Questions: -

1. What is a test case?

A **test case** consists of an input to the code and an expected output to verify a program's actual output against its expected output. ...

2. What are unconditional control statements?

UnConditional statements allows you to direct the program's flow to another part of your program without evaluating conditions.

3. Why does the size of datatypes change from machine to machine in c language?

The size of data types is dependent on the compiler or you can say that the system architecture i.e. 32 bit compiler or 64 bit compiler.

The size of data type int is 2 byte in 32 bit architecture or 4 bytes in 64 bit architecture.

4. Explain the usage of switch statement

The **switch statement** is a multiway branch **statement**. It provides an easy way to dispatch execution to different parts of code based on the value of the expression.

5. Explain exception handling

Exception handling is the process of responding to **exceptions** when a computer program runs. An **exception** occurs when an unexpected event happens that requires special processing.

6. Explain the flow of control of a program in function calls

Stack frame constructed **during** the **function call** for memory allocation implicitly. ... After this finishes, the caller has lost **control**, and the callee is **in** charge.

Programs: -

- 7. C program to print double quotes? printf(" \" "); will **print** you the **quotes**.
- 8. Print number charecters in a string without using loops/recursion/string.h.

scanf(): It returns total number of Inputs Scanned successfully,

9. Program to print a given string with only one word per line.

```
#include<stdio.h>
int main()
{
  int i;
```

```
char s[100];
    scanf("%c", s);
    for(i=0; s[i]!='\0'; i++)
        {
        printf("%c", s[i]);
        if(s[i]==' ')
        {
             printf("\n");
        }
    }
}
```

10. Example program to show the usage of structures

```
#include <stdio.h>
struct StudentData{
    char *stu_name;
    int stu_id;
    int stu_age;
};
int main()
{
     /* student is the variable of structure StudentData*/
         struct StudentData student;
     /*Assigning the values of each struct member here*/
     student.stu name = "Steve";
         student.stu_id = 1234;
         student.stu_age = 30;
         /* Displaying the values of struct members */
     printf("Student Name is: %s", student.stu_name);
   printf("\nStudent Id is: %d", student.stu_id);
printf("\nStudent Age is: %d", student.stu_age);
     return 0;
   }
```