

7219

BOARD DIPLOMA EXAMINATION, (C-20)

FEBRUARY/MARCH — 2022

DAEI - THIRD SEMESTER EXAMINATION

PROGRAMMING IN C

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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.

PART—B 8×5=40

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 streat(), stremp(), strepy() 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.

PART—C $10 \times 1 = 10$

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	В
40-60	C
0-40	D

