

26

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE  
Second Semester B.Sc Computer Science Degree Examination, March /April 2019  
BCS2B02 – Problem Solving using C Language  
(2018 Admission onwards)

Time: 3 hours

Max. Marks: 80

**PART - A**

**Answer all questions. Each question carries one mark**

1. List the relational operators in C.
2. What is a keyword? Give some examples.
3. What is an array?
4. What do you mean by recursion?
5. What is the use of typedef?
6. What are the storage classes available in C?
7. What is enumerated data types?
8. What are bit fields?
9. What are C preprocessors?
10. What do you mean by dynamic memory allocation?
11. What do you mean by function prototyping? Mention its advantages.
12. What is a register variable? What are its advantages?

(12 x 1 = 12 Marks)

**PART - B**

**Answer any seven questions. Each question carries two marks**

1. What are symbolic constants? Give examples.
2. What is the purpose of a return statement in C?
3. Distinguish between post increment and pre increment operators with valid examples.
4. Write a program to find the maximum of two numbers.
5. What is a macro? What are its advantages over functions?
6. What is the purpose of malloc( ) function? Explain.
7. How arrays and structures differ?
8. Write a C program to find the sum of first 10 natural numbers
9. What are storage classes? Explain.

(7 x 2 = 14 Marks)

**PART - C**

Answer *any six* questions. Each question carries *five* marks

22. What are the data types available in C? Explain.
23. Explain the difference between while and do while loop with an example.
24. What are different unary operators available in C? Explain each with an example.
25. What are strings? Explain any four string manipulation functions.
26. Write a program to generate first ten Fibonacci numbers?
27. Using functions, write a program to find the largest element in an array.
28. What is a union? How does it differ from a structure?
29. What is a function? What are the advantages of using functions?

(6x 5 = 30 M)

**PART - D**

Answer *any three* questions. Each question carries *eight* marks

30. Differentiate between call by value and call by reference with examples.
31. Write a program to multiply two matrices.
32. Write a program to compare two strings.
33. What is a file? What are the different modes in which a file can be opened? Explain examples.
34. What are the advantages of using pointers? Write a c program to swap two values using Pointers.

(3 x 8 = 24 M)