

SET – 01.

1. Which of this is used to skip one iteration:

1. break
2. continue
3. goto
4. return

2. Which of the following does not require to include math.h header file?

1. pow()
2. rand()
3. sqrt()
4. sinh()

3. Which has the highest precision?

1. float
2. double
3. unsigned long int
4. Long int

4. Choose the correct statement

```
while (0 == 0) { }
```

1. It has syntax error as there are no statements within braces { }
2. It will run forever
3. It compares 0 with 0 and since they are equal it will exit the loop immediately
4. It has syntax error as the same number is being compared with itself

5. Predict the output of following code:

```
main()
{
    int a=10,x;
    x= a- ++a;
    printf("%d",x);
}
```

1. 19
2. 20
3. 22
4. 23

6) Guess the output:

```
main()
{
    printf("%d", sizeof('a'));
    //same as → sizeof(97)
}
```

1. 2 or 4 —
2. 1 or 3
3. Garbage value
4. ASCII value of a

7. Predict the output of following code:

```
main()
{
    int a=b=c=d=10;
    printf("%d,%d,%d,%d",a,b,c,4);
}
```

1. Error
2. 10,10,10,10
3. Garbage Value,GarbageValue,Garbage Value,10
4. Garbage Value,GarbageValue,GarbageValue,Garbage Value

8. Select the missing statement?

```
#include
long int fact(int n);
int main()
{
    \\missing statement
}
long int fact(int n)
{
```

```
if(n>=1)
return n*fact(n-1);
else
return 1;
}
1.printf("%ll\n",fact(5));
2.printf("%u\n",fact(5));
3.printf("%d\n",fact(5));
4. printf("%ld\n",fact(5));
```

9. If a function's return type is not explicitly defined then it's default to _____ (In 3).

1. int
2. float
3. void
4. Error

10. How many times the below loop will be executed?

```
#include
int main()
{
int i;
for(i=0;i<5;i++) printf("Hello\n"); }
```

1. 5
2. 1
3. 0
4. 3

SET – 02.

1) What is the output of this C code?

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
int k = 5;
```

```
int *p = &k;
```

```
int **m = &p;
```

```
printf(“%d%d%d\n”, k, *p, **p);
```

```
}
```

1. 5 5 5

2. 5 5 junk

3. 5 junk junk

4. Compile time error

2) Which of the following statements about stdout and stderr are true?

1) They both are the same

2) Run time errors are automatically displayed in stderr

3) Both are connected to the screen by default.

4) stdout is line buffered but stderr is unbuffered

3) Given the below statements about C programming language;

1) main() function should always be the first function present in a C program file

2) all the elements of a union share their memory location

3) A void pointer can hold address of any type and can be typecasted to any type

4) A static variable holds random junk value if it is not initialised

Which of the above are correct statements?

1. 2,3

2. 1,2

3. 1,2,3

4. 1,2,3,4

4) If a function is defined as static, it means

1. The value returned by the function does not change

2. all the variable declared inside the function

automatically will be assigned initial value of zero

3. It should be called only within the same source code/program file.

4. None of the other choices as it is wrong to add **static** prefix to a function

5) Comment on the below while statement

```
while (0 == 0) { }
```

1. It has syntax error as there are no statements within braces { }

2. It will run forever

3. It compares 0 with 0 and since they are equal it will exit the loop immediately

4. It has syntax error as the same number is being compared with itself

6) **How many times hello will print ?**

```
#include<stdio.h>
```

```
int main(voi4)
```

```
{
```

```
int i;
```

```
for(i=0;i<5;i++);
```

```
printf(“hello”);
```

```
}
```

1. Compilation error

2. Runtime error

3. 4

4. 1

7) atoi() function is used for:

1. convert ASCII character to integer value

2. convert a character string to its equivalent integer value

3. gets index value of character in an array

4. converts an array of characters to array of

equivalent integers

8) Which of the following is NOT declared in string.h

?

1. strlen()
2. strcpy()
3. strcmp()
4. strdup()

9) which of the below function is NOT declared in

math.h ?

1. and()
2. pow()
3. exp()
4. acos()

10) Where are the local variable stored?

1. In a Queue
2. In stack Memory
3. In hard Disk
4. In heap Memory

SET – 03.

1. How many times loop will executed ?

```
#include
int main()
{
int x,y;
for(x=5;x>=1;x-)
{
for(y=1;y<=x;y++)
printf("%d\n",y);
}
}
```

- 1) 11
- 2) 13
- 3) 15
- 4) 10

2. Which of the following indicate the end of file ?

- 1) feof()
- 2) EOF
- 3) Both feof() and EOF
- 4) None of the mentioned

3. If a functions return type is not explicitly defined then it is default to(in 3).

- 1) int
- 2) float
- 3) void
- 4) error

4. Where the local variable is stored ?

- 1) Disk
- 2) Stack
- 3) Heap
- 4) Register

5. How many times loop will executed ?

```
#include
int main()
{
int i;
for(i=0;i<5;i++)
{
printf("Hello\n");
}
}
```

- 1) 0
- 2) 1
- 3) 3
- 4) 5

6. What is dangling pointer?

- 1) points to garbage value
- 2) points to function
- 3) Both A and B
- 4) None of these

7. what is the purpose of ftell ?

- 1)to get the current file position
- 2)to get the current file attribute
- 3)to get the current file status
- 4)to get the current file name

8. What is recursion ?

- 1) looping
- 2) a function calls another function repeatedly
- 3) a fnction calls repeatedly
- 4) function calls itself repeatedly

9. What is the similarity between enum and struct ?

- 1) can assign new values
- 2) can create new data types
- 3) nothing in common

4) they are same

10. which of the following is not a fundamental datatype?

- 1) Enum
- 2) unsigned long int
- 3) Long int
- 4) double

SET – 04.

1. while declaring parameters for main, the second parameter argv should be declared as

- 1) char argv[]
- 2) char argv
- 3) char ** argv[]
- 4) char * argv[]

2. A memory leak happens when

- 1) a program allocates memory in heap but forgets to be allocate it
- 2) when an un-assigned pointer is used is freed using free function
- 3) when realloc() is called on a pointer that is not allocated
- 4) A program allocates memory in stack

3. A pointer variable can be

- 1) Changed within function.
- 2) Assigned an integer value.
- 3) None of these
- 4) Passed to a function as argument.

4. Which of the following uses structure?

- 1) Linked Lists
- 2) Array of structures
- 3) All of these
- 4) Binary Tree

5. Strings are character arrays. The last index of it contains the null-terminated character

- 1) \t
- 2) \1
- 3) \0
- 4) \n

6. Which of the following is a collection of different data types?

- 1) String
- 2) Structure
- 3) Array
- 4) Files

7. What function should be used to free the memory allocated by calloc() ?

- 1) free();
- 2) malloc(variable_name, 0)
- 3) dealloc();
- 4) memalloc(variable_name, 0)

8. In the standard library of C programming language, which of the following header file is designed for basic mathematical operations?

- 1) conio.h
- 2) stdio.h
- 3) math.h
- 4) dos.h

9. int **ptr; is?

- 1) Pointer to integer
- 2) None of these
- 3) Pointer to pointer
- 4) Invalid declaration

10. Which of the following special symbol allowed in a variable name?

- 1) (underscore)
- 2) – (hyphen)
- 3) | (pipeline)
- 4) * (asterisk)

SET - 05

1. All keywords in C are in

- 1) Uppercase letters
- 2) None of these
- 3) Lowercase letters
- 4) Camel Case letters

2. What should the program below print?

```
#include <stdio.h>
#include <string.h>
#include <stdlib2> h>
void myfunc(char** param){
    ++param;
}
int main(){
    char* string = (char*)malloc(64);
    strcpy(string, "hello_World");
    myfunc(&string);
    myfunc(&string);
    printf("%s\n", string);
    // ignore memory leak for sake of quiz
    return 0;
}
1)hello_World
2)ello_World
3)lo_World
4)llo_World
```

3. The function ____ obtains block of memory dynamically.

- 1) calloc
- 2) malloc
- 3) Both calloc & malloc
- 4) free

4. For a typical program, the input is taken using

- 1) scanf
- 2) Files
- 3) Command-line
- 4) All of the mentioned

5. What is the default return-type of getchar()?

- 1) char
- 2) int
- 3) char *
- 4) reading character doesn't require a return-type

6. Memory allocation using malloc() is done in?

- 1) Static area
- 2) Stack area
- 3) Heap area
- 4) Both Stack & Heap area

7. What is the sizeof(char) in a 32-bit C compiler?

- 1) 1 bit
- 2) 2 bits
- 3) 1 Byte
- 4) 2 Bytes

8. What type of value does sizeof return?

- 1) char
- 2) short
- 3) unsigned int
- 4) long

9. Which one is used during memory deallocation in C?

- 1) remove(p);
- 2) delete(p);
- 3) free(p);
- 4) terminate(p);

10. What is the output of this C code?

```
#include <stdio.h>

void main()
{
    int x = 97;
    int y = sizeof(x++);
    printf("x is %d", x);
}
```

- 1) x is 97
- 2) x is 98
- 3) x is 99
- 4) Run time error

SET – 06.

1. Which is the character array used to accept command line arguments?

- 1) char argv
- 2) char* argv[]
- 3) char argv[]
- 4) char* argv

2. Which is not a string function?

- 1) strstr
- 2) strcmp
- 3)strupr
- 4) strchr

3. Which of the following does not require to include math.h header file?

- 1) pow()
- 2) rand()
- 3) sqrt()
- 4) sinh()

4. What is the task of pre-processor?

- 1) Expanding
- 2) Compiling
- 3) Linking
- 4) All of the above

5. Which of the following is true?

- 1) realloc() can change the memory size of arrays
- 2) Unary operator works on only one operand
- 3) Struct and Union works in same way.
- 4) None of the above

6. Which of this is used to skip one iteration:

- 1) break
- 2) continue
- 3) goto

4) return

7. Predict the output:

```
float a = 0.1;
if(a==0.1)
printf("Yes");
else
printf("No");
```

Answer would be No.

1) Yes

2) No

8. What makes a class abstract?

- 1) By making all member functions constant.
- 2) By making at least one-member function as pure virtual function.
- 3) By declaring it abstract using the static keyword
- 4) By declaring it abstract using the virtual keyword

9. Which type of class allows only one object of it to be created?

- 1) Virtual class
- 2) Abstract class
- 3) Singleton class
- 4) Friend class

10. Which of the following concepts of OOPS means exposing only necessary information to client?

- 1) Encapsulation
- 2) Abstraction
- 3) Data hiding
- 4) Data binding

SET – 07.

1. Which type of inheritance needs a virtual function:

- 1) Multi level inheritance
- 2) Multiple inheritance
- 3) Hybrid inheritance
- 4) All of the above

2. Which of the following cannot be inherited?

- 1) Friend function
- 2) Static function
- 3) Destructor

3. Which of the following are available only in the class hierarchy chain?

- 1) Public data members
- 2) Private data members
- 3) Protected data members
- 4) Member functions

4. Which of the following is not a type of inheritance?

- 1) Multiple
- 2) Multilevel
- 3) Distributive
- 4) Hierarchical

5. The process of building new classes from existing one is called _____.

- 1) Polymorphism
- 2) Structure
- 3) Inheritance
- 4) Cascading

6. Which of the following supports the concept of hierarchical classification?

- 1) Polymorphism
- 2) Encapsulation
- 3) Abstraction

4) Inheritance

7. Which Keyword from the following is used to inherit properties from one class into another?

- 1) extends
- 2) subclasses
- 3) native
- 4) all of the mentioned

8. Which one of the following connects the high-speed high-bandwidth device to memory subsystem and CPU.

- 1) expansion bus
- 2) PCI bus
- 3) SCSI bus
- 4) none of the mentioned

9. The _____ present a uniform device-access interface to the I/O subsystem, much as system calls provide a standard interface between the application and the operating system.

- 1) devices
- 2) buses
- 3) device drivers
- 4) I/O systems

10. When device A has a cable that plugs into device B, and device B has a cable that plugs into device C and device C plugs into a port on the computer, this arrangement is called a _____.

- 1) port
- 2) daisy chain
- 3) bus
- 4) cable

SET – 08.

1.The _____ determines the cause of the interrupt, performs the necessary processing and executes a return from the interrupt instruction to return the CPU to the execution state prior to the interrupt.

- 1) interrupt request line
- 2) device driver
- 3) interrupt handler
- 4) All of these

2.The _____ register is read by the host to get input.

- 1) flow in
- 2) flow out
- 3) data in
- 4) data out

3.The _____ register is written by the host to send output.

- 1) status
- 2) control
- 3) data in
- 4) data out

4.The CPU hardware has a wire called _____ that the CPU senses after executing every instruction.

- 1) interrupt request line
- 2) interrupt bus
- 3) interrupt receive line
- 4) interrupt sense line

5.The _____ are reserved for events such as unrecoverable memory errors.

- 1) non-maskable interrupts
- 2) blocked interrupts
- 3) maskable interrupts

4) None of these

6. The hardware mechanism that allows a device to notify the CPU is called _____.

- 1) polling
- 2) interrupt
- 3) driver
- 4) controlling

7. Which of the following is not a valid type of polymorphism?

- 1) adhoc polymorphism
- 2) imperative polymorphism
- 3) predicative polymorphism
- 4) inclusion polymorphism

8. What is the function used to describe the situation, when a function in base class is redefined in inherited class?

- 1) Inheritance
- 2) Overriding
- 3) Overloading
- 4) Encapsulation

9. How can a call to an overloaded function be ambiguous?

- 1) By misspelling the name
- 2) There might be two or more functions with the same name
- 3) There might be two or more functions with equally appropriate signatures
- 4) None of these

10.A complete binary tree with the property that the value at each node is at least as large as the values at its children is known as

- 1) Binary search tree

- 2) AVL tree
- 3) Completely balanced tree
- 4) Heap

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SET – 09.

1. Which of the following correctly describes overloading of functions?

- 1) Virtual polymorphism
- 2) Transient polymorphism
- 3) Ad-hoc polymorphism
- 4) Pseudo polymorphism

2. Which of the following operator is overloaded for object cout?

- 1) >>
- 2) <<3) + 4) = Answer:a 7. Which of the following operators cannot be overloaded? 1) [] 2) ->
- 3) ?:
- 4) *

3. Which of the following is a mechanism of static polymorphism?

- 1) Operator overloading
- 2) Function overloading
- 3) Templates
- 4) All of the above

4. Which of the following keyword is used to overload an operator?

- 1) Overload
- 2) Operator
- 3) Friend
- 4) Override

5. The operator << when overloaded in a class

- 1) must be a member function
- 2) must be a non-member function
- 3) can be both (1) & (2) above
- 4) cannot be overloaded

6. Neelam wants to share her code with a colleague, who may modify it. Thus she wants to include the date of the program creation, the author and other she wants to include the date of the program creation, the author and other information with the program. What component should she use?

- 1) Header files
- 2) Iteration
- 3) Comments
- 4) Preprocessor directive

7. What is the output of the following code statements?

The compiler saves the first integer at the memory location 4165 and the rest at consecutive memory spaces in order of declaration. Integer is one byte long.

- 1) 30
- 2) 4165
- 3) 40
- 4) 4166

8. A data type is stored as a 6 bit signed integer. Which of the following cannot be represented by this data type?

- 1) -12
- 2) 0
- 3) 32
- 4) 18

9. A language has 28 different letters in total. Each word in the language is composed of maximum 7 letters. You want to create a data-type to store a word of this language. You decide to store the word as an array of letters. How many bits will you assign to the data-type to be able to store all kinds of words of the language.

- 1) 7

- 2) 35
- 3) 28
- 4) 196

10. A 10-bit unsigned integer has the following range:

- 1) 0 to 1000
- 2) 0 to 1024
- 3) 1 to 1025
- 4) 0 to 1023

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SET – 10.

1. Parul takes as input two numbers: a and b. a and b can take integer values between 0 and 255. She stores a, b and c as 1-byte data type. She writes the following code statement to process a and b and put the result in c: $c = a + 2 * b$. To her surprise her program gives the right output with some input values of a and b, while gives an erroneous answer for others. For which of the following inputs will it give a wrong answer?

- 1) $a = 10, b = 200$
- 2) $a = 200, b = 10$
- 3) $a = 50, b = 100$
- 4) $a = 100, b = 50$

2. Which is used to convert source code to target language?

- 1) linker
- 2) compiler
- 3) executer
- 4) loader

3. Trisha wants to store a list of binary data. Which of the following data types should she use?

- 1) Integer
- 2) Float
- 3) Character
- 4) Boolean

4. Which of the following options is an exception to being a part of composite data types?

- 1) Union
- 2) Array
- 3) Structure
- 4) Stack

5. The datatype is stored as 6 but unsigned integer. Which of the following can't be represented by the

this datatype:

- 1) -12
- 2) 0
- 3) 32
- 4) 18

6. Choose the correct answer. Saumya writes a code which has a function which calls itself. Which programming concept is Saumya using?

- 1) This is bad programming practice and should not be done.
- 2) Recursion
- 3) Decision Making
- 4) Overloading

7. Consider the following function: `function calculate(n) { if(n equals 5) return 5 else return (n + calculate(n-5)) end }`. Shishir calls the function by the statement, `calculate(20)`. What value will the function return?

- 1) 50
- 2) 200
- 3) 35
- 4) 20

8. Choose the correct answer. `function g(int n) { if (n > 0) return 1; else return -1; }` `function f(int a, int 2) { if (a > 2) return g(b-1); if (a < 2) return g(a-2); return 0; }`. If `f(a,2)` is called, what is returned?

- 1) Always -1
- 2) 1 if $a > b$, -1 if $a < b$, 0 otherwise
- 3) -1 if $a > b$, 1 if $a < b$, 0 otherwise
- 4) 0 if a equals b , -1 otherwise

9. Choose the correct answer. Afzal writes a piece of code, where a set of three lines occur around 10 times in different parts of the program. What programming

concept can he use to shorten his program code

length?

- 1) Use for loops
- 2) Use functions
- 3) Use arrays
- 4) Use classes

10. Talika wants to implement heterogeneous linked list for her project. Which of the following will help her do the same.

- 1) Void pointer
- 2) Null pointer
- 3) Wild pointer
- 4) Heterogeneous list follows the same procedure as the homogeneous list. Hence no different pointer is required

SET – 11.

1. What is the difference between a function and a method?

- 1) Function is a named code unlike method which is a part of an object
- 2) Function contained in an object is called a method
- 3) Function cannot change variables outside its scope unlike method
- 4) There is no difference between the two

2. Consider the following code:

```
function modify(a,2)
```

```
{
Integer c,d=2
```

```
c= a*d+ b
```

```
return c
```

```
}
```

```
function calculate()
```

```
{
```

```
integer a = 5, b = 20, c
```

```
integer d= 10
```

```
c = modify(a, 2);
```

```
c = c+ d
```

```
print c
```

```
}
```

1) 80

2) 40

3) 32

4) 72

3. What is the term given to the variable whose scope is beyond all the scopes i.e., it can be accessed by all the scopes?

- 1) Universal Variable
- 2) Global Variable
- 3) External Variable

4) Auto Variable

4. Anu wants to make a function that is not bound to any identifier. which of the following functions should she incorporate in her program?

- 1) Anonymous Function
- 2) Friend Function
- 3) Null Function
- 4) Global Function

5. Which of the following accessibility modes can be the specifier of a top level class? Top-level classes can only have public, abstract, and final modifiers, and it is also possible to not define any class modifiers at all. This is called default/package accessibility. Besides that, private, protected, and static modifiers cannot be used when declaring top-level classes. Private, Protected, Public, No Modifier

- 1) Only Private
- 2) Protected and Private
- 3) Public and No Modifier
- 4) Only No Modifier

6. Top-level classes can only have public, abstract, and final modifiers, and it is also possible to not define any class modifiers at all. This is called default/package accessibility. Besides that, private, protected, and static modifiers cannot be used when declaring top-level classes.

Question 6 WRONG

Which of the following accessibility modes can be the specifier of a top level class? Top-level classes can only have public, abstract, and final modifiers, and it is also possible to not define any class modifiers at all. This is called default/package accessibility. Besides that, private, protected, and static modifiers cannot be used when declaring top-level classes. Private,

Protected, Public, No Modifier

- 1) Only Private
- 2) Protected and Private
- 3) Public and No Modifier
- 4) Only No Modifier

7. Top-level classes can only have public, abstract, and final modifiers, and it is also possible to not define any class modifiers at all. This is called default/package accessibility. Besides that, private, protected, and static modifiers cannot be used when declaring top-level classes.

Question 7 WRONG

Choose the correct answer. A pseudo-code which is similar to that of C++ and self-explanatory. An accessible member function or data member for an object are accessed by the statement `objectname.functionname` or `objectname.data member name` respectively. class brush { Private: integer size, colorcode function getdata() {
//Statement 1 public: integer name // Statement 2
function putdata(){...} } function main { brush b1, b2
print b1.name //Statement 3 b2.getdata() //Statement 4
} Deleting which line will correct the error in the code?

- 1) Statement 1
- 2) Statement 2
- 3) Statement 3
- 4) Statement 4

8. Function MyDisplay(string MyStr) //statement 1 {
print "Hello !" print MyStr return 1 // statement 2 }
function main() //statement 3 { string str= "Mickey"
MyDisplay(str) // statement 4 } Which statement will generate an error.

- 1) Statement 1
- 2) Statement 2

3) Statement 3

4) Statement 4

9. Choose the correct answer. Tanuj writes the code for a function that takes as input n and calculates the sum of first n natural numbers. Function `sum(n) { if(??) return 1 else return (n + sum(n-1)) end }` Fill in ?? in the code.

- 1) n equals 1
- 2) n equals 2
- 3) n >= 1
- 4) n > 1

10. Choose the correct answer. Shrishti writes the code for a function that computes the factorial of the inputted number n. function `factorial(n) { if(n equals 1) return 1 else — MISSING STATEMENT — end }` Fill in the missing statement.

- 1) return factorial(n-1)
- 2) return n*factorial(n)
- 3) return n*(n-1)
- 4) return n*factorial(n-1)

SET – 12.

1. The value of EOF is_____

- 1) -1
- 2) 0
- 3) 1
- 4) 10

2. Which of the following true about FILE *fp

- 1) FILE is a keyword in C for representing files and fp is a variable of FILE type.
- 2) FILE is a structure and fp is a pointer to the structure of FILE type
- 3) FILE is a stream
- 4) FILE is a buffered stream

3. The first and second arguments of fopen are _____

- 1) A character string containing the name of the file & the second argument is the mode
- 2) A character string containing the name of the user & the second argument is the mode
- 3) A character string containing file pointer & the second argument is the mode
- 4) None of the mentioned

4. If there is any error while opening a file, fopen will return

- 1) Nothing
- 2) EOF
- 3) NULL
- 4) Depends on compiler

5. fseek() should be preferred over rewind() mainly because

- 1) rewind() doesn't work for empty files
- 2) rewind() may fail for large files
- 3) In rewind, there is no way to check if the operations completed successfully

4) All of the above

6. FILE is of type _____

- 1) int type
- 2) char * type
- 3) struct type
- 4) None of the mentioned

7. FILE reserved word is

- 1) A structure tag declared in stdio.h
- 2) One of the basic datatypes in c
- 3) Pointer to the structure defined in stdio.h
- 4) It is a type name defined in stdio.h

8. getc() returns EOF when

- 1) End of files is reached
- 2) When getc() fails to read a character
- 3) Both of the above —
- 4) None of the above

9. Which of the following functions from “stdio.h” can be used in place of printf()?

- 1) fputs() with FILE stream as stdout.
- 2) fprintf() with FILE stream as stdout.
- 3) fwrite() with FILE stream as stdout.
- 4) All of the above three – a, b and 3)

10. fputs adds newline character

- 1) True
- 2) False
- 3) Depends on the standard
- 4) Undefined behaviour

SET – 13.

1. puts function adds newline character

- 1) True
- 2) False
- 3) Depends on the standard
- 4) Undefined behaviour

2. An array is also known as _____

- 1) Subscripted variable
- 2) Collective array
- 3) Ordinary variable
- 4) Similar Quantities variable

3. Till the array elements are not given any specific value, they are supposed to contain all _____

- 1) Zero
- 2) Garbage value
- 3) One
- 4) Combination of zero and one.

4. If array is initialized where it is declared, then mentioning _____ of array is optional.

- 1) Data type
- 2) Dimension
- 3) name
- 4) Data type and Dimension

5. What happen if we assign a value to an array element whose subscript exceeds the size of array.

- 1) The program will give error
- 2) No output
- 3) program will crash
- 4) none of these

6. What will be output of the following program

```
int main()
{
```

```
int b[4]={5,1,32,4};
```

```
int k,l,m;
```

```
k=++b[1];
```

```
l=b[1]++;
```

```
m=b[k++];
```

```
printf(“%d, %d, %d”,k,l,m);
```

```
return 0;
```

```
}
```

- 1) 2, 2, 4
- 2) 3, 2, 32
- 3) 3, 2, 4
- 4) 2, 3, 32

7. What will be output of the following program where c=65474 and int=2 bytes.

```
int main()
```

```
{
```

```
int c[3][4]={2,3,1,6,4,1,6,2,2,7,1,10};
```

```
printf(“%u, %u\n”, c+1, &c+1);
```

```
return 0;
```

```
}
```

- 1) 65482, 65498
- 2) 65476, 65476
- 3) 65476, 65498
- 4) No output

8. what will be output of the following program

```
int main()
```

```
{
```

```
int a[5],i=0;
```

```
while(i<5)
```

```
a[i]=++i;
```

```
for(i=0;i<5;i++)
```

```
printf(“%d”,a[i]);}
```

- 1) garbage value,1,2,3,4
- 2) 1,2,3,4,5
- 3) Error

4) Program crash

9. What will be output of the following program

```
int main()
```

```
{
```

```
float a[]={ 12.4, 2.3, 4.5, 6.7};
```

```
printf(“%d, %d”, sizeof(1), sizeof(a[0]));
```

```
return 0;
```

```
}
```

1) 16 bytes, 4 bytes

2) 4 bytes, 4 bytes

3) 8 bytes, 4 bytes

4) None of these

10. Which one of this is equivalent to

```
int fun(int arr[])
```

1) int fun(arr)

2) int fun(int s[])

3) int fun(int arr[2])

4) None of these

SET – 14.

1. In 2 Dimensional Array, it is necessary to mention _____ dimension.

- 1) second
- 2) first
- 3) both
- 4) none of these

2. An array can be passed to a function by _____

- 1) Call by reference
- 2) call by value
- 3) Call by reference by passing base address to a function
- 4) Both 1 and 3

3. What will be output of the following program

```
int main()
{
int arr[4]={3,4,5,6};
int k[4];
k=arr;
printf(“%d\n”,k[1]);
}
```

- 1) Compile Time Error
- 2) 4
- 3) No output
- 4) Program crashes

4. Which of the following syntax is correct for command-line arguments?

- 1) int main(int var, char *argv[])
- 2) int main(char *arv[], int arg)
- 3) int main(char c,int v)
- 4) int main(int v,char3)

5. What does argv and argc indicate in int main(int argc, char *argv[]) ?

- 1) argument constant, argument variable
- 2) argument count, argument vector
- 3) argument constant, argument vector
- 4) argument count, argument variable

6. What type of array is generally generated in Command-line argument?

- 1) MultiDimensional Array
- 2) Jagged Array
- 3) 2-Dimensional Array
- 4) Single Dimensional Array

7. The maximum length of the command-line arguments including the spaces is

- 1) May vary from one OS to another
- 2) 256 characters
- 3) Depends on the Number of arguments
- 4) 128 characters

8. The index of the last argument in command line arguments is

- 1) argc
- 2) argc * 2
- 3) argc – 1
- 4) argc + 1

9. What is the first argument of command line ?

- 1) File Name
- 2) Program Designation
- 3) argument passed by user
- 4) Program Name

10. What argv means in command line argument?

- 1) Array of pointers
- 2) pointer to a character array

3) Array of character pointers

4) Array of Strings

Campus Credential

SET 15

1) What will be the output of the following program if argument passed to command lines are : prog 1 4 2

```
#include<stdio.h>
```

```
int main(int argc, char *argv[])
```

```
{
```

```
int j;
```

```
j = argv[1] + argv[2] - argv[3];
```

```
printf("%d", j);
```

```
return 0;
```

```
}
```

1)Error

2)3

3)Garbage Value

4)None of these

2) What argv[0] and argv[1] denote in Command line Arguments ?

1) Pointers to first two command line argument
supplie4)

2)File Name and pointer to first command line
argument supplie4)

3) Program Name and Pointer to the 1st argument.

4) None of these.

3) Which one of these is equivalent to argc ?

1) Number of Arguments

2) Number of Arguments – 1

3) Number of Arguments + 2

4) Number of Arguments + 1

Answer:d

4) What will be output of the following program if argument passed to command lines are : prog 1 4 2

```
#include<stdio.h>
```

```
int main(int argc, char *argv[])
```

```
{
```

```
while(argc--)
```

```
printf("%s\n",argv[argc]);
```

```
return 0;
```

```
}
```

1)2 4 1

2) Garbage-value 2 4 1

3) Garbage-value 2 4 1 prog

4)Infinte Loop

5) What will be output of the following program if argument passed to command lines are : demo one two three

```
#include<stdio.h>
```

```
int main(int argc, char *argv[])
```

```
{
```

```
printf("%c\n",**+argv);
```

```
return 0;
```

```
}
```

1) n

2) o

3) t

4) Compile Time Error

6) What will be output of the following program if argument passed to command lines are : demo friday

```
#include<stdio.h>
```

```
int main(int argc, char *argv[])
```

```
{
```

```
printf("%c",*++argv[1]);
```

```
return 0;
```

```
}
```

1) r

2) f

3)i

4) d

7. What is the output of this C code?

```
#include  
void main()  
{  
m();  
void m()  
{  
printf("SimpleWay2Code");  
}  
}
```

- 1) SimpleWay2Code
- 2) Compile time error
- 3) Nothing
- 4) Varies

8. What is the output of this C code?

```
#include  
void main()  
{  
static int x = 3;  
x++;  
if (x <= 5) { printf("hello"); main(); } }
```

- 1) Run time error
- 2) hello
- 3) Infinite hello
- 4) hello hello

3. The value obtained in the function is given back to main by using _____ keyword?

- 1) return
- 2) static
- 3) new
- 4) volatile

10. What is the problem in the following declarations?

```
int func(int);  
double func(int);
```

```
int func(float);
```

- 1) A function with same name cannot have different signatures
- 2) A function with same name cannot have different return types
- 3) A function with same name cannot have different number of parameters
- 4) All of the mentioned

Set 16

1. What is the return-type of the function sqrt()

- 1) int
- 2) float
- 3) double
- 4) depends on the data type of the parameter

2. What is the output of this code having void return-type function? #include

```
void foo()
{
    return 1;
}

void main()
{
    int x = 0;
    x = foo();
    printf("%d", x);
}
```

- 1) 1
- 2) 0
- 3) Runtime error
- 4) Compile time error

3. The output of the code below is

```
#include

void main()
{
    int k = m();
    printf("%d", k);
}

void m()
{
    printf("hello");
}
```

- 1) hello 5
- 2) Error

3) Nothing

4) Garbage value

4. The output of the code below is

```
#include

int *m()
{
    int *p = 5;
    return p;
}

void main()
{
    int *k = m();
    printf("%d", k);
}
```

- 1) 5
- 2) Junk value
- 3) 0
- 4) Error

5. What will be the output of the program?

```
#include

int main()
{
    int i=1;
    if(!i)
        printf("SimpleWay2Code,");
    else
    {
        i=0;
        printf("C-Program");
        main();
    }
    return 0;
}
```

- 1) prints "SimpleWay2Code, C-Program" infinitely
- 2) prints "C-Program" infinitely

- 3) prints "C-Program, SimpleWay2Code" infinitely
 4) Error: main() should not inside else statement

6. How many times the program will print
 "SimpleWay2Code" ?

```
#include
int main()
{
printf("SimpleWay2Code");
main();
return 0;
}
```

- 1) Infinite times
- 2) 32767 times
- 3) 65535 times
- 4) Till stack overflows

7. Ashima wants to print a pattern which includes checking and changing a variable's value iteratively. She decides to use a loop/condition. Which of the following options should she use such that the body of the loop/condition is executed at least once whether the variable satisfies the entering condition or not?

- 1) For Loop
- 2) While Loop
- 3) Do While Loop
- 4) Switch Case

8. The construct "if (condition) then A else B" is for which of the following purposes?

- 1) Decision-Making
- 2) Iteration
- 3) Recursion
- 4) Object Oriented Programming

9. Function main() { Integer i=0.7 Static float m=0.7
 If(m equals i) Print("We are equal") Else If(m>i)

Print("I am greater") Else Print("I am lesser")

- 1) We are equal
- 2) I am greater
- 3) I am lesser
- 4) This code will generate an error

```
10. function main()
{
integer a=5,b=7
switch(1)
{
case 5 :print "I am 5"
break
case b:print "I am not 5"
break
default:print "I am different"
}
}
```

- 1) I am 5
- 2) I am not 5
- 3) I am different
- 4) Error

Set :17

1. Ravi and Rupali are asked to write a program to sum the rows of a 2X2 matrices stored in the array A.

Ravi writes the following code (Code A):

for n = 0 to 1

sumRow1[n] = A[n][1] + A[n][2]

end

Rupali writes the following code (Code B):

sumRow1[0] = A[0][1] + A[0][2]

sumRow1[1] = A[1][1] + A[1][2]

Comment upon these codes (Assume no loop-unrolling done by compiler):

- 1) Code A will execute faster than Code 2)
- 2) Code B will execute faster than Code A
- 3) Code A is logically incorrect.
- 4) Code B is logically incorrect.

2. Integer a = 40, b = 35, c = 20, d = 10 Comment about the output of the following two statements •

Print a*b/c-d

Print a*b/(c-4)

Comment about the output of the following two statements

- 1) Differ by 80
- 2) Same
- 3) Differ by 50
- 4) Differ by 160

3. What is the output of the following pseudo code? Int a = 456, b, c, d = 10; b = a/d; c = a-b; print c;

- 1) 411.4
- 2) 411
- 3) 410.4
- 4) 410

4. What is the output of this C code?

```
#include
static int x = 5;
void main()
{
x = 9;
{
int x = 4;
}
printf("%d", x);
}
1) 9
2) 4
3) 5
4) 0
```

5. The scope of an automatic variable is:

- 1) Within the block it appears
- 2) Within the blocks of the block it appears
- 3) Until the end of program
- 4) Within the block it appears & Within the blocks of the block it appears

6. Automatic variables are allocated space in the form of a:

- 1) stack
- 2) queue
- 3) priority queue
- 4) random

7. Which of the following is a storage specifier?

- 1) enum
- 2) union
- 3) auto
- 4) volatile

8. Automatic variables are stored in

- 1) stack

- 2) data segment
- 3) register
- 4) heap

9. What is the output of this C code?

```
#include  
int main()  
{  
    register int i = 10;  
    int *q = &i;  
    *q = 11;  
    printf("%d %d\n", i, *q);  
}
```

- 1) Depends on whether i is actually stored in machine register
- 2) 10 10
- 3) 11 11
- 4) Compile time error

10. Register storage class can be specified to global variables

- 1) true
- 2) false
- 3) Depends on the compiler
- 4) Depends on the standard

Set 18

1. What is the output of this C code?

```
#include
void main()
{
static int i;
printf("i is %d", i);
}
```

- 1) 0
- 2) 1
- 3) Garbage Value
- 4) Run time error

2. What is the output of this C code?

```
#include
int *i;
int main()
{
if (i == NULL)
printf("true\n");
return 0;
}
```

- 1) true
- 2) true only if NULL value is 0
- 3) Compile time error
- 4) Nothing

3. What is the output of this C code?

```
#include
static int i;
void main()
{
int i;
printf("i is %d", i);
}
```

- 1) 0
- 2) Garbage Value

3) Run time error

4) Nothing

4. Register variables reside in

- 1) stack
- 2) registers
- 3) heap
- 4) main memory

5. Which of the following operation is not possible in a register variable?

- 1) Reading the value into a register variable
- 2) Copy the value from a memory variable
- 3) Global declaration of register variable
- 4) All of the mentioned

6. Which for loop has range of similar indexes of 'i' used in for (i = 0; i < n; i++)?

- 1) for (i = n; i > 0; i--)
- 2) for (i = n; i >= 0; i--)
- 3) for (i = n-1; i > 0; i--)
- 4) for (i = n-1; i > -1; i--)

7. The output of this C code is?

```
#include
void main()
{
int x = 0;
for (x < 3; x++)
printf("Hello");
}
```

- 1) Compile time error
- 2) Hello is printed thrice
- 3) Nothing
- 4) Varies

8. The output of this C code is?

```
#include
```

```
void main()
```

```
{
```

```
double x = 0;
```

```
for (x = 0.0; x < 3.0; x++) printf("Hello");
```

```
}
```

1) Run time error

2) Hello is printed thrice

3) Hello is printed twice

4) Hello is printed infinitely

9. The output of this C code is?

```
#include
```

```
int main()
```

```
{
```

```
do
```

```
printf("Inside while loop ");
```

```
while (0);
```

```
printf("Outside loop\n");
```

```
}
```

1) Inside while loop

2) Inside while loop

Outside loop

3) Outside loop

4) Infinite loop

10. The output of this C code is?

```
#include
```

```
int main()
```

```
{
```

```
int i = 0;
```

```
do {
```

```
i++;
```

```
printf("Inside while loop\n");
```

```
} while (i < 3);
```

```
}
```

1) Inside while loop Inside while loop Inside while
loop

2) Inside while loop Inside while loop

3) Depends on the compiler

4) Compile time error

Set 19

1. The output of the code below is

```
#include
int a;
void main()
{
if (1)
printf("Hello");
else
printf("world");
}
```

- 1) Hello
- 2) World
- 3) compile time error
- 4) none of the mentioned

2. The output of the code below is

```
#include
void main()
{
int a = 5;
if (true);
printf("hello");
}
```

- 1) It will display hello
- 2) It will throw an error
- 3) No Output
- 4) Depends on Compiler

3. The output of the code below is

```
#include
void main()
{
int a = 0;
if (a == 0)
printf("hi");
else
```

```
printf("how are u");
printf("hello");
}
```

- 1) hi
- 2) how are you
- 3) hello
- 4)hihello

4. The following code 'for(;;)' represents an infinite loop. It can be terminated by.

- 1) break
- 2) exit(0)
- 3) abort()
- 4) all of the mentioned

5. The correct syntax for running two variable for loop simultaneously is.

- 1) for (i = 0; i < n; i++) for (j = 0; j < n; j += 5)
- 2) for (i = 0, j = 0; i < n, j < n; i++, j += 5)
- 3) for (i = 0; i < n; i++){ }
- 4) for (j = 0; j < n; j += 5){ }

6. Which of the following cannot be used as LHS of the expression in for (exp1 ;exp2 ; exp3) ?

- 1) Variable
- 2) Function
- 3) typedef
- 4) macros

7. Which keyword can be used for coming out of recursion?

- 1) break
- 2) return
- 3) exit
- 4) Both break and return

8. The keyword 'break' cannot be simply used within:

- 1) do-while
- 2) if-else
- 3) for
- 4) while

9. Which keyword is used to come out of a loop only for single iteration?

- 1) break
- 2) continue
- 3) return
- 4) none of the mentioned

10. The output of this C code is?

```
#include
```

```
void main()
```

```
{
```

```
int i = 0;
```

```
if (i == 0)
```

```
{
```

```
printf("Hello");
```

```
break;
```

```
}
```

```
}
```

- 1) Hello is printed infinite times
- 2) Hello
- 3) Varies
- 4) Compile time error

Set 20

1. Which of the following is not valid variable name declaration?

- 1) int __v1;
- 2) int __1v;
- 3) int __V1;
- 4) None

2. Which of the following is not a valid variable name declaration?

- 1) int _v1;
- 2) int v_1;
- 3) int 1_v;
- 4) int _1v

3. Variable names beginning with underscore is not encourage4) Why?

- 1) It is not standard form
- 2) To avoid conflicts since assemblers and loaders use such names
- 3) To avoid conflicts since library routines use such names
- 4) To avoid conflicts with environment variables of an operating system

4. Which is not a valid C variable name?

- 1) int number;
- 2) float rate;
- 3) int variable_count;
- 4) int \$main;

5. Which of the following is true for variable names in C?

- 1) They can contain alphanumeric characters as well as special characters
- 2) It is not an error to declare a variable to be one of the keywords (like goto, static)

3) Variable names can't start with a digit

4) Variable can be of any length

6. What will be the output?

```
#include
int main()
{
int main = 5;
printf("%d", main);
return 0;
}
```

- 1) compile-time error
- 2) run-time error
- 3) run without any error and prints 5
- 4) experience infinite looping

7. Which of the following cannot be a variable name in C?

- 1) friend
 - 2) true
 - 3) volatile
 - 4) export
7. Ans: cvolatile

8. The format identifier '%i' is also used for _____ data type?

- 1) char
- 2) double
- 3) float
- 4) int

9. Which of the following is a User-defined data type?

- 1) struct { char name[10], int age};
- 2) typedef enum {Mon, Tue, Wed, Thu, Fri} Workdays;
- 3) typedef int Boolean;

4) all of the mentioned

10. What is short int in C programming?

- 1) Basic datatype of C
- 2) Qualifier
- 3) short is the qualifier and int is the basic datatype
- 4) All of the mentioned

Campus Credential

Set 21

1. What is the output of this C code?

```
#include
int main()
{
signed char chr;
chr = 128;
printf("%d\n", chr);
return 0;
}
```

- 1) 128
- 2) -128
- 3) Depends on the compiler
- 4) None of the mentioned

2. What is the size of an int data type?

- 1) 4 Bytes
- 2) 8 Bytes
- 3) Depends on the system/compiler
- 4) Cannot be determined

3. Which of the datatypes have size that is variable?

- 1) int
- 2) struct
- 3) float
- 4) double

4. What is the output of this C code?

```
#include
int main()
{
float x = 'a';
printf("%f", x);
return 0;
}
```

- 1) 97.000000
- 2) run time error

3) 1) 00000000

4) a

5. What is the output of this program?

```
#include <iostream>
using namespace std;
int main()
{
char name[30];
cout<< "Enter name: ";
gets(name);
cout<< "Name: ";
puts(name);
return 0;
}
```

- 1) jobsjobs
- 2) jobs
- 3) compile time error
- 4) program will not run

6. setprecision requires which of the following header file?

- 1) stdli2) h
- 2) iomanip.h
- 3) console.h
- 4) conio.h

7. Which of the following header file does not exist?

- 1) <iostream>
- 2) <string>
- 3) <sstring>
- 4) <sstream>

8. Which of the header file must be included to use stringstream?

- 1) <iostream>
- 2) <string>

3) <sstring>

4) <sstream>

9. Which of the following header files is required for creating and reading data files?

1) ofstream.h

2) fstream.h

3) ifstream.h

4) console.h

10. What is the output of this program?

```
#include <iostream>
#include <stdarg.h>
using namespace std;
float avg( int Count, ... )
{
va_list Numbers;
va_start(Numbers, Count);
    int Sum = 0;
    for (int i = 0; i< Count; ++i)
        Sum += va_arg(Numbers, int);
va_end(Numbers);
    return (Sum/Count);
}
int main()
{
    float Average = avg(10, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9);
cout<< Average;
    return 0;
}
```

1) 4

2) 5

3) 6

4) compile time error

Set 22

1. What is the user-defined header file extension in c++?

- 1)cpp
- 2) h
- 3) hf
- 4) none of the mentioned

2. Which of the following keyword is used to declare the header file?

- 1) include
- 2) exclude
- 3) string
- 4) namespace

3. Identify the incorrect statement.

- 1) iostream is a standard header and iostream.h is a non-standard header
- 2) iostream is a non-standard header and iostream.h is a non-standard header
- 3) iostream is a standard header and iostream.h is a standard header
- 4) none of the mentioned

4. What does a default header file contain?

- 1) prototype
- 2) implementation
- 3) declarations
- 4) none of the mentioned

5. In the context of C data types, which of the followings is correct?

- (1) “unsigned long long int” is a valid data type.
- (2) “long long double” is a valid data type.
- (3) “unsigned long double” is a valid data type.
- (4) 1), 2) and 3) all are valid data types.
- (5) 1), 2) and 3) all are invalid data types.

6. Choose the best statement with respect to following three program snippets.

/*Program Snippet 1 with for loop*/

for (i = 0; i < 10; i++)

{

/*statement1*/

continue;

/*statement2*/

}

/*Program Snippet 2 with while loop*/

i = 0;

while (i < 10)

{

/*statement1*/

continue;

/*statement2*/

i++;

}

/*Program Snippet 3 with do-while loop*/

i = 0;

do

{

/*statement1*/

continue;

/*statement2*/

i++;

}while (i < 10);

- (1) All the loops are equivalent i.e. any of the three can be chosen and they all will perform exactly same.
- (2) continue can't be used with all the three loops in 3)
- (3) After hitting the continue; statement in all the

loops, the next expression to be executed would be
controlling expression (i.e. $i < 10$) in all the 3 loops.

(4) None of the above is correct.

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