C14–EE–**406**

4466

BOARD DIPLOMA EXAMINATION, (C–14)

OCT/NOV—2016

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. List any six keywords available in C.   3

2. What is type conversion? List various type conversion techniques in C.   1+2

3. List the three iterative statements supported by C.   3

4. Write the syntax of 'switch' statement.   3

5. What is an 'array'? How to declare and initialize it?   1+(1+1)

6. Write a C program to reverse the string 'SBTET'.   3

7. Define the term 'function'. List the types of function.   3

8. List any three storage classes supported by C.   3

9. Define the term 'structure'. Write the syntax to define a structure.   3

10. List any three preprocessor directives supported by C.   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)* Briefly explain arithmetic operators supported by C. 5

(b) Define pointer. How to declare and initialize it? Write an example in C program. 5

12. *(a)* Explain 'if-else-if' statement. 3

(b) Write a C program to find the largest among given three numbers using 'if-else-if' statement. 7

13. *(a)* Explain FOR loop. 3

(b) Write a C program to find the factorial of a given number using FOR loop. 7

14. Write a C program to perform the multiplication on two 2×2 matrices. 10

15. Briefly explain any five string-handling functions with examples. 10

16. Write a C program to generate Fibonacci sequence as 0, 1, 1, 2, 3, ... using functions. 10

17. Write a C program to swap two numbers by using the concept 'call by reference'. 10

18. *(a)* Explain how to find the size of a 'union'. 3

(b) Define a structure named 'student' and take its members— 'name', 'age', 'roll number' and declare its variable as 's_1', initialize it and also display 's_1' values. 7

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