



C09-CM-105/C09-IT-105

3025

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH/APRIL—2014

DCME—FIRST YEAR EXAMINATION

COMPUTER FUNDAMENTALS AND 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 the major functional blocks of CPU. 3
2. Convert the following : 3
 $(26\ 65625)_{10} \quad (?)_2$
3. What is a batch file? What is command prompt? 1+2
4. List the advantages of computer networks. 3
5. Write any three differences between an algorithm and a flowchart. 3
6. List the logical operators with their precedence. 3
7. What is an array? Write declaration and initialization of an array. 3
8. What is the purpose of malloc() function? Give its syntax. 2+1

- * 9. Give any three differences between structure and array. 3
10. List the output functions for writing data to a file. 3

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. (a) Differentiate between RAM and ROM. 4
 (b) Explain BCD and EBCDIC schemes. 3+3
12. What is the need for an operating system? What are the functions of operating system? 4+6
13. Explain any five Internet connection method. 10
14. Explain the fundamental data types in C language. 10
15. (a) Write a C program to print the multiplication table for a given number. 4
 (b) Write a C program to check whether the given number is Armstrong or not. 6
16. (a) Write a C program to sort the elements in a single-dimension array. 5
 (b) List the string handling functions in C language and explain any two of them. 5
17. (a) What are the differences between local and external variables? 4
 (b) Write a C program to print even numbers between 1 to 100 using recursion. 6
- * 18. (a) Write a C program to perform arithmetic operations on variables using pointers. 6
 (b) Differentiate an array with a single variable. 4
