

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE
Second Semester B.Sc Computer Science Degree Examination, March 2018
BCS2B02 – Problem Solving Using C - Language
(2017 Admission onwards)

Max. Time: 3 hours

Max. Marks: 80

PART - A**Answer all questions. Each question carries one mark**

List the basic data types in c.

What are identifiers?

Differentiate between break and continue statements.

What do you mean by recursion?

What is an array?

What do you mean by scope of a variable?

What are pointers?

What is a structure?

What is the use of static keyword?

0. What do you mean by dynamic memory allocation?
1. Distinguish between actual and formal parameters.
2. What do you mean by preprocessors?

(12 x 1 = 12 Marks)

PART - B**Answer any seven questions. Each question carries two marks**

3. What are library functions? Give two examples.
4. What is the purpose of a return statement in C?
5. What is the purpose of switch statement?
6. With an example, illustrate the use of conditional operator.
7. What are escape sequences in C?
8. What are command line parameters?
9. Compare printf() and fprintf() functions?
10. What is a file? What are the advantages of using files?
11. What is the purpose of sizeof operator in C?

(7 x 2 = 14 Marks)

PART - C

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

22. Write a program to reverse a number.
23. What is recursion? Using recursion, write a program to find the factorial of a number.
24. Explain the difference between malloc() and calloc() functions.
25. What is a static variable? How does it differ from automatic variables?
26. What are various storage classes available in C? Explain.
27. What are command line arguments? How is it declared and what are its advantages?
28. What is a macro? How does it differ from a function?
29. Write a C program to count the number of words in a line of text.

(6x 5 = 30 Mar

PART - D

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

30. What are the control structures available in C? Explain.
31. Explain how structures can be passed to a function.
32. Write a program to arrange a set of numbers in the ascending order?
33. Write a program to add two matrices using pointers?
34. Explain the purpose of each of the following functions
fopen(), fseek(), fprintf(), fscanf().

(3 x 8 = 24 Mar