24P161	(Pages: 2)	Name:
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FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2024

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19P CSS1 C04 - THE ART OF PROGRAMMING METHODOLOGY

(Computer Science)

(2019 Admission onwards)

Time: 3 Hours Maximum: 30 Weightage

Part-A

Answer any *four* questions. Each question carries 2 weightage.

- 1. What is a Flowchart? What are its applications? Make a flowchart of nested if statement.
- 2. Write steps for executing a 'C' program.
- 3. What is a variable? Give naming rules of a variable. Use some assignment statements.
- 4. Define static and dynamic arrays.
- 5. Briefly discuss the elements of user defined functions.
- 6. Define structure. How structures are declared and initialized?
- 7. What are command line arguments?

 $(4 \times 2 = 8 \text{ Weightage})$

Part-B

Answer any *four* questions. Each question carries 3 weightage.

- 8. Write down the advantages and disadvantages of modular programming.
- 9. Explain the characteristics of a good program.
- 10. Briefly discuss the evaluation of expression in C with suitable example.
- 11. What is operator precedence and associativity in C?
- 12. Differentiate goto and continue statement with suitable example.
- 13. Explain the various storage classes used in C with example.
- 14. Explain the working of pointers as function arguments with suitable example.

 $(4 \times 3 = 12 \text{ Weightage})$

Part-C

Answer any *two* questions. Each question carries 5 weightage.

15. Explain the following a) If statement b) Switch c) Break d) Continue with suitable examples

- 16. a) Define string variable. How strings are declared and initialised?
 - b) Explain the various string handling functions in C.
- 17. What is dynamic memory allocation? Explain different memory allocation functions.
- 18. Discuss a) Preprocessor b) Types of macros with suitable examples

 $(2 \times 5 = 10 \text{ Weightage})$
