1. In the following program what is the value of e?

enum number { a= -1, b= 4,c,d,e}

(a) 7 (b) 4 (c) 5 (d) 15 (e) 3

2. What is the output of the following program is

```
main()
{int i=0;
for(i=0;i<20;i++)
{switch(i)
case 0:i+=5;
case 1:i+=2;
case 5:i+=5;
default i+=4;
break;}
cout<<i;}}
```

a) 0,5,9,13,17 b) 5, 9, 13, 17 c) 12, 17, 22 d) 16, 21 e) Syntax error

3.What is the output in the following program?

```
main()
{char c=-64;
int i=-32
unsigned int u =-16;
if(c>i)
{cout<<pass1;
if(c<i)
cout<<pass2;
else
cout<<fail2;
}
else
cout<<fail1;
if(i<c)
cout<<pass2;
else
cout<<fail2;}
```

a) Pass1,Pass2 b) Pass1,Fail2 c) Fail1,Pass2 d) Fail1,Fail2
e) None of these

4. What is the difference between a normal pointer and a void pointer?

5. Why link list is used?

6. What is Hash function? Explain with an example</fail2;}

</pass2;

</c)

</fail1;

</fail2;

</pass2;

</i)

</pass1;

</i;}}

q2) trace the ouput

```
struct s{
  int i,char j}
main()
{
struct s s1;
s.s1=5;
printf("%d",s.s1);
}
```

q3) condition for empty queue

q4) trace the output

```
main()
{
int i,j;
int *p,*q;
p=&i;
q=&j;
i = 10;
j= 2;
i = *i++ + --*j;
j = --i* - ++*j;
printf("%d%d",i,j);
printf("%d%d",*p,*q);
}
```

1. How do you check whether a linked list is circular?
2. How do you decide which integer type to use?
3. How do you differentiate between a constructor and destructor?
4. How do you differentiate between aggregation and association?
5. How do you find out the size of a class?
6. How do you implement an itoa function?
7. How do you initialize a pointer to a function?
8. How do you link a C++ program to C functions?
9. How do you return a structure from functions?

10. How do you write a function that can reverse a linked-list?
11. What are the benefits of using exceptions in C++?
12. What are the differences between a struct and a class in C++?
13. What are the different types of Storage classes?
14. What do you mean by inline function?
15. What does extern mean in a function declaration?
16. What does extern mean in a function declaration?
17. What does it mean to declare a function or variable as static?
18. What is a conversion constructor?
19. What is a copy constructor?
20. What is a namespace?