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

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 $1\ 2\ 3\ \cdots\ n$ 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 '*book*$_1$', initialize it and also display '*book*$_1$' values.   6

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