B.Sc.DEGREE(CBCS)EXAMINATION, DECEMBER 2018

First Semester

Core Course - CS1CRT02 - METHODOLOGY OF PROGRAMMING AND C LANGUAGE

(Common to B.Sc Computer Applications Model III Triple Main, B.Sc Computer Science Model III,

B.Sc Information Technology Model III, Bachelor of Computer Application)

2018 Admission only

AD9C1513

Maximum Marks: 80   **Time: 3 Hours**

Part A

Answer any **ten** questions.

Each question carries **2** marks.

1. What is a low level language?

2. List out the characteristics of a good programming language.

3. Explain (i) Runtime error (ii) Logical error

4. What is a variable ? What are the rules for naming a variable ?

5. What are conditional operators?

6. Explain the use of puts() statement

7. What is the use of exit() ?

8. What are the differences between arrays and structures?

9. Explain * operator and & operator with example.

10. What are actual parameters and formal parameters?

11. What is array of structure? Give example.

12. What is the advantage of using enumerated data type?

(10×2=20)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain Linker.

14. Draw a flowchart to find factorial of a number.

15. Why do you mean by type modifier? What are the different type conversions possible in C? Explain with example

16. How switch statement is executed in C program? Give example.

17. Write a C program to perform the functions of arithmetic operations of a calculator using switch statement.

18. Write C program to sort a one dimensional array of integers in ascending or descending order based on users choice.

19. Explain the concept of pointer to array.

20. What is recursion? What are the advantages and disadvantages of recursion?

21. Explain the different dynamic memory allocation functions

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Explain the following a) Factors for selecting a language. b) Control structures used in programming languages.

23. Explain different tokens in C language

24. Explain strings and its memory representation. Write a C program to count the number of vowels in a string

25. a) What are the different Storage classes in C? B) Write down the arithmetic operations with Pointers.

(2×15=30)