

S.No. 5206

**16 SCCCA 1/16 SCCCS 1/
16 SCCIT 2**

(For candidates admitted from 2016–2017 onwards)

B.Sc. DEGREE EXAMINATION, APRIL 2022.

**Part III — Computer Science / Computer
Applications/Information Technology – Major**

PROGRAMMING IN C

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20)

Answer ALL questions.

1. Define Constant and Variable.
2. What is mixed mode arithmetic expression?
3. Differentiate do ..while () and while () loop
4. What is the use of BREAK statement
5. What is the use of return statement?
6. What is a null string and what is its length?
7. What is an automatic variable?

8. What is meant by random access file?
9. Write the uses of malloc and calloc function
10. Define Macros

PART B — ($5 \times 5 = 25$)

Answer ALL questions choosing either (a) or (b)

11. (a) Describe the various data types with example.
- (b) Discuss the precedence of arithmetic operators.

Or

12. (a) Explain the scanf and printf statements with syntax.

Or

- (b) Explain switch... case statement with example.
13. (a) What is the difference between strings and character arrays? Explain.

Or

- (b) What is a pointer value and address? Explain with example.

14. (a) Discuss how to declare and insert of pointer variable.

Or

- (b) What are the common uses of rewind, ftell(). and fseek function
15. (a) Describe briefly about the linked lists and its advantages.

Or

- (b) Explain briefly the macros with arguments with example.

PART C — ($3 \times 10 = 30$)

Answer any THREE questions out of five questions

16. Discuss the various types of operators with example
17. Explain various decision making and branching statements in C language

18. (a) What is nesting of function? Explain with example code

- (b) What is recursion function? Explain with example code

19. How structures are defined in C and how they are passed to function? Explain with syntax

20. Explain the four stages of program design