C Multiple Choice Questions and answers MCQ with Ans.

1. Who is father of C Language?
A. Bjarne Stroustrup
B. Dennis Ritchie
C. James A. Gosling
D. Dr. E.F. Codd
Answer : B

2. C Language developed at _____?
A. AT & T's Bell Laboratories of USA in 1972
B. AT & T's Bell Laboratories of USA in 1970
C. Sun Microsystems in 1973
D. Cambridge University in 1972
Answer : A

3. For 16-bit compiler allowable range for integer constants is _____ ?
A. -3.4e38 to 3.4e38
B. -32767 to 32768
C. -32768 to 32767
D. -32668 to 32667
Answer : C

4. C programs are converted into machine language with the help of
A. An Editor
B. A compiler
C. An operating system
D. None of the above
Answer : B

5. A C variable cannot start with
A. An alphabet
B. A number
C. A special symbol other than underscore
D. both (b) and (c)
Answer : D

6. Which of the following is allowed in a C Arithmetic instruction
A. []
B. {}
C. ()
D. None of the above
Answer : C

7. Which of the following shows the correct hierarchy of arithmetic operations in C
A. / + * -
B. * - / +
C. + - / *
D. * / + -
Answer : D

8. What is an array?
A. An array is a collection of variables that are of the dissimilar data type.
B. An array is a collection of variables that are of the same data type.
C. An array is not a collection of variables that are of the same data type.

D. None of the above.
Answer : B

9. What is right way to Initialization array?
A. int num[6] = { 2, 4, 12, 5, 45, 5 } ;
B. int n{} = { 2, 4, 12, 5, 45, 5 } ;
C. int n{6} = { 2, 4, 12 } ;
D. int n(6) = { 2, 4, 12, 5, 45, 5 } ;
Answer : A

10. An array elements are always stored in _____ memory locations.
A. Sequential
B. Random
C. Sequential and Random
D. None of the above
Answer : A

11. What is the right way to access value of structure variable book{ price, page }?
A. printf("%d%d", book.price, book.page);
B. printf("%d%d", price.book, page.book);
C. printf("%d%d", price::book, page::book);
D. printf("%d%d", price->book, page->book);
Answer : A

12. perror( ) function used to ?
A. Work same as printf()
B. prints the error message specified by the compiler
C. prints the garbage value assigned by the compiler
D. None of the above
Answer : B

13. Bitwise operators can operate upon?
A. double and chars
B. floats and doubles
C. ints and floats
D. ints and chars
Answer : D

14. What is C Tokens?
A. The smallest individual units of c program
B. The basic element recognized by the compiler
C. The largest individual units of program
D. A & B Both
Answer : D

15. What is Keywords?
A. Keywords have some predefine meanings and these meanings can be changed.
B. Keywords have some unknown meanings and these meanings cannot be changed.
C. Keywords have some predefine meanings and these meanings cannot be changed.
D. None of the above
Answer : C

16. What is constant?
A. Constants have fixed values that do not change during the execution of a program
B. Constants have fixed values that change during the execution of a program
C. Constants have unknown values that may be change during the execution of a program
D. None of the above

Answer : A

17. Which is the right way to declare constant in C?
A. int constant var =10;
B. int const var = 10;
C. const int var = 10;
D. B & C Both
Answer : D

18. Which operators are known as Ternary Operator?
A. ::, ?
B. ?, :
C. ?, ;;
D. None of the above
Answer : B

19. In switch statement, each case instance value must be _____?
A. Constant
B. Variable
C. Special Symbol
D. None of the above
Answer : A

20. What is the work of break keyword?
A. Halt execution of program
B. Restart execution of program
C. Exit from loop or switch statement
D. None of the above
Answer : C

21. What is function?
A. Function is a block of statements that perform some specific task.
B. Function is the fundamental modular unit. A function is usually designed to perform a specific task.
C. Function is a block of code that performs a specific task. It has a name and it is reusable
D. All the above
Answer : D

22. Which one of the following sentences is true ?
A. The body of a while loop is executed at least once.
B. The body of a do .. while loop is executed at least once.
C. The body of a do .. while loop is executed zero or more times.
D. A for loop can never be used in place of a while loop.
Answer : B

23. A binary tree with 27 nodes has _____ null branches.
A. 54
B. 27
C. 26
D. None of the above
Answer : D

24. Which one of the following is not a linear data structure?
A. Array
B. Binary Tree
C. Queue
D. Stack

Answer : B

25. Recursive functions are executed in a?
A. First In First Out Order
B. Load Balancing
C. Parallel Fashion
D. Last In First Out Order
Answer : D

26. Queue is a _____ list.
A. LIFO
B. LILO
C. FILO
D. FIFO
Answer : D

27. The statement print f ("%d", 10 ? 0 ? 5 : 1 : 12); will print?
A. 10
B. 0
C. 12
D. 1
Answer : D

28. To represent hierarchical relationship between elements, which data structure is suitable?
A. Priority
B. Tree
C. Dqueue
D. All of the above
Answer : B

29. Which of the following data structure is linear type?
A. Strings
B. Queue
C. Lists
D. All of the above
Answer : D

30. The statement printf("%c", 100); will print?
A. prints 100
B. print garbage
C. prints ASCII equivalent of 100
D. None of the above
Answer : C

31. The _____ memory allocation function modifies the previous allocated space.
A. calloc
B. free
C. malloc
D. realloc
Answer : D

32. Number of binary trees formed with 5 nodes are
A. 30
B. 36
C. 108
D. 42
Answer : D

33. The "C" language is
A. Context free language
B. Context sensitive language
C. Regular language
D. None of the above
Answer : A

34. The worst case time complexity of AVL tree is better in comparison to binary search tree for
A. Search and Insert Operations
B. Search and Delete Operations
C. Insert and Delete Operations
D. Search, Insert and Delete Operations
Answer : D

35. In which tree, for every node the height of its left subtree and right subtree differ almost by one?
A. Binary search tree
B. AVL tree
C. Threaded Binary Tree
D. Complete Binary Tree
Answer : B

36. C is _____ Language?
A. Low Level
B. High Level
C. Assembly Level
D. Machine Level

37. The Default Parameter Passing Mechanism is called as
A. Call by Value
B. Call by Reference
C. Call by Address
D. Call by Name
Answer : A

38. What is Dequeue?
A. Elements can be added from front
B. Elements can be added to or removed from either the front or rear
C. Elements can be added from rear
D. None of the above
Answer : B

39. In which linked list last node address is null?
A. Doubly linked list
B. Circular list
C. Singly linked list
D. None of the above
Answer : C

40. Which is the correct syntax to declare constant pointer?
A. int *const constPtr;
B. *int constant constPtr;
C. const int *constPtr;
D. A and C both
Answer : D

1. What will be the output of the following arithmetic expression ?
5+3*2%10-8*6
a) -37
b) -42
c) -32
d) -28
Ans: a

2. What will be the output of the following statement ?
int a=10; printf("%d &i",a,10);
a) error
b) 10
c) 10 10
d) none of these
Ans: d

3. What will be the output of the following statement ?
printf("%X%x%ci%x",11,10,'s',12);
a) error
b) basc
c) Bas94c
d) none of these
Ans: b

4. What will be the output of the following statements ?
int a = 4, b = 7,c; c = a = = b; printf("%i",c);
a) 0
b) error
c) 1
d) garbage value
Ans: a

5. What will be the output of the following statements ?
int a = 5, b = 2, c = 10, i = a%b
void main()
{ printf("hello"); main(); }
a) 1
b) 2
c) infinite number of times
d) none of these
Ans: c

6. What will be output if you will compile and execute the following c code?
```
struct marks{
int p:3;
int c:3;
int m:2;
};
void main(){
struct marks s={2,-6,5};
printf("%d %d %d",s.p,s.c,s.m);
}
```
(a) 2 -6 5
(b) 2 -6 1
(c) 2 2 1

(d) Compiler error
(e) None of these
Ans: c

7. What will be the output of the following statements ?
int x[4] = {1,2,3}; printf("%d %d %D",x[3],x[2],x[1]);
a) 03%D
b) 000
c) 032
d) 321
Ans: c

8. What will be the output of the following statement ?
printf(3 + "goodbye");
a) goodbye
b) odbye
c) bye
d) dbye
Ans: d

9. What will be the output of the following statements ?
long int a = scanf("%ld%ld",&a,&a); printf("%ld",a);
a) error
b) garbage value
c) 0
d) 2
Ans: b

10. What will be the output of the following program ?
#include
void main()
{ int a = 2;
switch(a)
{ case 1:
printf("goodbye"); break;
case 2:
continue;
case 3:
printf("bye");
}
}
a) error
b) goodbye
c) bye
d) byegoodbye
Ans: a

11. What will be the output of the following statements ?
int i = 1,j; j=i--- -2; printf("%d",j);
a) error
b) 2
c) 3
d) -3
Ans: c

12. What will be the output of following program ?
#include

```
main()
{
int x,y = 10;
x = y * NULL;
printf("%d",x);
}
```
a) error
b) 0
c) 10
d) garbage value
Ans: b

13. What will be the output of following statements ?
```
char x[ ] = "hello hi"; printf("%d%d",sizeof(*x),sizeof(x));
```
a) 88
b) 18
c) 29
d) 19
Ans: d

14. What will be the output of the following statements ?
```
int a=5,b=6,c=9,d; d=(ac?1:2):(c>b?6:8)); printf("%d",d);
```
a) 1
b) 2
c) 6
d) Error
Ans: d

15. What will be the output of the following statements ?
```
int i = 3;
printf("%d%d",i,i++);
```
a) 34
b) 43
c) 44
d) 33
Ans: b

16. What will be the output of the following program ?
```
#include
void main()
{
int a = 36, b = 9;
printf("%d",a>>a/b-2);
}
```
a) 9
b) 7
c) 5
d) none of these
Ans: a

17. int testarray[3][2][2] = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12};
What value does testarray[2][1][0] in the sample code above contain?
a) 11
b) 7
c) 5
d) 9
Ans: a

```
18. void main()
{
int a=10,b=20;
char x=1,y=0;
if(a,b,x,y)
{
printf("EXAM");
}
}
```
What is the output?
a) XAM is printed
b) exam is printed
c) Compiler Error
d) Nothing is printed
Ans: d

19. What is the output of the following code?
```
#include
void main()
{
int s=0;
while(s++<10)>
# define a 10
main()
{
printf("%d..",a);
foo();
printf("%d",a);
}
void foo()
{
#undef a
#define a 50
}
```
a) 10..10
b) 10..50
c) Error
d) 0
Ans: c

20. main()
```
{
struct
{
int i;
}xyz;
(*xyz)->i=10;
printf("%d",xyz.i);
}
```
What is the output of this program?
a) program will not compile
b) 10
c) god only knows
d) address of I
Ans: b

21.What will happen if in a C program you assign a value to an array element whose subscript exceeds the size of array?

A. The element will be set to 0.

B. The compiler would report an error.

C. The program may crash if some important data gets overwritten.

D. The array size would appropriately grow.

Ans: C

22. What would be the output of the following program?

```
#include
main()
{
char str[]="S\065AB";
printf("\n%d", sizeof(str));
}
```

a) 7

b) 6

c) 5

d) error

Ans: b

23. What will be the value of `a` after the following code is executed

```
#define square(x) x*x
a = square(2+3)
```

a) 25

b) 13

c) 11

d) 10

Ans: c

24.
```
#include
void func()
{
int x = 0;
static int y = 0;
x++; y++;
printf( "%d -- %d\n", x, y);
}
int main()
{
func();
func();
return 0;
}
```

What will the code above print when it is executed?

a)

1 -- 1

1 -- 1

b)

1 -- 1

2 -- 1

c)

1 -- 1

2 -- 2

d)

1 -- 1

1 -- 2

Ans: d

25. long factorial (long x)
{
????
return x * factorial(x - 1);
}
With what do you replace the ???? to make the function shown above return the correct answer?
a)
if (x == 0) return 0;
b)
return 1;
c)
if (x >= 2) return 2;
d)
if (x <= 1) return 1;
Ans: d

26. int y[4] = {6, 7, 8, 9};
int *ptr = y + 2; printf("%d\n", ptr[1]);
What is printed when the sample code above is executed?
a) 6
b) 7
c) 8
d) 9
Ans: d

27. int i = 4;
switch (i)
{
default: ;
case 3:
i += 5;
if (i == 8)
{
i++;
if (i == 9) break;
i *= 2;
}
i -= 4;
break;

case 8:
i += 5;
break;
}
printf("i = %d\n", i);
What will the output of the sample code above be?
a) i = 5
b) i = 8
c) i = 9
d) i = 10
Ans: a

28. What will be output if you will compile and execute the following c code?
void main()

```
{
if(printf("cquestionbank"))
printf("I know c");
else
printf("I know c++");
}
```
(a) I know c
(b) I know c++
(c) cquestionbankI know c
(d) cquestionbankI know c++
(e) Compiler error
Answer: (c)

29. What will be output if you will compile and execute the following c code?
```
#define call(x) #x
void main(){
printf("%s",call(c/c++));
}
```
(a)c
(b)c++
(c)#c/c++
(d)c/c++
(e)Compiler error
Answer: (d)

30. What will be output if you will compile and execute the following c code?
```
#define message "union is\
power of c"
void main()
{
clrscr();
printf("%s",message);
getch();
}
```
(a) union is power of c
(b) union is power of c
(c) union is Power of c
(d) Compiler error
(e) None of these
Answer: (b)

31. What will be output if you will compile and execute the following c code?
```
void main(){
int a=25;
clrscr();
printf("%o %x",a,a);
getch();
}
```
(a) 25 25
(b) 025 0x25
(c) 12 42
(d) 31 19
(e) None of these
Answer: (d)

32. What will be output if you will compile and execute the following c code?
```
void main()
```

```
{
int i=0;
if(i==0){
i=((5,(i=3)),i=1);
printf("%d",i);
}
else
printf("equal");
}
```
(a) 5
(b) 3
(c) 1
(d) equal
(e) None of above
Answer: (c)

33. What will be output if you will compile and execute the following c code?
```
int extern x;
void main()
printf("%d",x);
x=2;
getch();
}
int x=23;
```
(a) 0
(b) 2
(c) 23
(d) Compiler error
(e) None of these
Answer: (c)

34. What will be output if you will compile and execute the following c code?
```
void main(){
int a,b;
a=1,3,15;
b=(2,4,6);
clrscr();
printf("%d ",a+b);
getch();
}
```
(a) 3
(b) 21
(c) 17
(d) 7
(e) Compiler error
Answer: (d)

35. What will be output if you will compile and execute the following c code?
```
void main(){
static main;
int x;
x=call(main);
clrscr();
printf("%d ",x);
getch();
}
int call(int address){
```

```c
address++;
return address;
}
```
(a) 0
(b) 1
(c) Garbage value
(d) Compiler error
(e) None of these
Answer: (b)

36. What will be output if you will compile and execute the following c code?
```c
#include "string.h"
void main(){
clrscr();
printf("%d %d",sizeof("string"),strlen("string"));
getch();
}
```
(a) 6 6
(b) 7 7
(c) 6 7
(d) 7 6
(e) None of these
Answer: (d)

37. Write c program which display mouse pointer and position of pointer.(In x coordinate, y coordinate)?
Answer:
```c
#include" dos.h"
#include" stdio.h"
void main()
{
union REGS i,o;
int x,y,k;
//show mouse pointer
i.x.ax=1;
int86(0x33,&i,&o);
while(!kbhit()) //its value will false when we hit key in the key board
{
i.x.ax=3; //get mouse position
x=o.x.cx;
y=o.x.dx;
clrscr();
printf(" (%d , %d)",x,y);
delay(250);
int86(0x33,&i,&o);
}
getch();
}
```

38. What will be output if you will compile and execute the following c code?
```c
void main(){
int huge*p=(int huge*)0XC0563331;
int huge*q=(int huge*)0xC2551341;
*p=200;
printf("%d",*q);
}
```
(a) 0

(b)Garbage value
(c)null
(d) 200
(e)Compiler error
Answer: (d)

39.What will be output if you will compile and execute the following c code?
```
struct marks{
int p:3;
int c:3;
int m:2;
};
void main(){
struct marks s={2,-6,5};
printf("%d %d %d",s.p,s.c,s.m);
}
```
(a) 2 -6 5
(b) 2 -6 1
(c) 2 2 1
(d) Compiler error
(e) None of these
Answer: (c)

40.What will be output if you will compile and execute the following c code?
```
void main(){
if(printf("cquestionbank"))
printf("I know c");
else
printf("I know c++");
}
```
(a) I know c
(b) I know c++
(c) cquestionbankI know c
(d) cquestionbankI know c++
(e) Compiler error
Answer: (c)

41.What will be output if you will compile and execute the following c code?
```
#define call(x) #x
void main(){
printf("%s",call(c/c++));
}
```
(a)c
(b)c++
(c)#c/c++
(d)c/c++
(e)Compiler error
Answer: (d)

42. What will be output if you will compile and execute the following c code?
```
#define message "union is¥
power of c"
void main(){
clrscr();
printf("%s",message);
getch();
}
```

(a) union is power of c
(b) union ispower of c
(c) union is
Power of c
(d) Compiler error
(e) None of these
Answer: (b)

43. What will be output if you will compile and execute the following c code?
```c
void main(){
int a=25;
clrscr();
printf("%o %x",a,a);
getch();
}
```
(a) 25 25
(b) 025 0x25
(c) 12 42
(d) 31 19
(e) None of these
Answer: (d)

44. What will be output if you will compile and execute the following c code?
```c
void main(){
int i=0;
if(i==0){
i=((5,(i=3)),i=1);
printf("%d",i);
}
else
printf("equal");
}
```
(a) 5
(b) 3
(c) 1
(d) equal
(e) None of above
Answer: (c)

45. What will be output if you will compile and execute the following c code?
```c
int extern x;
void main()
printf("%d",x);
x=2;
getch();
}
int x=23;
```
(a) 0
(b) 2
(c) 23
(d) Compiler error
(e) None of these
Answer: (c)

46. What will be output if you will compile and execute the following c code?
```c
void main(){
int a,b;
```

```
a=1,3,15;
b=(2,4,6);
clrscr();
printf("%d ",a+b);
getch();
}
(a) 3
(b) 21
(c) 17
(d) 7
(e) Compiler error
Answer: (d)
```

47. What will be output if you will compile and execute the following c code?
```
void main(){
static main;
int x;
x=call(main);
clrscr();
printf("%d ",x);
getch();
}
int call(int address){
address++;
return address;
}
```
(a) 0
(b) 1
(c) Garbage value
(d) Compiler error
(e) None of these
Answer: (b)

48. What will be output if you will compile and execute the following c code?
```
#include "string.h"
void main(){
clrscr();
printf("%d %d",sizeof("string"),strlen("string"));
getch();
}
```
(a) 6 6
(b) 7 7
(c) 6 7
(d) 7 6
(e) None of these
Answer: (d)

49. What will be output if you will compile and execute the following c code?
```
void main(){
int huge*p=(int huge*)0XC0563331;
int huge*q=(int huge*)0xC2551341;
*p=200;
printf("%d",*q);
}
```
(a)0
(b)Garbage value
(c)null
```

(d) 200
(e) Compiler error
Answer: (d)

50. What will be output if you will compile and execute the following c code?
```
struct marks{
int p:3;
int c:3;
int m:2;
};
void main(){
struct marks s={2,-6,5};
printf("%d %d %d",s.p,s.c,s.m);
}
```
(a) 2 -6 5
(b) 2 -6 1
(c) 2 2 1
(d) Compiler error
(e) None of these
Answer: (c)

51. What will be output if you will compile and execute the following c code?
```
void main(){
if(printf("cquestionbank"))
printf("I know c");
else
printf("I know c++");
}
```
(a) I know c
(b) I know c++
(c) cquestionbankI know c
(d) cquestionbankI know c++
(e) Compiler error
Answer: (c)

52. What will be output if you will compile and execute the following c code?
```
#define call(x) #x
void main(){
printf("%s",call(c/c++));
}
```
(a) c
(b) c++
(c) #c/c++
(d) c/c++
(e) Compiler error
Answer: (d)

53. What will be output if you will compile and execute the following c code?
```
#define message "union is\
power of c"
void main(){
clrscr();
printf("%s",message);
getch();
}
```
(a) union is power of c
(b) union ispower of c

(c) union is
Power of c
(d) Compiler error
(e) None of these
Answer: (b)

54. What will be output if you will compile and execute the following c code?
```
void main(){
int a=25;
clrscr();
printf("%o %x",a,a);
getch();
}
```
(a) 25 25
(b) 025 0x25
(c) 12 42
(d) 31 19
(e) None of these
Answer: (d)

55.What will be output if you will compile and execute the following c code?
```
void main(){
int i=0;
if(i==0){
i=((5,(i=3)),i=1);
printf("%d",i);
}
else
printf("equal");
}
```
(a) 5
(b) 3
(c) 1
(d) equal
(e) None of above
Answer: (c)

56.What will be output if you will compile and execute the following c code?
```
int extern x;
void main()
printf("%d",x);
x=2;
getch();
}
int x=23;
```
(a) 0
(b) 2
(c) 23
(d) Compiler error
(e) None of these
Answer: (c)

57.What will be output if you will compile and execute the following c code?
```
void main(){
int a,b;
a=1,3,15;
b=(2,4,6);
```

```
clrscr();
printf("%d ",a+b);
getch();
}
```
(a) 3
(b) 21
(c) 17
(d) 7
(e) Compiler error
Answer: (d)

58. What will be output if you will compile and execute the following c code?
```
void main(){
static main;
int x;
x=call(main);
clrscr();
printf("%d ",x);
getch();
}
int call(int address){
address++;
return address;
}
```
(a) 0
(b) 1
(c) Garbage value
(d) Compiler error
(e) None of these
Answer: (b)

59. What will be output if you will compile and execute the following c code?
```
#include "string.h"
void main(){
clrscr();
printf("%d %d",sizeof("string"),strlen("string"));
getch();
}
```
(a) 6 6
(b) 7 7
(c) 6 7
(d) 7 6
(e) None of these
Answer: (d)

60. What will be output if you will compile and execute the following c code?
```
void main(){
int huge*p=(int huge*)0XC0563331;
int huge*q=(int huge*)0xC2551341;
*p=200;
printf("%d",*q);
}
```
(a)0
(b)Garbage value
(c)null
(d) 200
(e)Compiler error
```

Answer: (d)

61. What is the right way to access value of structure variable book{ price, page }?
A. printf("%d%d", book.price, book.page);
B. printf("%d%d", price.book, page.book);
C. printf("%d%d", price::book, page::book);
D. printf("%d%d", price->book, page->book);
Answer : A

62. perror( ) function used to ?
A. Work same as printf()
B. prints the error message specified by the compiler
C. prints the garbage value assigned by the compiler
D. None of the above
Answer : B

63. Bitwise operators can operate upon?
A. double and chars
B. floats and doubles
C. ints and floats
D. ints and chars
Answer : D

64. What is C Tokens?
A. The smallest individual units of c program
B. The basic element recognized by the compiler
C. The largest individual units of program
D. A & B Both
Answer : D

65. What is Keywords?
A. Keywords have some predefine meanings and these meanings can be changed.
B. Keywords have some unknown meanings and these meanings cannot be changed.
C. Keywords have some predefine meanings and these meanings cannot be changed.
D. None of the above
Answer : C

66. What is constant?
A. Constants have fixed values that do not change during the execution of a program
B. Constants have fixed values that change during the execution of a program
C. Constants have unknown values that may be change during the execution of a program
D. None of the above
Answer : A

67. Which is the right way to declare constant in C?
A. int constant var =10;
B. int const var = 10;
C. const int var = 10;
D. B & C Both
Answer : D

68. Which operators are known as Ternary Operator?
A. ::, ?
B. ?, :
C. ?, ;;

D. None of the avobe
Answer : B

69. In switch statement, each case instance value must be _____?
A. Constant
B. Variable
C. Special Symbol
D. None of the avobe
Answer : A

70. What is the work of break keyword?
A. Halt execution of program
B. Restart execution of program
C. Exit from loop or switch statement
D. None of the avobe
Answer : C