## 7219

# BOARD DIPLOMA EXAMINATION, (C-20) <br> FEBRUARY/MARCH - 2022 <br> DAEI - THIRD SEMESTER EXAMINATION <br> PROGRAMMING IN C 

Time : 3 hours ]
[ Total Marks : 80
$3 \times 10=30$

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 three pre-processor directives.
2. List the relational operators used in C.
3. Write the syntax of if..else statement.
4. List loop/iterative statements used in C.
5. Differentiate between break and continue statements.
6. State declaration of one dimensional array with an example.
7. Define string.
8. State the need for user defined functions.
9. List the four storage classes supported by C.
10. Define a union.

Instructions : (1) Answer all questions.
(2) Each question carries eight marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
11. (a) Explain the structure of C language program.

## (OR)

(b) Explain printf() and scanf() functions with examples.
12. (a) Write the syntax of switch statement and explain.

## (OR)

(b) Write a program to find sum of given numbers using loops.
13. (a) Write a C program to find largest number in an array.

## (OR)

(b) Explain the string handling functions strcat(), strcmp(), strcpy() and strlen() with examples.
14. (a) Explain function prototype and function declaration in programs.
(OR)
(b) Write a program to find sum and average of any 5 numbers using function with arguments, with no return values.
15. (a) Write a program using structure to read and print a book database consisting of title of book, author, no. of pages, price as fields.

## (OR)

(b) Differentiate between structure and union.

Instructions : (1) Answer the following question.
(2) The question carries ten marks.
(3) Answer should be comprehensive and criterion for valuation is the content but not the length of the answer.
16. Write a C program to print grade obtained if percentage is given as input as per the following grade allotment.

| Percentage range | grade |
| :--- | :---: |
| $80-100$ | A |
| $60-80$ | B |
| $40-60$ | C |
| $0-40$ | D |

