Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 40386

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2021.

Second Semester

Computer Science and Engineering

CS 8251 – PROGRAMMING IN C

(Common to Computer and Communication Engineering/ Information Technology)

(Regulations 2017)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. In which ways does a switch statement differs from an if statements.

2. What is associativity and why is in important?

3. What is the difference between NULL. '\0' and 0?

4. How does the C language handle the values in an array internally?

5. Why addition of two pointers is impossible?

6. Why is the return statement not necessary when function is called by reference?

7. Illustrate nested structure with an example.

8. What is a self-referential structure?

9. Explain argv and argc.

10. Distinguish between text mode and binary mode operation of a file.

PART B — (5 × 16 = 80 marks)

11. (a) (i) Explain enumeration constants with an example program. (8)

(ii) Write a 'C' program to compute student grades using switch case statement. The input to be program are marks of 5 subjects, compute the total and average and find respective grade of the students. (8)

Grades

>90	'S'
80-90	A
70-79	B
60-69	C
50-59	D
40-49	E
<40	F

Or

(b) (i) Explain iterative statement in 'C' with an example. (8)

(ii) Discuss pre-processor directives with example program. (8)

12. (a) What is string? Explain about declaration and initialization of string in 'C'. How strings are displayed with different formats? Explain with examples.

Or

(b) Write a C program to check whether the given matrix is symmetric or not.

13. (a) Explain different string handling functions available in C with examples.

Or

(b) Write a C program to access the values of an array of elements using pointer.

14. (a) Explain nested structure and self-referential structure with an example.

Or

(b) Define a structure. Describe how to declare and initialize structure and its members with an example.

15. (a) Explain about the fopen (), fclose(), feof(), fprintf(), fscanf(), fseek() and rewind() functions.

Or

(b) Create two text files and write a C program to add to contents of one file at the end of another.

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