

**4416**

BOARD DIPLOMA EXAMINATION, (C-14)
OCT / NOV-2017
DAEIE-FOURTH SEMESTER EXAMINATION
PROGRAMMING IN 'C'

Time : 3 Hours]

[Total Marks : 80

PART - A

3 x 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. What is a variable? Give the rules for naming variable.
2. Evaluate the expression $[(2 + 3) (4 - 5 - 6 + 2)]/3 + 4$.
3. List the conditional statements supported by C.
4. Write the syntax of a for loop.
5. What is array initialization?
6. Define a string. Give example.
7. Distinguish between local and external variables.
8. Write any three differences between addressing and dereferencing operators.
9. What is self referential structure?
10. Define union.

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PART - B

10 x 5 = 50

- Instructions :* (1) Answer any **five** questions.
(2) Each question carries **ten** marks.
(3) Answers should be comprehensive and the criteria for valuation is the content but not the length of the answer.

11. Explain different data types in C with examples.
12. Explain the following with syntax and a sample program
 - a) If statement
 - b) If-else statement
13. Write a C program to check whether a number is a palindrome or not.
14. Write a C program to find the sum of elements of a single dimensional array.
15. Explain the operations of `getchar ()` and `putchar ()` functions with examples.
16. Define recursion and explain with an example program.
17. Write a C program to perform arithmetic operations on variables using pointers.
18. Explain the conditional preprocessor directives.

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