

Reg. No.: ......

Il Semester Integrated M.Sc. (Regular) Examination, January 2022 (2020 Admission)

### COMPUTER SCIENCE

2B02ICSC: Advanced C Programming

Time: 3 Hours

Max. Marks: 40

PART – A (Short Answer)

Answer all questions:

 $(6 \times 1 = 6)$ 

- 1. What is user-defined function?
- 2. How do you create a union in C?
- 3. What is the meaning of auto keyword?
- 4. What is malloc in C?
- 5. What is the size of a void pointer in C?
- 6. How do you access the value pointed by a pointer?

PART – B (Short Essay)

Answer any 6 questions:

 $(6 \times 2 = 12)$ 

- 7. What is macro substitution in C?
- 8. What is the difference between extern and global?
- 9. What is file \*fp in C?
- 10. What is structure initialization in C?
- 11. Why macro is faster than function?

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- 12. What is the advantage of function pointer in C?
- 13. How errors are handled during file operations?
- 14. What is call by reference how it is different from call by value?

## PART – C (Essay)

#### Answer any 4 questions:

 $(4 \times 3 = 12)$ 

- 15. What are the advantages of user defined functions in C?
- 16. How do you open a file in C?
- 17. Compare structure and union in C.
- 18. How memory is allocated for structure? What is the size of structure?
- 19. How do you declare an array of structures ?
- 20. What is pointer increment and scale factor in C?

# PART – D (Long Essay)

### Answer any 2 questions :

 $(2 \times 5 = 10)$ 

- 21. Explain scope and lifetime of variables in C language with example.
- 22. What is macro explain with example in C. What are the advantages and disadvantages of using macro in C?
- 23. What are the different modes of file operations? Explain.
- 24. Why do we use pointers to structures? Explain with suitable program.