7250

BOARD DIPLOMA EXAMINATION, (C-20)

NOVEMBER/DECEMBER—2022

DEEE - THIRD SEMESTER EXAMINATION

PROGRAMMING IN C

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

Instruction: (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.** How do you write comments in C?
- **2.** List any six keywords of C.
- **3.** State any three techniques of conversion in C.
- **4.** Give the importance of 'break' and 'continue' statements in loops.
- **5.** What is array and how do you initialize the ID array?
- **6.** Give the syntax, example and purpose of **strlen()** function.
- **7.** List any three inbuilt functions of C.
- **8.** What is the importance of static storage class?
- **9.** Give the syntax to declare a union by stating its purpose.
- **10.** List any six pre-processor directives available in C.

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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 procedure of arithmetic and relational operators with their precedence in C programming.

(OR)

- (b) Explain the procedure of assignment operators of C with examples.
- **12.** (a) Explain the working of *if-else* statement with syntax and give the example program.

(OR)

- (b) Explain the working of for Loop with syntax and example program.
- **13.** (a) Write a C program to find the smallest number in a given array of 10 numbers.

(OR)

- (b) Write a C program using any three string handling functions other than **strlen()**.
- **14.** (a) Write a C program using a user defined function to find the average of three numbers with parameters and with return values.

(OR)

- (b) Write a C program using Local and External variables.
- **15.** (a) Explain the initialization of a structure in C, with an example.

(OR)

(b) List the pointers and discuss the pointer arithmetic in C.

PART—C 10×1=10

Instructions: (1) Answer the following question.

- (2) The question carries **ten** marks.
- (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- **16.** Is it possible to handle 2D arrays without using for loops? If yes, write a program to find the biggest element of each row of a 2D matrix without using *for loop*. If not, give the reasons to justify your answer.

