

PROGRAMMING IN C

PAPER-203

Each Question Carries with 1 Mark (Multiple Choice Questions)

1. Who is the father of C language?

- a) Steve Jobs
- b) James Gosling
- c) Dennis Ritchie
- d) Rasmus Lerdorf

Answer: c

2. Which of the following is not a valid C variable name?

- a) int number;
- b) float rate;
- c) int variable_count;
- d) int \$main;

Answer: d

3. All keywords in C are in _____

- a) LowerCase letters
- b) UpperCase letters
- c) CamelCase letters
- d) None of the mentioned

Answer: a

4. 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 cannot start with a digit
- d) Variable can be of any length

Answer: c

5. Which is valid C expression?

- a) int my_num = 100,000;
- b) int my_num = 100000;
- c) int my num = 1000;
- d) int \$my_num = 10000;

Answer: b

6. Which of the following cannot be a variable name in C?

- a) volatile
- b) true
- c) friend
- d) export

Answer: a

7. Which of the following declaration is not supported by C language?

- a) String str;
- b) char *str;
- c) float str = 3e2;
- d) Both String str; & float str = 3e2;

Answer: a

8. Which keyword is used to prevent any changes in the variable within a C program?

- a) immutable
- b) mutable
- c) const
- d) volatile

Answer: c

9. What is the result of logical or relational expression in C?
- a) True or False
 - b) 0 or 1
 - c) 0 if an expression is false and any positive number if an expression is true
 - d) None of the mentioned

View Answer

Answer: b

10. Which of the following typecasting is accepted by C language?

- a) Widening conversions
- b) Narrowing conversions
- c) Widening & Narrowing conversions
- d) None of the mentioned

Answer: c

11. Where in C the order of precedence of operators do not exist?

- a) Within conditional statements, if, else
- b) Within while, do-while
- c) Within a macro definition
- d) None of the mentioned

Answer: d

12. Which of the following is NOT possible with any 2 operators in C?

- a) Different precedence, same associativity
- b) Different precedence, different associativity
- c) Same precedence, different associativity
- d) All of the mentioned

Answer: c

13. What is an example of iteration in C?

- a) for
- b) while
- c) do-while
- d) all of the mentioned

Answer: d

14. Functions can return enumeration constants in C?

- a) true
- b) false
- c) depends on the compiler
- d) depends on the standard

Answer: a

15. Functions in C Language are always _____

- a) Internal
- b) External
- c) Both Internal and External
- d) External and Internal are not valid terms for functions

Answer: b

16. Which of following is not accepted in C?

- a) `static a = 10; //static as`
- b) `static int func (int); //parameter as static`
- c) `static static int a; //a static variable prefixed with static`
- d) all of the mentioned

Answer: c

17. Property which allows to produce different executable for different platforms in C is called?

- a) File inclusion
- b) Selective inclusion

- c) Conditional compilation
- d) Recursive macros

Answer: c

18. What is #include <stdio.h>?

- a) Preprocessor directive
- b) Inclusion directive
- c) File inclusion directive
- d) None of the mentioned

Answer: a

19. C preprocessors can have compiler specific features.

- a) True
- b) False
- c) Depends on the standard
- d) Depends on the platform

Answer: a

20. Which of the following are C preprocessors?

- a) #ifdef
- b) #define
- c) #endif
- d) all of the mentioned

Answer: d

21. The C-preprocessors are specified with _____ symbol.

- a) #
- b) \$
- c) " "
- d) &

Answer: a

22. How is search done in #include and #include "somelibrary.h" according to C standard?

- a) When former is used, current directory is searched and when latter is used, standard directory is searched
- b) When former is used, standard directory is searched and when latter is used, current directory is searched
- c) When former is used, search is done in implementation defined manner and when latter is used, current directory is searched
- d) For both, search for 'some library' is done in implementation-defined places

Answer: d

23. How many number of pointer (*) does C have against a pointer variable declaration?

- a) 7
- b) 127
- c) 255
- d) No limits

Answer: d

24. Which of the following is not possible statically in C language?

- a) Jagged Array
- b) Rectangular Array
- c) Cubical Array
- d) Multidimensional Array

Answer: a

25. Which of the following return-type cannot be used for a function in C?

- a) char *
- b) struct
- c) void
- d) none of the mentioned

Answer: d

26. The standard header _____ is used for variable list arguments (...) in C.

- a) <stdio.h >
- b) <stdlib.h>
- c) <math.h>
- d) <stdarg.h>

Answer: d

27. When a C program is started, O.S environment is responsible for opening file and providing pointer for that file?

- a) Standard input
- b) Standard output
- c) Standard error
- d) All of the mentioned

Answer: d

28. In C language, FILE is of which data type?

- a) int
- b) char *
- c) struct
- d) None of the mentioned

Answer: c

29. What is the sizeof(char) in a 32-bit C compiler?

- a) 1 bit
- b) 2 bits
- c) 1 Byte
- d) 2 Bytes

Answer: c

30. Which of the following is not an operator in C?

- a) ,
- b) sizeof()
- c) ~
- d) None of the mentioned

Answer: d

31 scanf() is a predefined function in _____ header file.

- a) stdlib. h
- b) ctype. h
- c) stdio. h
- d) stdarg. h

Answer: c

32. What is meant by 'a' in the following C operation?

```
fp = fopen("Random.txt", "a");
```

- a) Attach
- b) Append
- c) Apprehend
- d) Add

Answer: b

33 What will be the output of the following C code?

```
#include <stdio.h>
int main()
{
int y = 10000;
int y = 34;
printf("Hello World! %d\n", y);
return 0;
```

}

- a) Compile time error
- b) Hello World! 34
- c) Hello World! 1000
- d) Hello World! followed by a junk value

Answer: a

34. What will happen if the following C code is executed?

```
1. #include <stdio.h>
2. int main()
3. {
4. int main = 3;
5. printf("%d", main);
6. return 0;
7. }
```

- a) It will cause a compile-time error
- b) It will cause a run-time error
- c) It will run without any error and prints 3
- d) It will experience infinite looping

Answer: c

35. What will be the output of the following C code?

```
#include <stdio.h>
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

Answer: b

36. What will be the output of the following C code on a 64 bit machine?

```
#include <stdio.h>
union Sti
{
int nu;
char m;
};
int main()
{
union Sti s;
printf("%d", sizeof(s));
return 0;
}
```

- a) 8
- b) 5
- c) 9
- d) 4

Answer: d

37. What will be the output of the following C function?

```
#include <stdio.h>
```

```
enum birds {SPARROW, PEACOCK, PARROT};
enum animals {TIGER = 8, LION, RABBIT, ZEBRA};
int main()
{
enum birds m = TIGER;
int k;
k = m;
printf("%d\n", k);
return 0;
}
```

- a) 0
- b) Compile time error
- c) 1
- d) 8

Answer: d

38. What will be the output of the following C code?

```
#include <stdio.h>
int const print()
{
printf("Sanfoundry.com");
return 0;
}
void main()
{
print();
}
```

- a) Error because function name cannot be preceded by const
- b) Sanfoundry.com
- c) Sanfoundry.com is printed infinite times
- d) Blank screen, no output

Answer: b

39. Will the following C code compile without any error?

```
#include <stdio.h>
int main()
{
for (int k = 0; k < 10; k++);
return 0;
}
```

- a) Yes
- b) No
- c) Depends on the C standard implemented by compilers
- d) Error

Answer: c

40. What will be the final value of x in the following C code?

```
#include <stdio.h>
void main()
{
int x = 5 * 9 / 3 + 9;
}
```

- a) 3.75
- b) Depends on compiler
- c) 24
- d) 3

Answer: c

41. What will be the output of the following C code? (Initial values: x= 7, y = 8)

```
1. #include <stdio.h>
2. void main()
3. {
4. float x;
5. int y;
6. printf("enter two numbers \n", x);
7. scanf("%f %f", &x, &y);
8. printf("%f, %d", x, y);
9. }
```

- a) 7.000000, 7
- b) Run time error
- c) 7.000000, junk
- d) Varies

Answer: c

42 What will be the output of the following C function?

```
#include <stdio.h>
void reverse(int i);
int main()
{
reverse(1);
}
void reverse(int i)
{
if (i > 5)
return ;
printf("%d ", i);
return reverse((i++, i));
}
```

- a) 1 2 3 4 5
- b) Segmentation fault
- c) Compilation error
- d) Undefined behaviour

View Answer

Answer: a

43. Comment on the following C statement.

```
n = 1;
printf("%d, %dn", 3*n, n++);
```

- a) Output will be 3, 2
- b) Output will be 3, 1
- c) Output will be 6, 1
- d) Output is compiler dependent

Answer: d

44. How many times i value is checked in the following C program?

```
#include <stdio.h>
int main()
{
int i = 0;
while (i < 3)
i++;
printf("In while loop\n");
}
```

- a) 2
- b) 3
- c) 4
- d) 1

Answer: c

45. What will be the output of the following C code?

```
#include <stdio.h>
int main()
{
int i = 0;
do
{
i++;
if (i == 2)
continue;
printf("In while loop ");
} while (i < 2);
printf("%d\n", i);
}
```

- a) In while loop 2
- b) In while loop in while loop 3
- c) In while loop 3
- d) Infinite loop

Answer: a

46. What will be the data type returned for the following C function?

```
#include <stdio.h>
int func()
{
return (double)(char)5.0;
}
```

- a) char
- b) int
- c) double
- d) multiple type-casting in return is illegal

Answer: b

47. What is the problem in the following C declarations?

```
int func(int);
double func(int);
int func(float);
```

- a) A function with same name cannot have different signatures
- b) A function with same name cannot have different return types
- c) A function with same name cannot have different number of parameters
- d) All of the mentioned

Answer: d

48. Which option should be selected to work the following C expression?

```
string p = "HELLO";
```

- a) typedef char [] string;
- b) typedef char *string;
- c) typedef char [] string; and typedef char *string;
- d) Such expression cannot be generated in C

Answer: b

49. What is the meaning of the following C statement?

```
printf("%10s", state);
```


- a) 10 spaces before the string state is printed
- b) Print empty spaces if the string state is less than 10 characters
- c) Print the last 10 characters of the string
- d) None of the mentioned

Answer: b

50. What will be the output of the following C function when EOF returns?

```
int fputs(char *line, FILE *fp)
```

- a) '\0' character of array line is encountered
- b) 'n' character in array line is encountered
- c) 't' character in array line is encountered
- d) When an error occurs

Answer: d

51. Which part of the program address space is p stored in the following C code?

```
#include <stdio.h>
```

```
int *p;
```

```
int main()
```

```
{
```

```
int i = 0;
```

```
p = &i;
```

```
return 0; }
```

- a) Code/text segment
- b) Data segment
- c) Bss segment
- d) Stack

Answer: c

52. Which of the following sequences are unaccepted in C language?

a) #if

#else

#endif

b) #if

#elif

#endif

c) #if

#if

#endif

d) #if

#undef

#endif

Answer: c

Each Question Carries with 2 Marks

- 1) How do you construct an increment statement or decrement statement in C?
- 2) What is the difference between Call by Value and Call by Reference?
- 3) Some coders debug their programs by placing comment symbols on some codes instead of deleting it. How does this aid in debugging?
- 4) What is the equivalent code of the following statement in WHILE LOOP format?
- 5) What is a sequential access file?
- 6) What is variable initialization and why is it important?
- 7) Differentiate Source Codes from Object Codes
- 8) In C programming, how do you insert quote characters (' and ") into the output screen?
- 9) What is the use of a '\0' character?
- 10) What is the difference between the = symbol and == symbol?
- 11) What is the modulus operator?

- 12) What is a nested loop?
- 13) Which of the following operators is incorrect and why? (>=, <=, <>, ==)
- 14) Compare and contrast compilers from interpreters.
- 15) How do you declare a variable that will hold string values?
- 16) Can the curly brackets { } be used to enclose a single line of code?
- 17) What are header files and what are its uses in C programming?
- 18) What is syntax error?
- 19) What are variables and in what way is it different from constants?
- 20) How do you access the values within an array?
- 21) Can I use "int" data type to store the value 32768? Why?
- 22) Can two or more operators such as \n and \t be combined in a single line of program code?
- 23) Why is it that not all header files are declared in every C program?
- 24) When is the "void" keyword used in a function?
- 25) What are compound statements?
- 26) What is the significance of an algorithm to C programming?
- 27) What is the advantage of an array over individual variables?
- 28) Write a loop statement that will show the following output:
1
12
123
1234
12345
- 29) Describe how arrays can be passed to a user defined function
- 30) What are pointers?
- 31) Can you pass an entire structure to functions?
- 32) What is gets() function?
- 33) What are the different data types in C?
- 34) What is the general form of a C program?
- 35) What is the advantage of a random access file?
- 36) In a switch statement, what will happen if a break statement is omitted?
- 37) What are structure types in C?
- 38) What do the characters "r" and "w" mean when writing programs that will make use of files?
- 39) What is the difference between functions getch() and getche()?
- 40) What are multidimensional arrays?