Programming Logic

1.Which of this is used to skip one iteration:
A) break
B) continue
C) goto
D) return
Answer:b

2.Which of the following does not require to include math.h header file?
A) pow()
B) rand()
C)sqrt()
D) sinh()
Answer:b

3.Which has the highest precision?
A. float
B. double
C. unsigned long int
D. Long int
Answer:b

4.Choose the correct statement
while (0 == 0) { }
A) It has syntax error as there are no statements within braces {}
B) It will run forever
C) It compares 0 with 0 and since they are equal it will exit the loop immediately
D) It has syntax error as the same number is being compared with itself
Answer:b

5.Predict the output of following code:

```
main()
{
int a=10,x;
x= a– + ++a;
printf(“%d”,x);
```

}

A) 19
B) 20
C) 22
D) 23
Answer:b

6.Guess the output:
main()
{
printf("%d", sizeof('a'));
//same as → sizeof(97)
}
A) 2 or 4 —
B) 1 or 3
C) Garbage value
D) ASCII value of a
Answer:a
Explaination:
sizeof 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.Predict the output of following code:
main()
{
int a=b=c=d=10;
printf("%d,%d,%d,%d",a,b,c,d);
}
A) Error
B) 10,10,10,10
C) Garbage Value,Garbage Value,Garbage Value,10
D) Garbage Value,Garbage Value,Garbage Value,Garbage Value
Answer: a
Explaination: error: 'b' , 'c', 'd' undeclared

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;
}
```

A) printf(“%ll\n”,fact(5));
B) printf(“%u\n”,fact(5));
C) printf(“%d\n”,fact(5));
D) printf(“%ld\n”,fact(5));
Answer:d

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

A) int
B) float
C) void
D) Error
Answer:a

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

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

A) 5
B) 1
C) 0
D) 3
Answer:a

11. 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);
}
}
```

a) 11
b) 13
c) 15
d) 10
Answer:c

12. Which of the following indicate the end of file?
a) feof()
b) EOF
c) Both feof() and EOF
d) None of the mentioned
Answer:c

13. If a functions return type is not explicitly defined then it is default to …….(in C).
a) int
b) float
c) void
d) error
Answer:a

14. Where the local variable is stored ?
a) Disk
b) Stack
c) Heap
d) Register
Answer:b

15. How many times loop will executed ?

```
#include
int main()
{
int i;
for(i=0;i<5;i++)
{
```

printf(“Hello\n”);
}
}
a) 0
b) 1
c) 3
d) 5
Answer:d

16. What is dangling pointer?
a) points to garbage value
b) points to function
c) Both A and B
d) None of these
Answer:a

17. what is the purpose of ftell ?
a)to get the current file position
b)to get the current file attribute
c)to get the current file status
d)to get the current file name
Answer:a

18. What is recursion ?
a) looping
b) a function calls another function repeatedly
c) a fnction calls repeatedly
d) function calls itself repeatedly
Answer:d

19. What is the similarity between enum and struct ?
a) can assign new values
b) can create new data types
c) nothing in common
d) they are same
Answer:b

20. which of the following is not a fundamental datatype?
a) Enum

b) unsigned long int
c) Long int
d) double
Answer:a

21. How many times hello will print ?

```
#include
int main(void)
{
int i;
for(i=0;i<5;i++);
printf(“hello”);
}
```

a) Compilation error
b) Runtime error
c) 4
d) 1
Answer:b

22. What is the output of this C code?

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

a) 0
b) 1
c) Garbage Value
d) Run time error
Answer:a

23. What is the output of this C code?

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

a) true
b) true only if NULL value is 0
c) Compile time error
d) Nothing
Answer:a

24. What is the output of this C code?

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

a) 0
b) Garbage Value
c) Run time error
d) Nothing
Answer:b

25. What is the output of this C code?

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

a) 9
b) 4
c) 5
d) 0
Answer:a

26. The scope of an automatic variable is:

a) Within the block it appears
b) Within the blocks of the block it appears
c) Until the end of program

d) Within the block it appears & Within the blocks of the block it appears
Answer:d

27. Automatic variables are allocated space in the form of a:
a) stack
b) queue
c) priority queue
d) random
Answer:a

28. Which of the following is a storage specifier?
a) enum
b) union
c) auto
d) volatile
Answer:c

29. Automatic variables are stored in
a) stack
b) data segment
c) register
d) heap
Answer:a

30. 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);
}
```

a) Depends on whether i is actually stored in machine register
b) 10 10
c) 11 11
d) Compile time error
Answer:d

31. Register storage class can be specified to global variables

a) true
b) false
c) Depends on the compiler
d) Depends on the standard
Answer:b

32. Register variables reside in
a) stack
b) registers
c) heap
d) main memory
Answer:b

33. Which of the following operation is not possible in a register variable?
a) Reading the value into a register variable
b) Copy the value from a memory variable
c) Global declaration of register variable
d) All of the mentioned
Answer:d

34. Which of the following is not valid variable name declaration?
a) int __v1;
b) int __1v;
c) int __V1;
d) None
Ans:d

35. Which of the following is not a valid variable name declaration?
a) int _v1;
b) int v_1;
c) int 1_v;
d) int _1v
Ans:c
Explanation:Variable name can’t start with a digit.

36. Variable names beginning with underscore is not encouraged. Why?
a) It is not standard form
b) To avoid conflicts since assemblers and loaders use such names
c) To avoid conflicts since library routines use such names

d) To avoid conflicts with environment variables of an operating system
Ans:c

37. Which is not a valid C variable name?
a) int number;
b) float rate;
c) int variable_count;
d) int $main;
Ans:d

38.Which of the following is true for variable names in C?
a) They can contain alphanumeric characters as well as special characters
b) It is not an error to declare a variable to be one of the keywords(like goto, static)
c) Variable names can't start with a digit
d) Variable can be of any length
Ans:c

39. What will be the output?

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

a) compile-time error
b) run-time error
c) run without any error and prints 5
d) experience infinite looping
Ans:c
Explanation:A C program can have same function name and same variable name.

40. Which of the following cannot be a variable name in C?
a) friend
b) true
c) volatile
d) export
Ans: c
Explanation:volatile is C keyword

41. The format identifier '%i' is also used for _____ data type?
a) char
b) double
c) float
d) int
Ans:d
Explanation:Both %d and %i can be used as a format identifier for int data type.

42. Which of the following is a User-defined data type?
a) struct {char name[10], int age};
b) typedef enum {Mon, Tue, Wed, Thu, Fri} Workdays;
c) typedef int Boolean;
d) all of the mentioned
Answer:d

43. What is short int in C programming?
a) Basic datatype of C
b) Qualifier
c) short is the qualifier and int is the basic datatype
d) All of the mentioned
Ans:c

44. What is the output of this C code?
```
#include
int main()
{
signed char chr;
chr = 128;
printf("%d\n", chr);
return 0;
}
```
a) 128
b) -128
c) Depends on the compiler
d) None of the mentioned
Ans:b
Explanation:signed char will be a negative number.

45. What is the size of an int data type?
a) 4 Bytes

b) 8 Bytes
c) Depends on the system/compiler
d) Cannot be determined
Ans:c

46. Which of the datatypes have size that is variable?
a) int
b) struct
c) float
d) double
Ans:b
Explanation:Since the size of the structure depends on its fields, it has a variable size.

47. What is the output of this C code?

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

a) 97.000000
b) run time error
c) a.0000000
d) a
Ans:a
Explanation:Since the ASCII value of a is 97, the same is assigned to the float variable and printed.

48. What is the sizeof(char) in a 32-bit C compiler?
a) 1 bit
b) 2 bits
c) 1 Byte
d) 2 Bytes
Ans: c

49. What type of value does sizeof return?
a) unsigned int
b) short
c) char

d) long
Ans: a

50. Which one is used during memory deallocation in C?
a) remove(p);
b) delete(p);
c) free(p);
d) terminate(p);
Ans: c