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?
System Software

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;
```

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] << "  ";
 }
```

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."

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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

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

The size of int data type is

► 1 bytes

► 2 bytes

► 3 bytes

► 4 bytes

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

In Flow chart process is represented by

► Rectangle

► Arrow symbol

► Oval

► Circle

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

► No effect on program

► Program stops its execution

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

► 7

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

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

const int *ptr.

► ptr is a constant pointer

ptr is constant integer pointer (Sorry format ►   disable)

ptr is a constant pointer to ►   int

ptr is a pointer to const ►   int

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 ►

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

.exe ►

.txt ►

.h ►

.c ►

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

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

False ►

True ►

Question No: 14 (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: 15 (Marks: 1) - Please choose one

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

► True

False ►

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

Syntax of union is identical to _____

► Structure

► Class

► Function

► None of the given options

Question No: 17 (Marks: 1)

Suppose 'z' is a variable of type int. What will be the result of x = 27/4:

Question No: 18 (Marks: 1)

Give the general syntax of definition of structure.

Question No: 19 (Marks: 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: 20 (Marks: 3)

What is compiler?

Question No: 21 (Marks: 5)

What is the difference between while and for loop?

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