



C14-EE-406

4466

BOARD DIPLOMA EXAMINATION, (C-14)
MARCH/APRIL—2017
DEEE—FOURTH SEMESTER 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. Define variable. Write the syntax to declare variables in C. 1+2
2. List the logical operators available in C. 3
3. List various conditional statements available in C. 3
4. Write the syntax of 'while' loop. 3
5. Define the term string. How to declare and initialize it? 1+1+1
6. Explain how to access array elements. 3
7. What is user-defined function? What is the need for user-defined function? 3
8. List any three differences between local and external variables. 3
9. Define the term 'union'. Give the syntax to define union. 1+2
10. Explain how to access structure members. 3

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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) Write a short note on keywords. 5
(b) Write a C program to illustrate the concept 'pointer arithmetic'. 5
- 12.** (a) Define loop. List the iterative statements available in C. 4
(b) Write a C program to find the sum of $1 + 2 + 3 + \dots + n$ using 'for' loop. 6
- 13.** (a) Write the syntax of switch statement. 4
(b) Write a C program to perform arithmetic operations using 'switch' statement. 6
- 14.** Write a C program to perform the addition on two 2×2 matrices. 10
- 15.** (a) Write various string handling functions. 4
(b) Write a C program to check whether the given string is palindrome or not. 6
- 16.** (a) Define function and give the syntax to define a function. 4
(b) Explain the concept of 'functions with arguments and no return values' with a C program. 6
- 17.** Write a C program to swap the two numbers by using the concept 'call by value'. 10
- 18.** (a) Differentiate between an array and a structure. 4
(b) Define a structure named 'book' and take its members "title, author, pages, price" and declare its variable as 'book₁', initialize it and also display 'book₁' values. 6

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