



C16-CM/IT-106

6026

BOARD DIPLOMA EXAMINATION, (C-16)

MARCH/APRIL—2018

DCME—FIRST YEAR EXAMINATION

PROGRAMMING IN C

Time : 3 hours]

[*Total Marks* : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. List any three steps involved in C program execution.
2. Define an identifier and mention the rules to form it.
3. Differentiate between scanf() and printf().
4. Write the syntax of if-else statement.
5. Write the syntax of exit controlled loop with an example.
6. Define an array. Give the syntax to declare an array of size 10 and array name : X.
7. List any three string handling functions.

- * 8. List any three storage classes available in C.
- 9. State the purpose of malloc() and realloc() functions in C.
- 10. Write how to create your own user defined data types in C.

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11. Write a C program to print the 'Grade' of the student. Read 6 subject marks from the keyboard. Each subject carries 100 marks (total = 600). 10

Grade calculations :

Percentage ≥ 70	Grade—Distinction
Percentage ≥ 60 & percentage < 70	Grade—First
Percentage ≥ 50 & percentage < 60	Grade—Second
Percentage ≥ 40 & percentage < 50	Grade—Pass
Percentage < 40	Grade—Fail

- 12. (a) Explain nested for loop. 3
- (b) Write a C program to print 7th table using nested for loop. 7

- * 13. Write a C program to find the biggest and smallest among N numbers using arrays. 10

- 14. Write a C program to find the factorial of a given number using Recursive function. 10

- * **15.** (a) Explain about precedence and associativity of operators. 5
(b) Explain about scope and lifetime of variables. 5
- 16.** Write a C program to exchange the contents of two variables, using call-by-reference parameter passing technique. 10
- 17.** (a) Write the differences between structure and union. 5
(b) Explain about array and structures in C. 5
- 18.** (a) What is a preprocessor? Explain #include and #define directives. 5
(b) Explain any five file handling functions in C. 5

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