

SET – 01.

1. Correct Answer - 02.

2. Correct Answer - 02.

3. Correct Answer - 02.

4. Correct Answer - 02.

5. Correct Answer - 02.

6. Correct Answer - 01.

Size of takes ascii value of character and determines

number of bytes required by it. Ascii is number,

Number is of type int. so integer requires either 2 in

16 or 4 in 32-bit machine

7. Correct Answer – 01.

error: 'b' , 'c', 'd' undeclared

8. Correct Answer - 04.

9. Correct Answer - 01.

10. Correct Answer - 01.

SET – 02.

1. Correct Answer – 04.

Compile time error

2. Correct Answer – 04.

stdout is line buffered but stderr is unbuffered.

3. Correct Answer – 03.

1,2,3

4. Correct Answer – 03.

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

5. Correct Answer – 02.

It will run forever

6. Correct Answer – 04.

1

7. Correct Answer - 02.

convert a character string to its equivalent integer
value

8. Correct Answer - 03.

strptr()

9. Correct Answer - 01.

and()

10 Correct Answer - 01.

In a Queue

SET – 03.

1. Correct Answer - 03.

15

2. Correct Answer - 03.

Both feof() and EOF

3. Correct Answer - 01.

int

4. Correct Answer - 02.

Stack

5. Correct Answer - 04.

5

6. Correct Answer - 01.

points to garbage value

7. Correct Answer - 01.

to get the current file position

8. Correct Answer - 04.

function calls itself repeatedly

9. Correct Answer - 02.

can create new data types

10. Correct Answer - 01.

Enum

SET – 04.

1. Correct Answer - 04.

`char * argv[]`

2. Correct Answer - 01.

a program allocates memory in heap but forgets to be
allocate it

3. 4.

Passed to a function as argument.

4. Correct Answer - 03.

All of these

5. Correct Answer - 03.

`\0`

6. Correct Answer - 02.

Structure

7. Correct Answer - 01.

`free();`

8. Correct Answer - 03.

`math.h`

9. Correct Answer - 03.

Pointer to pointer

10. Correct Answer - 01.

(underscore)

SET – 05.

1. Correct Answer – 03.

Lowercase letters

2. Correct Answer – 01.

hello_World

3. Correct Answer – 03.

Both calloc & malloc

4. Correct Answer – 04.

All of the mentioned

5. Correct Answer – 02.

int

6. Correct Answer – 03.

Heap area

7. Correct Answer – 03.

1 Byte

8. Correct Answer – 03.

unsigned int

9. Correct Answer – 03.

free(p);

10. Correct Answer – 01.

x is 97

SET – 06.

1. Correct Answer - 02.

char* argv[]

2. Correct Answer - 03.

strupr

3. Correct Answer - 02.

rand()

4. Correct Answer - 01.

Expanding

5. Correct Answer - 02.

Unary operator works on only one operand

6. Correct Answer - 02.

continue

7. Correct Answer – 02.

No

8. Correct Answer - 02.

By making at least one-member function as pure virtual function.

9. Correct Answer - 03.

Singleton class

10. Correct Answer - 04.

Data hiding is a method used in object-oriented programming to hide information within computer code. Objects inside code are not privy to information which is considered hidden. It presents many advantages for programmers because objects are unable to connect to irrelevant data and hackers are less likely to access data.

Data hiding takes specific parts of the code and then conceals those parts from the objects. The objects are not directly accessible in any data that is hidden. If an object is able to access hidden data, it will return an error, and this is because the object cannot see the data.

SET – 07

1. Correct Answer - 04.

All of the above

2. Correct Answer - 02.

Static function

3. Correct Answer - 03.

Protected data members

4. Correct Answer - 03.

Distributive

5. Correct Answer - 03.

Inheritance

6. Correct Answer - 04.

Inheritance

7. Correct Answer - 01.

Extends

8. Correct Answer - 01.

expansion bus

9. Correct Answer - 03.

device drivers

10. Correct Answer - 02.

daisy chain

SET – 08.

1. Correct Answer - 03.

interrupt handler

2. Correct Answer - 03.

data in

3. Correct Answer - 04.

data out

4. Correct Answer - 01.

interrupt request line

5. Correct Answer - 01.

non-maskable interrupts

6. Correct Answer - 02.

Interrupt

7. Correct Answer - 02.

imperative polymorphism

8. Correct Answer - 02.

Overriding

9. Correct Answer - 02.

There might be two or more functions with the same name

10. Correct Answer - 04.

A max-heap is a complete binary tree in which the value in each internal node is greater than or equal to the values in the children of that node.

SET – 09.

1. Correct Answer - 03.

Ad-hoc polymorphism

2. Correct Answer - 03.

?:

3. Correct Answer - 03.

Templates

4. Correct Answer - 02.

Operator

5. Correct Answer - 03.

can be both (1) & (2) above

6. Correct Answer - 04.

Preprocessor directive

7. Correct Answer - 03.

40

8. Correct Answer - 03.

32

9. Correct Answer - 02.

35

10. Correct Answer - 04.

0 to 1023

SET – 10

1. Correct Answer - 01.

a = 10 b = 200

2. Correct Answer - 02.

A **compiler** is a special program that processes statements written in a particular programming language and turns them into machine language or "code" that a computer's processor uses. Typically, a programmer writes language statements in a language such as Pascal or C one line at a time using an editor.

3. Correct Answer - 04.

Boolean

4. Correct Answer - 04.

Stack

5. Correct Answer - 01.

-12

6. Correct Answer - 02.

Recursion

7. Correct Answer - 01.

50

8. Correct Answer - 04.

0 if a equals b, -1 otherwise

9. Correct Answer - 02.

Use functions

10. Correct Answer - 01.

Void pointer

SET – 11.

1. Correct Answer - 01.

Function is a named code unlike method which is a part of an object

2. Correct Answer - 02.

$c=?$ $d=2$ $c=a*d+b$ $c=a*2+b$ then $a=5$ $b=20$, $c=?$ $c=c+d$

$c=a*2+b+d$ $c=5*2+20+10=40$

3. Correct Answer - 02.

Global Variable

4. Correct Answer - 01.

Anonymous Function

5. Correct Answer - 03.

Public and No Modifier

6. Correct Answer - 03.

Public and No Modifier

7. Correct Answer - 04.

Since, get data is private

8. Correct Answer - 02.

Statement 2

9. Correct Answer - 01.

n equals 1

10. Correct Answer - 04.

return $n*factorial(n-1)$

SET – 12.

1. Correct Answer - 01.

-1

2. Correct Answer - 02.

fp is a pointer of FILE type and FILE is a structure that store following information about opened file.

3. Correct Answer - 01.

A character string containing the name of the file & the second argument is the mode

4. Correct Answer - 03.

NULL

5. Correct Answer - 03.

In rewind, there is no way to check if the operations completed successfully

6. Correct Answer - 03.

struct type

7. Correct Answer - 04.

It is a type name defined in stdio.h

8. Correct Answer - 03.

Both of the above —

9. Correct Answer - 02.

fprintf() with FILE stream as stdout.

10. Correct Answer - 02.

False

SET – 13.

1. Correct Answer - 01.

True

2. Correct Answer - 01.

Subscripted variable

3. Correct Answer - 02.

Garbage value

4. Correct Answer - 02.

Dimension

5. Correct Answer - 03.

program will crash

6. Correct Answer - 02.

Here, ++b[1] means that firstly b[1] will be incremented so, b[1]=2 then assigned to k i.e. k=2.

b[1]++ means firstly b[1] will be assigned to variable l i.e. l=2, Then value stored in b[1] will be incremented i.e. b[1]=3.

b[k++] means first b[k] will be assigned to m i.e. m=32, then value of k will be incremented i.e. k=3.

7. Correct Answer - 01.

Here c[3][4]= {

{2,3,1,6};

{4,1,6,2};

{2,7,1,10}

};

c+1 means c is base address i.e. address of 1st one

Dimensional array and on incrementing it by 1 means

it points to 2nd one 2 Dimensional array.

So, c+1=65474 + (4 * 2)= 65482

But, when we are writing &c, that means address of

this whole array i.e. address of next new array.

So, &c+1=65474 + (12 * 2)=65498

8. Correct Answer - 01.

firstly right side of any expression is evaluated, then the left side is evaluate4) So, here ++i will be evaluated at first, then a[i].

Hence, when i=0, a[1]=1, then i=1, a[2]=2,...a[4]=4 and a[0]=garbage value

9. Correct Answer - 01.

sizeof(1)=number of element * size of each element
=4 * 4 bytes

=16 bytes

sizeof(a[0])=size of 1st element of array a
= 4 bytes

10. Correct Answer - 03.

int fun(int arr[]) and int fun(int arr[0]) are equivalent.

Both are prototype for function fun(), that accepts one integer array as parameter and return an integer value.

SET – 14.

01. Correct Answer - 01.

In 2D array, it is necessary to mention the second dimension, whereas the first dimension is optional.

```
int arr[][3]={ 12,34,33,45,56,73};
```

02. Correct Answer - 04.

Both 1 and 3

03. Correct Answer - 01.

We cannot assign one array to another directly. We can do assignment operation element by element. Thus, reports compile time error.

04. Correct Answer - 01.

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

05. Correct Answer - 02.

argument count, argument vector

06. Correct Answer - 02.

Jagged Array

07. Correct Answer - 01.

May vary from one OS to another

08. Correct Answer - 03.

argc – 1

09. Correct Answer - 01.

File Name

10. Correct Answer - 03.

Array of character pointers

Set 15

1) Answer:a

Exp :> Here, argv[1], argv[2] and argv[3] are of type String. So, we have to convert String to integer before performing arithmetic operation.

2) Answer:b: File Name and pointer to first command line argument supplied

3) Answer:d Number of Arguments + 1

4) Answer:a 2 4 1

5) Answer:b

Explanation: > Here, char * argv[] denotes Array of Pointers. So, argv[] holds the address of the command line argument passed. ++argv denote the address of next location, which holds the address of the 2nd argument.

*++argv denote the value stored at that address i.e. the address of the 1st character of the 2nd argument and **++argv itself denote the character 'o'.

6) Answer:a

Explanation :>argv[1] can be written as *(argv+1), (argv+1) denote the address of next location, which holds the address of 2nd argument. Thus *(argv+1) or argv[1] denote the value stored at that address i.e. denote the address of 1st character of the 2nd Argument. ++argv[1] denote the address of 2nd character of the 2nd Argument. So *++argv[1] itself denote the character 'r'.

7) Answer:b Compile time error

8) Answer:d hello hello

9) Answer:a return

10) Answer:d All of the mentioned

Set 16

- 1) Answer:c double
2. Answer:d Compile time error
3. Answer:a hello 5
4. Answer:a 5
5. Answer:b prints "C-Program" infinitely
6. Answer:d Till stack overflows
7. Answer:c Do While Loop
8. Answer:a Decision-Making
9. Answer:d This code will generate an error
10. Answer:d Error

Explanation: Break doesn't have -> ;

Set 17

1. Answer: b Code B will execute faster than Code A

2. Answer: a Differ by 80

3. Answer: b 411

4. Answer: a 9

5. Answer: d Within the block it appears & Within the blocks of the block it appears

6. Answer: a stack

7. Answer: c auto

8. Answer: a stack

9. Answer: d Compile time error

10. Answer: b false

Set 18

1. Answer:a 0
2. Answer:a true
3. Answer:b Garbage Value
4. Answer:b registers
5. Answer:d All of the mentioned
6. Answer:d for (i = n-1; i>-1; i--)
7. Answer:a Compile time error
8. Answer:b Hello is printed thrice
9. Answer:b Inside while loop
- 10 Answer:a Inside while loop Inside while loop
Inside while loop

Set 19

1. Answer:b World
2. Answer:b It will throw an error
3. Answer:dhihello
4. Answer:a break
5. Answer:b for (i = 0, j = 0; i < n, j < n; i++, j += 5)
6. Answer:d macros
7. Answer:b return
8. Answer:b if-else
9. Answer:b continue
10. Answer:d Compile time error

Set 20

1. Ans:d None

2. Ans:c int 1_v;

Explanation: Variable name can't start with a digit.

3. Ans:c To avoid conflicts since library routines use such names

4. Ans:d int \$main;

5. Ans:c Variable names can't start with a digit

6. Ans:c run without any error and prints 5

Explanation: A C program can have same function name and same variable name.

7. Explanation: volatile is C keyword

8. Ans:d int

Explanation: Both %d and %i can be used as a format identifier for int data type.

9. Answer: d all of the mentioned

10. Ans: c short is the qualifier and int is the basic datatype

Set 21

1. Ans:b -128

Explanation:signed char will be a negative number.

2. Ans:c Depends on the system/compiler

3. Ans:b struct

Explanation:Since the size of the structure depends on its fields, it has a variable size.

4. Ans:a 97.000000

Explanation:Since the ASCII value of a is 97, the same is assigned to the float variable and printed)

5. Answer: c compile time error

Explanation: This program will run on older version of C++ with the inclusion of `#includeheader` file, but for on new compiler C++14 and above the `gets` is removed from the header file so it will not run on them even after inclusion of `cstdio` header file.

6. Answer: b `io manip.h`

Explanation: The `io manip` header file is used to correct the precision of the values.

7. Answer: c `<sstring>`

Explanation: There is no such header file `<sstring>` in C++.

8. Answer: b `<string>`

Explanation: `stringstream` is available under the header file `<string>` in C++.

9. Answer: b `fstream.h`

Explanation: In this `fstream.h` header file is used for accessing the files only.

10. Answer: a 4

Explanation: In this program, we are finding the average of first 10 numbers using `stdarg` header file

Output:

```
$ g++ st4) cpp
```

```
$ 1) out
```

```
4
```

Set 22

1. Answer: b h

Explanation: .h extensions are used for user defined header files. To include a user defined header file one should use `#include "name.h"` i.e. enclosed within double quotes.

2. Answer: a include

Explanation: The include keyword is used to include all the required things to execute the given code in the program.

3. Answer: a iostream is a standard header and iostream.h is a non-standard header

Explanation: The iostream.h is used in the older versions of c++ and iostream is evolved from it in the std namespace.

4. Answer: c declarations

Explanation: In the header file, we define something that to be manipulated in the program.

5. Answer: (1) “unsigned long long int” is a valid data type.

Explanation:

In C, “float” is single precision floating type. “double” is double precision floating type. “long double” is often more precise than double precision floating type.

So the maximum floating type is “long double”.

There’s nothing called “long long double”. If someone wants to use bigger range than “long double”, we need to define our own data type i.e. user defined data type.

Besides, Type Specifiers “signed” and “unsigned” aren’t applicable for floating types (float, double, long double). Basically, floating types are always signed only.

But integer types i.e. “int”, “long int” and “long long int” are valid combinations. As per C standard, “long

long int” would be at least 64 bits i.e. 8 bytes. By default integer types would be signed. If we need to make these integer types as unsigned, one can use Type Specifier “unsigned”. That’s why 1) is correct answer.

6. Answer: (4)

Explanation:

First and foremost, continue can be used in any of the 3 loops in 3) In case of “for” loop, when continue is hit, the next expression to be executed would be `i++` followed by controlling expression (i.e. `i < 10`). In case of “while” loop, when continue is hit, the next expression to be executed would be controlling expression (i.e. `i < 10`). In case of “do-while” loop, when continue is hit, the next expression to be executed would be controlling expression (i.e. `i < 10`). That’s why “while” and “do-while” loops would behave exactly same but not the “for” loop. Just to re-iterate, `i++` would be executed in “for” loop when continue is hit.