4032

BOARD DIPLOMA EXAMINATION, (C–14)
OCT/NOV—2015
DCM—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. State the importance of C language.   3

2. What is an identifier? Give two examples.   2+1

3. Explain the usage of printf function with an example. 2+1

4. Write the syntax of 'if-else' statement. Give one example. 2+1

5. Explain the syntax of 'for loop'.   3

6. Define array. Give one example.   2+1

7. Define string. Give two examples.   2+1

8. Write the syntax of function definition.   3

9. Explain initialization of a pointer with example.   3

10. State the need of preprocessor directives.   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)* Explain logical operators used in C with their precedence.

(b) Differentiate between local and external variables.   5+5

12. Write a C program to find whether a given character is vowel or not using switch statement.   10

13. *(a)* Differentiate between 'while' and 'do-while' loops with an example.

(b) Illustrate the usage of break statement.   5+5

14. *(a)* Explain how to assign values to array elements with example.

(b) Explain reordering an array in ascending order.   5+5

15. *(a)* Illustrate the usage of functions with arguments that return values.

(b) Define recursion.   6+4

16. *(a)* Explain how pointers can be manipulated in arithmetic operations.

(b) Explain calloc( ) function with an example.   6+4

17. *(a)* Write the syntax of structure variable declaration. Give one example.

(b) Illustrate the usage of structure as a function argument.

5+5

18. Explain any five file opening modes.   2×5

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