

2020

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Answer any five questions in which

Q. No. 1 is compulsory.

1. Choose the correct answer of the following :

(a) Malloc() function return values as :

- (i) int pointer
- (ii) zero
- ✓(iii) void pointer
- (iv) float pointer

(b) If $A = 10$, $B = 8$, then $++A * 2 - ++B * 2 + A++$ is :

- ✓(i) 15
- (ii) 16

(iii) 17

(iv) None of these

(c) If $\text{int } A = 10$, $\text{int } *P = \&A$, $\text{int } **Q = \&P$, then the output of `print f(%d, %d", *P **Q)` is :

(i) 10, 11

✓(ii) 10, 10

(iii) 11, 11

(iv) 10, 100

(d) Which of the following storage classes is a default storage class ?

(i) Register

(ii) Extern

(iii) Static

✓(iv) None of these

(e) The output of the expression 12^{10} is :

(i) 4

(ii) 5

(iii) 6

✓(iv) None of these

(f) Which of the following operator is known as difference operator ?

(i) &

(ii) >>

(iii) *

(iv) @

(g) In C language, size is :

(i) A function

(ii) A command

(iii) An operator

(iv) None of these

(h) In C language, the default value of static variable is :

(i) Garbage

(ii) Zero

(iii) Random

(iv) None of these

2. What is datatypes ? Explain the various datatypes in C language with suitable example.

3. What is an operator ? Write a program in C language to demonstrate conditional operator.

4. Explain flow charts and algorithm. Also write an algorithm for the roots of quadratic equation.

5. Explain the different types of loops in C language. Also write a program to generate prime numbers between 1 to 100.

6. Explain an array and its types. Also write a programme to multiply two dimensional matrices in C language.

7. What is pointer ? Explain with suitable example. Also write a program in C language to pass two variables passed by address to a function and swap these two variables.

8. (a) Explain Union. How is it different from Structure ?

(b) Write a program to pass record of employee to a function and then display the same.

9. Write short notes on any two of the following :

(a) Dynamic Memory Allocation

(b) Storage Classes

(c) File Handling

