First Semester FYUGP Computer Science Examination NOVEMBER 2024 (2024 Admission onwards) KU1DSCCSC101 (FUNDAMENTALS OF PROGRAMMING WITH C) (DATE OF EXAM: 4-12-2024)

| Time : 90 min | Maximum Marks : 50 |
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| Part A (Answer any 6 questions. Each carrie | es 2 marks) |
| 1. What are the types of comments available in C | 2 |
| 2. Define syntax error with an example. | 2 |
| 3. How do you declare a variable in C? | 2 |
| 4. What are the usage of the printf() and scanf()fur | actions. 2 |
| 5. What is a simple if statement? Provide an examp | ple. (A2, A3, A4) 2 |
| 6. Write a C program to check whether the given m | umber is even or odd. 2 |
| 7. Describe the while loop and its structure | 2 |
| 8. List three common operations that can be performed on arrays in C and briefly describe each. 2 | |
| Part B (Answer any 4 questions. Each car | ries 6 marks) |
| 9. Describe the various types of errors possible in C | . Give example for each. 6 |
| 10. Discuss different type qualifiers used with integers, with a simple program code. 6 | |
| 11. Write a program that uses both printf() and scanf() to create a simple interactive calculator. | |
| 12. Write a C program to design an arithmetic calcu | lator in C using switch. 6 |
| 13. Discuss the various types of loops in C and when | to use each type. 6 |
| 14. Discuss the declaration and initialization of two-d | imensional arrays with examples. 6 |
| Part C (Answer any 1 question(s). Each ca | arries 14 marks) |
| 15. (a) Write a C program to find and print the s | um of two matrices. Display an |

- 15. (a) Write a C program to find and print the sum of two matrices. Display an error message if the matrices are not possible to add. 7
 - (b) Explain the declaration and initialization of 1-dimensional and 2- dimensional arrays in C. 7

| 16. | (a) Explain the do-while loop with syntax and an example. | 7 |
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| | (b) Discuss the while loop and its usage in iteration with an example. | 7 |