of a student. The aggregate can be calculated by the formula: (10)

$$\text{Aggregate} = (\text{Matrix\_marks} * 2 + \text{Fsc\_marks} * 4) / 24$$

If the aggregate of a student is less than 150 then the program should display message

“You can not be admitted to VU” otherwise display the message

“Congratulation! You admitted in VU “

ANS

```
#include<iostream.h>
```

```
#include<conio.h>
```

```
main()
```

```
{ int m,f; float a;
```

```
m=254; f=340; a =
```

```
((m*2) + (f*4))/24; if(a <
```

```
150)
```

```
{
```

```
cout <<"You can not be admitted to VU";
```

```
} else
```

```
{
```

```
cout <<"Congratulation! You admitted in VU ";
```

```
}
```

```
//Aggregate = (Matrix_marks*2 + Fsc_marks*4) / 24
```

```
getche();
```

```
}
```

Q1

What is function of cout ?

- (a) To send data to printer
- (b) To read data from keyboard
- (c) To display message
- (d) To display output on the screen Q2

In Flow chart process is represented by

- (a) Rectangle
- (b) Arrow symbol
- (c) Oval
- (d) Circle

Q3

&& is ----- operator.

- (a) An arithmetic
- (b) Logical
- (c) Relational
- (d) Unary Q4

An over Flow condition occurs when we try to assign a value to a variable which is,

- (a) Less than its maximum size
- (b) Greater than its maximum size
- (c) With in its range
- (d) Equal to its size

Q5

For dereferencing an array element using pointer, we use the operator (a) &

- (b) *
- (c) /
- (d) +

Q6

In the declaration of two dimensional array,

- (a) First index represents row and second represents column
- (b) First index represents column and second represents row

- (c) Both indexes represent rows
- (d) Both indexes represent column

Q7

Which of the following data type(s) can operate on modulus operator '%'? (a) float, int

- (b) float, double
- (c) int
- (d) char

Q8

Which of the following is the correct way to declare a variable x of integer type? (a) x int ;

- (b) integer x ;
- (c) int x;
- (d) x integer

Q9

Which of the following can not be a variable name?

- (a) area
- (b) _area
- (c) 10area
- (d) area2

Q10

Which of the function call is call by value for the following function prototype?

float area (int);

- (a) area(&num) ;
- (b) area(num) ;
- (c) area(int num) ;
- (d) area(*num) ;

Q11

Recursive functions are used when there is a repetitive pattern.

- (a) True
- (b) False

Q12

What will be the range of numbers generated by function rand () % 9?

- (a) 0 to 9

- (b) 1 to 9
- (c) 0 to 8
- (d) 1 to 8

Q13

What will be the correct syntax to declare two-dimensional array of float data type?

- (a) float arr{2}{2} ;
- (b) float arr[2][2] ;
- (c) float arr[2,2] ;
- (d) float[2][2] arr ;

Q14

When a function finishes its execution then,

- (a) The control return to its Prototype
- (b) The control returns to its definition
- (c) Control returns to statement following function call
- (d) The compiler stop execution of whole program

Q15

Consider the following statements to initialize a two-dimensional array.

- i. int arr[2][3] = {4, 8, 9, 2, 1, 6} ; ii. int arr[3][2] = {4, 8, 9, 2, 1, 6} ; iii. int arr[][2] = {{4,8},{9, 2},{1, 6}} ;

Which of the following option(s) are correct to initialize a two-dimensional array with 3 rows and 2 columns?

- (a) (ii) only
- (b) (iii) only
- (c) (ii) and (iii)
- (d) (i) and (iii)

Q16

Editors are used to compile the code.

- (a) True
- (b) False

Q17

What are global variables? (1)

ANS

Global variables are those that are defined outside of main. It can be accessed in entire program.
Q18

Is it possible to evaluate the size of structure, if yes then how? (1)

ANS

YES

```
#include <iostream.h>
#include <stdlib.h> struct
VehicleParts
{
    int wheels; int
    seats;
    VehicleParts()
    {
        cout << "\n VehicleParts - default constructor";
    }
    VehicleParts(int wheels, int seats)
    {
        this->wheels = wheels; this->seats = seats; cout << "\n VehicleParts - parameterized
        constructor";
    }
}
```

Q19

Write down the general syntax of switch statement. (22)

ANS

```
switch ( variable/expression )
{
    case constant1 : statementLlist1 ; case constant2:
    statementLlist1 ; default: statementLlist1 ;
}
```

What will be the output of following code segment?
{2, 4, 5, 7, 1}; int *ptr =&x[2]; cout << (*ptr)++ <<" " ;

(3) int x[5] =

cout << *ptr++ ;

ANS

5 6

Q22

What is the difference between compiler and interpreter? (5)

ANS

compiler and interpreter are system software but the difference is that the compiler compile the whole program but the interpreter is compiled line by line. Compiler are efficient in performance.

Q23

(10)

Write a recursive function that takes three arguments (an integer array, starting subscript 's' and ending subscript 'e').

In first recursive call, the function should display the array from subscript 's' (s = 0) to 'e' (e = size of array). In each successive call, the function should print the array from index s+1 to e. The function should stop processing and return when starting subscript becomes equal to ending subscript.

For example, if user enters values for array 2, 3, 4, 5, 6 then the recursive function must display the following output.

```
2 3 4 5 6
3 4 5 6
4 5 6
5 6
6
```

ANS

```
#include<iostream.h>
#include<conio.h>
void recursive(int [],int,int); void
main()
{   int array[5];
    for(int i=0;i<5;i++)
    {
        cout<<"\nEnter the "<<i<<" Index number :";    cin>>array[i];
    }
    recursive(array,0,4); //0 is the starting index and 4 is the ending subscript   getch();
} void recursive(int arr[],int s,int e)
{   if(s!=e+1)
    {   for(int
        i=s;i<=e;i++)
            cout<<arr[i]<<"\t";;
```

```
    cout<<endl;    s++;    recursive(arr,s,e);  
    //Recursive call  
    }  
}
```

Q1

What is function of cout ?

- (a) To send data to printer
- (b) To read data from keyboard
- (c) To display message
- (d) To display output on the screen

Q2

<, <=, >, >= are called ----- operators. (a) Logical

- (b) Arithmetic
- (c) Relational
- (d) Conational

Q3

In while loop the loop counter must be initialized,

- (a) With in the loop
- (b) Before entering the loop
- (c) At the end of the loop
- (d) None of the given options

Q4

Data Size of the file is always _____ the actual size of the file. (a) Greater than

- (b) Equal to
- (c) Less than or equal to
- (d) None of the above

Q5

The precedence of * is higher than dot operator (.)operator

- (a) True
- (b) False

Q6

Let ptr1 and ptr2 are pointer variables that points to integer data type then which one of the following arithmetic is allowed,

- (a) $\text{ptr1} + \text{ptr2}$
- (b) $\text{ptr1} - \text{ptr2}$
- (c) $\text{ptr1} * \text{ptr2}$
- (d) $\text{ptr1} / \text{ptr2}$

Q7

Word processor is

- (a) Operating system
- (b) Application software
- (c) Device driver
- (d) Utility software

Q8

What will be the range of numbers generated by function $\text{rand}() \% 9$?

- (a) 0 to 9
- (b) 1 to 9
- (c) 0 to 8
- (d) 1 to 8

Q9

How many bytes will the pointer intPtr of type int move in the following statement?

$\text{intPtr} += 3$;

- (a) 3 bytes
- (b) 6 bytes
- (c) 12 bytes
- (d) 24 bytes

Q10

What will be the correct syntax to assign an array named arr of 5 elements to a pointer ptr?

- (a) $*\text{ptr} = \text{arr}$;
- (b) $\text{ptr} = \text{arr}$;
- (c) $*\text{ptr} = \text{arr}[5]$;
- (d) $\text{ptr} = \text{arr}[5]$;

Q11

What will be the output of the following code segment?

```
char *x = "programming" ;  
cout << *(x+2) << *(x+3) << *(x+5) << *(x+8) ;
```

- (a) prgm
- (b) rorm (c) oga
- (d) rang

Q12

There is a pointer variable named ptr of type int then address of which type of variable the ptr will store in it?

- (a) variable of type char
- (b) variable of type short
- (c) variable of type int
- (d) variable of type double

Q13

Flow charts explain the working of a program in pictorial format. (a) True

- (b) False

Q14

The object _____ may be used both for file input and file output (a) fstream,

- (b) ifstream,
- (c) ofstream,
- (d) none of the given options.

Q15

Most efficient method of dealing with structure variables is to define the structure globally

- (a) True
- (b) False

Q16

If a variable is passed by value to a function and the function makes some changes to that variable then it

- (a) does not affect the original variable
- (b) affects the original variable
- (c) causes syntax error
- (d) None of the given options

Q17

How does elements of two-dimensional array store into memory? (1)

ANS

Two dimensional arrays are also stored in liner order. As like one dimensional array.

Q18

What is a structure? (1)

ANS

In structure, we introduce a new data type. "A structure is a collection of variables under a single name. These variables can different types, and each has a name that is used to select it from the structure"

Q19 (2)

When a pointer is incremented then how many bytes will it move to change its address?

ANS

If an integer occupies four bytes in the memory, then the `yptr++;` will increment its value by four.

Q20

What happens when we increment a pointer? (3)

ANS

become 11. The increment of a pointer depends on its data type. The data type, the pointer points to, determines the amount of increment. In this case, `yptr` is an integer pointer. Therefore, when we increment the `yptr`, it points to the next integer in the memory. If an integer occupies four bytes in the memory, then the `yptr++;` will increment its value by four. This can be understood from the following example.

Q21

What are the advantages of random access file over sequential access file? (5)

Q22

Write a C/C++ program which calculates the aggregate of a student. The aggregate can be calculated by the formula: (10)

$$\text{Aggregate} = (\text{Matrix\_marks} * 2 + \text{Fsc\_marks} * 4) / 24$$

If the aggregate of a student is less than 150 then the program should display message

“You can not be admitted to VU” otherwise display the message
“Congratulation! You admitted in VU “

ANS

```
#include<iostream.h>
#include<conio.h>

main()
{   int m,f;
    float a;
    m=254;
    f=340;
    a = ((m*2) + (f*4))/24;   if(a <
150)
    {
        cout <<"You can not be admitted to VU";
    }   else
    {
        cout <<"Congratulation! You admitted in VU ";
    }
    //Aggregate = (Matrix_marks*2 + Fsc_marks*4) / 24

    getche();
}
```


Q1

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

- (a) cplex.h
- (b) ctype.h
- (c) stdio.h
- (d) delay.h

Q2

The header file which is used for input and output is

- (a) maths.h
- (b) string.h
- (c) iostream.h
- (d) ctype.h

Q3

Suppose `int multi[5][10];` when we are using `**multi`, it means,

- (a) Single dereferencing
- (b) Single referencing
- (c) Double referencing
- (d) Double dereferencing

Q4

To access the data members of structure _____ is used.

- (a) dot operator (.)
- (b) * operator
- (c) operator (d) None of given.

Q5

The precedence of * is higher than dot operator (.)operator

- (a) True
- (b) False

Q6

Which of the following is the starting index of an array in C++? (a) 0

- (b) 1
- (c) -1

- (d) any number

Q7

When a call to function statement is encountered,

- (a) The control transfers to its Prototype
- (b) The control transfers to its definition
- (c) Control returns to statement following function call
- (d) The compiler stops execution of whole program

Q8

A function must always return value.

- (a) True
- (b) False

Q9

If an array has 100 elements, what is allowable range of subscripts?

- (a) 0 – 99
- (b) 1 – 99
- (c) 0 – 100
- (d) 1 – 100

Q10

If a pointer appears on left hand side of an assignment operator then right side of that assignment operator must be,

- (a) Variable name
- (b) Address of variable
- (c) Variable value
- (d) Constant

Q11

Editors are used to compile the code.

- (a) True
- (b) False

Q12

Which bitwise operator returns false if both bits are 1?

- (a) AND
- (b) XOR

(c) NOT

(d) OR

Q13

What does !(7) evaluate to in decimal where ! is a NOT operator? (a) 7

(b) 8

(c) 9

(d) 10

Q14

Structures cannot be passed as Function Parameters

(a) True

(b) False

Q15

When break statement is encountered in a loop body it,

(a) Transfers the control outside from current loop

(b) Transfers the control outside from current program (c) Enforces the next iteration of loop (d) Generates compile time error.

Q16

A union is a user-defined data type that contains only _____ from its list of members at a time.

(a) One object

(b) Two objects

(c) Three objects

(d) None of the given options

Q17

Why programming is important? Describe in ONE line. (1)

"A program is a precise sequence of steps to solve a particular problem."

Q18

Which bitwise operator returns true if both bits are different and returns false if both bits are same? (1)

ANS

1. !=

2. ==

Q19

Why we close a file after use? (2)

ANS

To save our data stored on file. Also this process makes our program fast and reliable.

Q20

Can you use an assignment operator to assign the value of one C-string to another? (3)

ANS

Yes we can assign value c-string to another i.e char
a={'I Love Pakistan'}; char b={'I Love Pakistan'};

Q21

The statement `int Name [2][2];` define a 2x2 array, Write the code which read data from keyboard for this array. (5)

ANS

```
for(int i=0; i<2; i++)
{
    for (w=0; w<2; w++)
    {
        cin >>Name[i][w];
    }
    cout <<endl;
}
for(int i=0; i<2; i++)
{
    for (w=0; w<2; w++)
    {
```

```

        cout<<Name[i][w]<<" ";
    }
    cout <<endl;
}

```

Q22

Write a program which reads a text file "PlayersInfo.txt" residing in the current directory. Open the file PlayersInfo.txt in read mode and assign these values to the struct Player; assume order of the data in the file to be exactly the same as the order of struct attributes. The struct Player has following attributes

- i) Name
- ii) Height
- iii) Age iv) Score v) Game

After reading the file and assigning values to the struct, in the end close the file

PlayersInfo.txt. (10)

Q1

The size of int data type is

- (a) 1 bytes
- (b) 2 bytes
- (c) 3 bytes
- (d) 4 bytes

Q2

When the logical operator AND (&&) combine two expressions exp1 and exp2 then the result will be true only,

- (a) When both exp1 and exp2 are true
- (b) When both exp1 and exp2 are false
- (c) When exp1 is true and exp2 is false
- (d) When exp1 is false and exp2 is true

The correct syntax of do-while loop is,

- (a) (condition) while; do { statements; };
- (b) { statements; } do-while ();
- (c) while(condition); do { statements; };

(d) `do { statements; } while (condition);`

Q4

_____ provide communication channels between files and program.

- (a) Streams
- (b) Language like C++
- (c) `Function seekg()`
- (d) None of the above

Q5

All elements of an array must be of,

- (a) different data type
- (b) float data only
- (c) character data only
- (d) `same data type`

Q6

Function `seekg()` takes _____ parameter(s).

- (a) 0
- (b) `1`
- (c) 2
- (d) 3

Q7

Structures help to define program-specific _____.

- (a) `functions`
- (b) datatypes
- (c) Arithmetic operations
- (d) None of the given options.

Q8

In the declaration of two dimensional array,

- (a) `First index represents row and second represents column`
- (b) First index represents column and second represents row
- (c) Both indexes represent rows
- (d) Both indexes represent column

Q9

What will be the result of arithmetic expression $6+27/3*3$? (a) `33`

- (b) 45

- (c) 9
- (d) 30

Q10

Which of the function call is call by value for the following function prototype?

float area (int);

- (a) area(&num) ;
- (b) area(num) ;
- (c) area(int num) ;
- (d) area(*num) ;

Q11

How many bytes are occupied by declaring following array of characters?

char str[] = "programming";

- (a) 10
- (b) 11
- (c) 12
- (d) 13

Q12

What will be the correct syntax to assign an array named arr of 5 elements to a pointer ptr?

- (a) *ptr = arr ;
- (b) ptr = arr ;
- (c) *ptr = arr[5] ;
- (d) ptr = arr[5] ;

Q13

Let ptr1 and ptr2 are pointer variables then which of the following arithmetic operation is allowed on pointers?

- (a) Addition
- (b) Subtraction
- (c) Multiplication
- (d) All of the above

Q14

The variables having a name, type and size are just like empty boxes.

- (a) True
- (b) False

Q15

When break statement is encountered in a loop body it,

- (a) Transfers the control outside from current loop
- (b) Transfers the control outside from current program (c) Enforces the next iteration of loop (d) Generates compile time error.

Q16

If two programs a and b are trying to open a file xyz.txt at approximately same time then

- (a) Both programs will generate error
- (b) One of them will succeed in opening that file and other will fail
- (c) Both programs will open the file
- (d) One of the program will re-start

Q17

What is meant by array manipulation? (1)

Q18

What will be the value of x after the execution of the following code segment? (1)

```
int x =10; int y
=30; int *xptr =
&x;
x = *xptr + 10;
```

Q19 (2)

What is the output of the code given below? void main()

```
{
    int a=10,b=20; char
x=1,y=0; if(a,b,x,y)
    {
        cout << "EXAM";
    } }
```

Q20

What is Overflow condition? (3)

ANS

When we try to store larger information in a variable, than a data type can store, overflow condition occurs.

Q21

Write code which read a string not greater than 20 characters from keyboard stored it in an array Name and display it on the screen. (5)

ANS

```
char string[19]; cout<<"Enter a
string"; cin >> string;
```

Q22 (10)

Write a C++ program which contains a user-define function named convertHeight which takes height of person in centimeter as an argument. This function converts the height in centimeter into feet and inches and displays them on the screen.

Program should prompt the user to enter height in centimeter and pass it to function convertHeight as an argument which displays height in feet and inches.

Hint:

1 foot = 12 inches

1 inch = 2.5 cm

ANS

```
#include<iostream.h>
```

```
#include<conio.h>
```

```
void convertHeight (int);
```

```
main()
```

```
{ int hight;
```



```
    cout << "Enter the High of the Person = ";    cin  
>> high;    convertHeight(high);
```

```
    getch();  
}
```

```
void convertHeight (int f)
```

```
{  
    //1 foot = 12 inches  
    //1 inch = 2.5 cm  
    int i,c;    i  
= f*12;  
    c = i*2.5;  
    cout << "high in Feet = "<<f<<endl;    cout  
<< "high in inches = "<<i<<endl;  
    cout << "high in CM = "<<c<<endl;  
}
```

Q1

The data type of size one byte is

- (a) char
- (b) int
- (c) long
- (d) double

Q2

If Num is an integer variable then Num*= 4; means,

- (a) Multiply Num 4 times

- (b) Multiply 4 with Num and display
- (c) Multiply 4 with Num and assign the result to Num
- (d) Add 4 with Num

Q3

Member function tellg() returns the current location of the _____ pointer.

- (a) tellptr()
- (b) write()
- (c) seekg()
- (d) get()

Q4

If we want to store a string "abc" in an array str then the size of this array must be at least,

- (a) 2
- (b) 3
- (c) 4
- (d) 5

Q5

Pointer is a variable which store,

- (a) Values
- (b) Data
- (c) Memory Address
- (d) Data Type

Q6

C is widely known as development language of _____ operating system. (a) Linux

- (b) Windows
- (c) Unix
- (d) Mac OS

Q7

C++ is a case-sensitive language

- (a) True
- (b) False

Q8 What is the output of the following code?

```
for (int a = 1; a <= 1; a++) cout << a++; cout << a;
```

- (a) 22

- (b) 12
- (c) 23
- (d) 13

Q9

A continue statement causes execution to skip to

- (a) the return 0; statement
- (b) the first statement after the loop
- (c) the statements following the continue statement
- (d) the next iteration of the loop

Q10

If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block? (a) parentheses ()

- (b) braces { }
- (c) brackets []
- (d) arrows < >

Q11

What will be the correct syntax for the following function call?

float square (int &);

- (a) square (int num);
- (b) square (&num);
- (c) square (num);
- (d) square (*num);

Q12

Which of the following is the correct way to assign an integer value 5 to element of a matrix say 'm' at second row and third column?

- (a) m[2][3] = 5 ;
- (b) m[3][2] = 5 ;
- (c) m[1][2] = 5 ;
- (d) m[2][3] = '5';

Q13

How many dimensions does n-dimensional array has?

- (a) n dimensions (b) 2n dimensions
 (c) (n+1) dimensions
 (d) (n-1) dimensions

Q14

Consider the following code segment. What will be the output of following code?

```
int addValue (int *a){ int
b = (*a) + 2; return b ;
}

main () { int x =6 ; cout << x << "," ;
; cout << addValue(&x) << "," ;

cout << x ;
}
```

- (a) 6,8,6
 (b) 6,6,8
 (c) 6,8,8
 (d) 6,6,6

Q15

If most significant bit of un-signed number is 1 then it represents a positive number.

- (a) True
 (b) False

Q16

When we declare a multidimensional array the compiler store the elements of multidimensional array in the form of,

- (a) Contiguous memory location
 (b) Matrix
 (c) Columns
 (d) Rows

Q17

What is the functionality of the function:char *strncat (char *s1, const char *s2, size_t n)

(1)

ANS

<code>char *strncat(char *s1, const char *s2, size_t n)</code>	Appends at most n characters of string s2 to array s1 . The first character of s2 overwrites the terminating null character of s1 . The value of s1 is returned.

Q18

Write a piece of code that outputs three values of type int, long and float to a stream. (1)

ANS

```
main()
```

```
{  int a;
```

```
  long b;
```

```
  float c;
```

```
    a = 10;  b=
```

```
124568979;  c =
```

```
6.57;
```

```
    cout <<a<<"\t"<<b<<"\t"<<c;
```

```
    getch();
```

```
}
```

Q19

Which bit of the number is used as a sign bit? (2)

ANS

The most significant bit is used as a sign bit.

Q20

What is difference between single-dimensional and multi-dimensional array?

ANS

Single dimensional array used to stored lists and muli dimestional arrays used to stored value as tabler formate i.e matrix.

Q21

Write down the C++ program that calculates the Zakat on the amount entered by the user

Note: Zakat is 2.5% of the given amount (5) ANS

```
main()
```

```

{
    int amount;

    float zakat;

    cout << "Enter the Amount = ";    cin
    >> amount;    zakat = (amount*2.5)/100;
    cout << "Amount = " << amount << endl;    cout
    << "Amount = " << zakat << endl;

    getch();
}

```

Q22

What is meant by scope of identifiers? Differentiate between different scope of identifiers and explain them with examples? (10)

Scope of Identifiers

An 'Identifier' means any name that the user creates in his/her program. These names can be of variables, functions and labels. Here the scope of an identifier means its visibility. We will focus Scope of Variables in our discussion.

Now this variable 'i' can be used in any statement inside the function func1(). But consider this variable being used in a different function like:

```

void func2()
{
    int k = i + 4; //Compilation error
}

```

The variable 'i' belongs to func1() and is not visible outside that. In other words, 'is local to func1()'.
Q1

What is function of cout ?

- (a) To send data to printer
- (b) To read data from keyboard
- (c) To display message
- (d) To display output on the screen

Q2

For one byte there are _____ combinations of values that can be stored in computer.

- (A) $6 \cdot 2$
- (B) 2^7
- (C) 2^8
- (D) 2^4

Q3

_____ provide communication channels between files and program.

- (a) Streams
- (b) Language like C++
- (c) Function seekg()
- (d) None of the above

Q4

The data type before a function name represents its,

- (a) Return Type
- (b) Function data
- (c) Function arguments
- (d) Function name

Q5

In C/C++ language when an array is passed to a function then by default its passing mechanism is,

- (a) Call by value
- (b) Call by Reference
- (c) It depends on type of array
- (d) It depends on the return type of function.

Q6

Array is a data structure which store

- (a) Memory addresses
- (b) Variables
- (c) Data Type
- (d) Data

Q7

If there is more than one statement in the block of a for loop, which of the following must be placed at the beginning and the ending of the loop block? (a) parentheses ()

- (b) braces { }
- (c) brackets []
- (d) arrows < >

Q8

Array is passed by value to a function by default.

- (a) True
- (b) False

Q9

Which of the following is the correct function call having array named student of 10 elements as a parameter.

- (a) addRecord(student[]) ;
- (b) addRecord(student) ;
- (c) addRecord(student[10]) ;
- (d) addRecord(*student) ;

Q10

What will be the correct syntax for initialization of pointer ptr of type int with variable x?

- (a) int ptr = &x ;
- (b) int ptr = x ;
- (c) int *ptr = &x ;
- (d) int ptr* = &x ;

Q11

What will be the correct syntax for initialization of pointer ptr with string "programming"?

- (a) char ptr = 'programming' ;
- (b) char *ptr = "programming" ;
- (c) char *ptr = 'programming' ;
- (d) *ptr = "programming" ;

Q12

The condition in while loop may contain logical expression but not relational expression.

- (a) True
- (b) False

Q13

We want to access array in random order which approach is better?

- (a) Pointers

(b) Array index

(c) Both pointers and array index are better (d) None of the given options.

Q14

Single line comments explaining code would be preceded like in the following example.

(a) /*

(b) //

(c) /

(d) /**

Q15

Function write() takes _____ as parameter(s).

(a) String of pointer type

(b) String and no. of bytes to be written

(c) Pointer array of characters and delimiter

(d) String of variable lengths, no. of bytes to be read and flags

Q16

Structure is a collection of _____ under a single name.

(a) Only Functions

(b) Only Variables

(c) Both Functions and Variables

(d) None of the given options

Q17

What will be the correct syntax to initialize a pointer 'ptr' with two-dimensional array 'm'? (1)

ANS

```
int m[2][2];
```

```
int * ptr; ptr
```

```
= *m;
```

Q18

Which one of the loop (while or do-while) must be used if it is necessary to execute a loop at least once? (1)

ANS

do-while loop

Q19

Identify each of the following function as string conversion function or string manipulation function. (2) `double atof(const char *nptr)` `char *strcpy ( char *s1, const char *s2)` `int atoi(const char *nptr)`

ANS

1. `double atof(const char *nptr)` --- Converts the string nPtr to double. 2. `char *strcpy ( char *s1, const char *s2)` - Copies string s2 into character array s1. The value of s1 is returned.

3. `int atoi(const char *nptr)`-- Converts the string nPtr to int.

Q20

What is difference between single-dimensional and multi-dimensional array? (3)

ANS

Single dimensional array used to stored lists and multi dimensional arrays used to stored value as table format i.e matrix.

Q21

What will be the output of following code segment? (5) `int num[10] = {2, 3, 5, 8, 9, 10, 12, 15, 19, 20}; int *ptr = num; for (int i=0; i<10; i+=2){`

`cout << *(ptr+i) << " , ";`
`}`

ANS

2, 5, 9, 12, 19,

Q22

Write a C++ program which contains a user-defined function named `convertHeight` which takes height of person in centimeter as an argument. This function converts the height in centimeter into feet and inches and displays them on the screen. (10)

Program should prompt the user to enter height in centimeter and pass it to function `convertHeight` as an argument which displays height in feet and inches.

Hint:

1 foot = 12 inches

1 inch = 2.5 cm

ANS

```
#include<iostream.h>
```

```
#include<conio.h>
```

```
void convertHeight (int);
```

```
main()
```

```
{  int hight;
```

```
    cout <<"Enter the High of the Person = ";  cin  
>> hight;  convertHeight(hight);
```

```
    getche();
```

```
}
```

```
void convertHeight (int f)
```

```
{
```

```
    //1 foot = 12 inches
```

```
    //1 inch = 2.5 cm
```

```
    int i,c;  i  
    = f*12;  c =
```

```
    i*2.5;  cout
```

```
    <<"high in
```

```
    Feet =
```

```
    "<<f<<endl;
```

```
    cout <<"high
```

```
    in inches =
```

```
    "<<i<<endl;
```

```
    cout <<"high in CM = "<<c<<endl;
```

```
}
```

Q1

Compiler is a

- (a) System software
- (b) Application Software
- (c) Driver
- (d) Editor

Q2

In while loop the loop counter must be initialized,

- (a) With in the loop
- (b) Before entering the loop
- (c) At the end of the loop
- (d) None of the given options

Q3

If Num is an integer variable then $\text{Num} *= 4$; means,

- (a) Multiply Num 4 times
- (b) Multiply 4 with Num and display
- (c) Multiply 4 with Num and assign the result to Num
- (d) Add 4 with Num

Q4

In C/C++ ,the arguments are passed by _____ to a function by default . (a) reference

- (b) value
- (c) data
- (d) type

Q5

Disks is divided into _____ with power of _____.

- (a) Chunks, 2^n
- (b) Blocks, n^2
- (c) Blocks, 2^n
- (d) Chunks, n^2

Q6

C is widely known as development language of _____ operating system. (a) Linux

(b) Windows

(c) Unix

(d) Mac OS

Q7

Assignment operator '=' is a

(a) Unary operator

(b) Binary operator (c)

Ternary operator

(d) None of the given options

Q8

Consider the following code segment. What will be the output of the following program?

```
int func(int) ;  
int num = 10 ;  
  
int main(){ int  
num ; num = 5 ;  
cout << num ;  
cout << func(num) ;  
}  
int func(int x){  
return num ;  
}
```

(a) 5, 5

(b) 10, 5

(c) 5, 10

(d) 10, 10

Q9

Name of an array is a constant pointer.

(a) True

(b) False

Q10

What will be the correct syntax to assign an array named arr of 5 elements to a pointer ptr?

(a) *ptr = arr ;

- (b) `ptr = arr ;`
- (c) `*ptr = arr[5] ;`
- (d) `ptr = arr[5] ;`

Q11

If there are $2^{(n+1)}$ elements in an array then what would be the number of iterations required to search a number using binary search algorithm?

- (a) n elements
- (b) (n+1) elements
- (c) $2(n+1)$ elements
- (d) $2^{(n+1)}$ elements

Q12

In C/C++, null character is represented as

- (a) `\n`
- (b) `\0`
- (c) `\t`
- (d) `\r`

Q13

How many nested loop would be required to manipulate n-dimensional array? (a) $2n$

- (b) n
- (c) n + 1
- (d) n - 1

Q14

What will be the correct syntax to access the value of fourth element of an array using pointer ptr?

- (a) `ptr[3]`
- (b) `(ptr+3)`
- (c) `*(ptr+3)`
- (d) Both 1 and 3

Q15

Single line comments explaining code would be preceded like in the following example.

- (a) `/*`
- (b) `//`
- (c) `/`

(d) /**

Q16

If a variable is passed by value to a function and the function makes some changes to that variable then it

(a) does not affect the original variable

(b) affects the original variable

(c) causes syntax error

(d) None of the given options

Q17

What is meant by *num and &num? [1]

ANS

* num is a pointer and &num is a reference to that pointer.

Q18

Suppose there is a pointer to structure *sPtr. How can we access the data member 'name' with sPtr? [1]

ANS

Structure data members using pointers Using the * operator;

(*sPtr).name

Q19

Why we close a file after use? [2]

ANS

To save our data stored on file. Also this process makes our program fast and reliable

Q20

Define Flow chart. [3]

ANS

Flow Chart

A flow chart is a pictorial representation of a program. There are labeled geometrical symbols, together with the arrows connecting one symbol with other. A flow chart helps in correctly designing the program by visually showing the sequence of instructions to be executed.

Q21

Write down the function definition if we want to pass the arguments to a function by reference without changing the values stored at that addresses. [5]

Q22

From writing to execution of the program following software are used explain for what purpose each is used. [10]

Editor

Compiler/Interpreter

Linker

Loader

ANS

Editors is a tool for writing the code of a program. For this purpose we used Editors in which we write our code. We can use word processor too for this, but word processors have many other features like bold the text, italic, coloring the text etc, so when we save a file written in a word processor, lot of other information including the text is saved on the disk. For programming purposes we don't need these things we only need simple text. Text editors are such editors which save only the text which we type. So for programming we will be using a text editor

Compiler and Interpreter

Compilers translate the English like language (Code written in C) into a language (Machine language) which computers can understand. The Compiler read the whole program and translates it into machine language completely. The difference between interpreter and compiler is that compiler will stop translating if it finds an error and there will be no executable code generated whereas Interpreter will execute all the lines before error and will stop at the line which contains the error. So Compiler needs syntactically correct program to produce an executable code. We will be using compiler in our course

As we write the code in English and we know that computers can understand only 0s and 1s. So we need a translator which translates the code of our program into machine language. There are two kinds of translators which are known as Interpreter and Compilers. These translators translate our program which is written in C-Language into Machine language. Interpreters translates the program line by line meaning it reads one line of program and translates it, then it reads second line, translate it and so on. The benefit of it is that we get the errors as we go along and it is very easy to correct the errors. The drawback of the interpreter is that the program

executes slowly as the interpreter translates the program line by line. Another drawback is that as interpreters are reading the program line by line so they cannot get the overall picture of the program hence cannot optimize the program making it efficient.

Linker Most of the time our program is using different routines and functions that are located in different files, hence it needs the executable code of those routines/functions. Linker is a tool which performs this job, it checks our program and includes all those routines or functions which we are using in our program to make a standalone executable code and this process is called Linking

Loader after a executable program is linked and saved on the disk and it is ready for execution. We need another process which loads the program into memory and then instruct the processor to start the execution of the program from the first instruction (the starting point of every C program is from the main function). This processor is known as loader. Linker and loaders are the part of development environment. These are part of system software.

Q1

There are mainly ----- types of software

- (a) Two
- (b) Three
- (c) Four
- (d) Five

Q2

<, <=, >, >= are called ----- operators.

- (a) Logical
- (b) Arithmetic
- (c) Relational
- (d) Conational

Q3

In order to get 256 from the number 2568 we divide this number by 10 and take,

- (a) Its remainder

(b) The number (c) Its quotient

(d) Its divisor

Q4

If `int x = 10`; then the value of `x/= 3`; will be,

- (a) 10
- (b) 3
- (c) 13
- (d) 1

Q5

How many parameter(s) function `getline()` takes?

- (a) 0
- (b) 1
- (c) 2
- (d) 3

Q6

Suppose `int multi[5][10]`; when we are using `**multi`, it means,

- (a) Single dereferencing
- (b) Single referencing
- (c) Double referencing
- (d) Double dereferencing

Q7

To access the data members of structure _____ is used.

- (a) dot operator (.)
- (b) * operator
- (c) operator (d) None of given.

Q8

There is NO difference between bitwise AND operator (`&`) and Logical AND (`&&`) operator.

- (a) True
- (b) False

Q9

Which of the following data type(s) can operate on modulus operator '`%`'?

- (a) float, int

(b) float, double

(c) int

(d) char

Q10

What's wrong with this while loop?

```
while( (i < 10) && (i > 24))
```

(a) the logical operator && cannot be used in a test condition

(b) the while loop is an exit-condition loop

(c) the while loop is an exit-condition loop

(d) the test condition is always true

Q11

The switch structure is a _____ construct

(a) single-selection

(b) bi-selection

(c) multiple-selection

(d) unconditional

Q12

Keyword 'array' must be used to declare an array.

(a) True

(b) False

Q13

What will be the correct syntax to declare two-dimensional array of float data type?

(a) float arr{2}{2} ;

(b) float arr[2][2] ;

(c) float arr[2,2] ;

(d) float[2][2] arr ;

Q14

When an array element is passed to a function then this array element is passed to the function,

(a) By reference

(b) By data type

(c) By value

(d) By data

Q15

Which of the following operator is used to access the value of variable pointed to by a pointer?

- (a) * operator
- (b) -> operator
- (c) && operator
- (d) & operator

Q16

Paying attention to detail in designing a program is _____

- (a) Time consuming
- (b) Redundant
- (c) Necessary
- (d) Somewhat Good

Q17

How does elements of two-dimensional array store into memory? (1) Two dimensional arrays are also stored in liner order. As like one dimensional array.

Q18

Which strategy is used by binary search algorithm to search a number? (1)

ANS

'divide and conquer' strategy is applied.

Q19

Write down the general syntax of switch statement. (2)

ANS

```
switch ( variable/expression )  
{  
  case constant1 : statementList1 ; case constant2:  
  statementList1 ;  
  default: statementList1 ;  
}
```

Q20

What is a Linker? (3)

Linker Most of the time our program is using different routines and functions that are located in different files, hence it needs the executable code of those routines/functions. Linker is a tool which performs this job, it checks our program and includes all those routines or functions which we are using in our program to make a standalone executable code and this process is called Linking

Q21

What are similarities and differences between Structures and Unions? (5)

Structure

In structures, the data members are public by default. It means that these are visible to all and anyone can change them. Is there any disadvantage of this? Think about the date.

syntax



Fantasy.fear@gmail.com

Fantasy.fear@gmail.com

```
struct student
```

```
{
```

```
    char name[60]; char  
    address[100];
```

```
    float GPA;
```

```
};
```

Unions We have another construct named union. The concept of union in C/C++ is: if we have something in the memory, is there only one way to access that memory location or there are other ways to access it. We have been using int and char interchangeably in our programs. We have already developed a program that prints the ASCII codes. In this program, we have stored a char inside an integer. Is it possible to have a memory location and use it as int or char interchangeably? For such purposes, the construct union is used. The syntax of union is: union intOrChar

```
{
```

```
    int i;
```

```
    char c;
```

```
};
```

Q22

Differentiate between C and c++. (10)

1. C was the C++ predecessor. As its name implies, a lot of C remains in C++. Although not actually being more powerful than C.
2. C++ allows the programmer to more easily manage and operate with Objects, using an OOP (Object Oriented Programming) concept
3. C++ allows the programmer to create classes, which are somewhat similar to C structures. However, to a class can be assigned methods, functions associated to it, of various prototypes, which can access and operate within the class, somewhat like C functions often operate on a supplied handler pointer.
4. Although it is possible to implement anything which C++ could implement in C, C++ aids to standardize a way in which objects are created and managed, whereas the C programmer who implements the same system has a lot of liberty on how to actually implement the internals, and style among programmers will vary a lot on the design choices made
5. In C, some will prefer the handler-type, where a main function initializes a handler, and that handler can be supplied to other functions of the library as an object to operate on/through.

Others will even want to have that handler link all the related function pointers within it which then must be called using a convention closer to C++.

6. C++ applications are generally slower at runtime, and are much slower to compile than C programs. The low-level infrastructure for C++ binary execution is also larger. For these reasons C is always commonly used even if C++ has a lot of popularity, and will probably continue to be used in projects where size and speed are primary concerns, and portable code still required (assembly would be unsuitable then).

Q1

The remainder (%) operator is

- (a) A logical operator
- (b) An arithmetic operator
- (c) A relational operator
- (d) A division operator

Q2

If `int sum = 10;` then the value of the statement `sum = sum + 3 ;` is, (a) 7

- (b) Illegal statement
- (c) Garbage value
- (d) 13

Q3

Which of the following function(s) is/are included in `ctype.h` header file? (a) `isdigit(int c)`

- (b) `isxdigit(int c)`
- (c) `tolower(int c)`
- (d) All of the above

Q4

In C/C++ which of the following header file is used for string manipulation? (a) `stdlib.h`

- (b) `string.h`
- (c) `strings.h`
- (d) `stype.h`

Q5

_____ provide communication channels between files and program.

- (a) Streams
- (b) Language like C++
- (c) Function `seekg()`

(d) None of the above

Q6

_____ translates high level language program into machine language code

- (a) Debugger
- (b) Editor
- (c) **Compiler**
- (d) Linker

Q7

Which of the following data type(s) can operate on modulus operator '%'? **(a) float, int**

- (b) float, double
- (c) int
- (d) char

Q8

C++ is a case-sensitive language

- (a) True**
- (b) False**

Q9

To include code from the library in the program, such as iostream, a directive would be called up using this command.

- (a) #include "iostream.h"
- (b) include <iostream.h>
- (c) include <iostream.h>
- (d) #include <iostream.h>**

Q10

What will be the range of numbers generated by function rand () % 9?

- (a) 0 to 9
- (b) 1 to 9
- (c) 0 to 8**
- (d) 1 to 8

Q11

An array stores the numbers into consecutive memory locations. **(a) True**

- (b) False

Q12

Which of the following is the correct statement for the following declaration?

`const int *ptr.`

- (a) ptr is a constant pointer
- (b) ptr is constant integer pointer
- (c) ptr is a constant pointer to int
- (d) ptr is a constant pointer to int

Q13

Which of the following header file defines the `rand()` function?

- (a) `iostream.h`
- (b) `conio.h`
- (c) `stdlib.h`
- (d) `stdio.h`

Q14

Consider the following code segment. What will be the output of following code?

```
int addValue (int *a){ int b = (*a) +  
2;  
return b ;  
}  
main () { int x =6 ; cout << x << "," ; cout  
<< addValue(&x) << "," ;  
cout << x ;  
}
```

- (a) 6,8,6
- (b) 6,6,8
- (c) 6,8,8
- (d) 6,6,6

Q15

Identifier is a name that can be given to variables, labels and functions. (a) True

- (b) False

Q16

For which array, the size of the array should be one more than the number of elements in an array?

- (a) Int
- (b) Char
- (c) Double
- (d) float

Q17

Give a precise definition of function . (1)

ANS

Functions In C/C++, functions are a way of modularizing the code. A bigger problem is broken down into smaller and more manageable parts. There is no rule of thumb for the length of each part but normally one function's length is not more than one screen.

Q18

What will be the size of array if we initialize an array with declaration: `int arr[] = {0, 0, 0, 0};`? (1)

ANS

`int arr[3];`

Q19

What is the difference between switch statement and if statement. (2)

ANS

In switch statement only one variable can be tested on various condition but using if we can tested multi variables in single statement

Q20

Evaluate the following arithmetic expressions. (3)

- a) $X = 2 + 6 * 4 - 4 * 20 / 5 + 3 * 2$
- b) $Y = (6 * 7) - (2 + 3) * (3 - 1) + 5 * (3 + 1)$

ANS

- a) $X = 2 + (6 * 4) - (4 * 20) / 5 + (3 * 2)$

b) $Y = (6 * 7) - (2 + 3) * (3 - 1) + (5 * (3 + 1))$

a) 16

b) 52

Q21

What is the difference between = in C as compared to = used in algebra. (5)

ANS

In C = sign is used to assigned the value in algebra = sign is show that the both side are equal.

In C there must be a variable on the = sign and the right side of the = sign must be a arithmetic expression, variable or a value.

In algebra both side of the equation may or may not be expression. Q22

Write a program which consists of three variables Area, Per, Base, this program should find the area of triangle using the formula, (10)

$$\text{Area} = (\text{Base} * \text{Per})/2$$

```
#include<iostream.h>
#include<conio.h> main()
{
    float Area, Per, Base;    // Area =
    (Base * Per)/2
    Per = 5.0;
    Base = 2.5;
    Area = (Base * Per)/2;    cout <<"Area =
    "<<Area;  getch();
}
```

Q1

In C/C++ language the header file which is used to perform useful task and manipulation of character data is

- (e) cplex.h
- (f) ctype.h
- (g) stdio.h
- (h) delay.h

Q2

The header file which is used for input and output is

- (e) maths.h
- (f) string.h
- (g) iostream.h
- (h) ctype.h

Q3

Suppose `int multi[5][10]`; when we are using `**multi`, it means,

- (e) Single dereferencing
- (f) Single referencing
- (g) Double referencing
- (h) Double dereferencing

Q4

To access the data members of structure _____ is used.

- (e) dot operator (.)
- (f) * operator
- (g) operator (h) None of given.

Q5

The precedence of * is higher than dot operator (.)operator

- (c) True
- (d) False

Q6

Which of the following is the starting index of an array in C++? (e) 0

- (f) 1
- (g) -1
- (h) any number

Q7

When a call to function statement is encountered,

- (e) The control transfers to its Prototype

- (f) The control transfers to its definition
- (g) Control returns to statement following function call
- (h) The compiler stops execution of whole program

Q8

A function must always return value.

- (c) True
- (d) False

Q9

If an array has 100 elements, what is allowable range of subscripts?

- (e) 0 – 99
- (f) 1 – 99
- (g) 0 – 100
- (h) 1 – 100

Q10

If a pointer appears on left hand side of an assignment operator then right side of that assignment operator must be,

- (e) Variable name
- (f) Address of variable
- (g) Variable value
- (h) Constant

Q11

Editors are used to compile the code.

- (c) True
- (d) False

Q12

Which bitwise operator returns false if both bits are 1?

- (e) AND
- (f) XOR
- (g) NOT
- (h) OR

Q13

What does !(7) evaluate to in decimal where ! is a NOT operator? (e) 7

- (f) 8
- (g) 9
- (h) 10

Q14

Structures cannot be passed as Function Parameters

- (c) True
- (d) False

Q15

When break statement is encountered in a loop body it,

- (e) Transfers the control outside from current loop
- (f) Transfers the control outside from current program
- (g) Enforces the next iteration of loop
- (h) Generates compile time error.

Q16

A union is a user-defined data type that contains only _____ from its list of members at a time.

- (e) One object
- (f) Two objects
- (g) Three objects
- (h) None of the given options

Q17

Why programming is important? Describe in ONE line. (1)

Q18

Which bitwise operator returns true if both bits are different and returns false if both bits are same? (1)

Q19

Why we close a file after use? (2)

Q20

Can you use an assignment operator to assign the value of one C-string to another? (3)

Q21

The statement `int Name [2][2];` define a 2x2 array, Write the code which read data from keyboard for this array. (5)

Q22

Write a program which reads a text file "PlayersInfo.txt" residing in the current directory. Open the file PlayersInfo.txt in read mode and assign these values to the struct Player; assume order of the data in the file to be exactly the same as the order of struct attributes. The struct Player has following attributes

- i) Name
- ii) Height iii) Age iv) Score v) Game

After reading the file and assigning values to the struct, in the end close the file PlayersInfo.txt. (10)

Q23

Q2

Write a program to convert upper case letter to lower case letter. (5) Write a program to convert lower case letter to upper case letter. (5) Q2

Write a program to convert upper case letter to lower case letter. (5)

Ans:

```
#include <iostream>
```

```
using std::cout; using  
std::cin; using std::endl;
```

```
#include <stdlib.h>
```



```

int main() {    char inputString[100];    char lowerCase[100];
cout<<"Please enter a string (maximum 100 characters): ";
gets(inputString);    int i=0;    for(i=0; i<strlen(inputString); i++)
{
    lowerCase[i] = tolower(inputString[i]);
}    lowerCase[i]='\0';
puts(lowerCase);
system("PAUSE");
return 0;
}

```

Write a program to convert lower case letter to upper case letter. (5)

Ans:

```

#include <iostream>

using std::cout; using std::cin; using std::endl; #include <stdlib.h> int
main() {    char inputString[100];    char upperCase[100];
cout<<"Please enter a string (maximum 100 characters): ";
gets(inputString);    int i=0;    for(i=0; i<strlen(inputString); i++)
{
    upperCase[i] = toupper(inputString[i]);
}    upperCase[i]='\0';
puts(upperCase);
system("PAUSE");
return 0;
}

```

