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Reg. No.....

THIRD SEMESTER (CBCSS—UG) DEGREE EXAMINATION NOVEMBER 2020

Computer Science

BCS 3C 03—PROBLEM SOLVING USING C

Time: Two Hours

Maximum: 60 Marks

Section A

Answer at least eight questions.

Each question carries 3 marks.

All questions can be attended.

Overall Ceiling 24.

- 1. What are formal parameters?
- 2. Write the syntax of "switch" statement.
- 3. Explain a nested for loop.
- 4. Name the various storage class specifiers.
- 5. What is a header file?
- 6. Which are the different integer types in C?
- 7. Differentiate 'a' and 'a+' modes for appending.
- 8. Explain conditional operator in C.
- 9. What is extern in C?
- 10. What do you mean by local variables?
- 11. How will you initialize one dimensional and two dimensional arrays in C?
- 12. What is the purpose of strlen() and strcmp()?

 $(8 \times 3 = 24 \text{ marks})$

Section B

Answer at least **five** questions. Each question carries 5 marks. All questions can be attended. Overall Ceiling 25.

- 13. Write a C program to find whether a given number is odd or even. If even, print its square root.
- 14. Explain function prototype with an example program and its use.
- 15. What is a union? How can it be declared?
- Explain with syntax and examples, the use of fprintf().
- 17. Differentiate the use of break and continue statements with examples.
- 18. Explain if and if-else in C with syntax and example.
- 19. Explain relational operators in C.

 $(5 \times 5 = 25 \text{ marks})$

Section C

Answer any one question.

The question carries 11 marks.

- 20. Write a C program to multiply two matrices.
- 21. Explain the dynamic memory allocation functions malloc() and realloc() with example.

 $(1 \times 11 = 11 \text{ marks})$