

ED-620

M.A./M.Sc. 3rd Semester Examination, March-April 2021

MATHEMATICS

Optional (A)

Paper - V

Programming in 'C' (with ANSI Features - I)

Time: Three Hours] [Maximum Marks: 70]

Note: Answer any **two** parts from each question. All questions carry equal marks.

- **1.** (a) What is the main difference between a variable and a constant?
 - (b) Explain the basic concepts of a C program.
 - (c) Explain overview and classification of programming language.

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(Turn Over)

- **2.** (a) What is data type? Explain different data types in detail with examples.
 - (b) What is pointer? Define it and write the use of pointer.
 - (c) What is the use of typedef in C? Give an example.
- **3.** (a) Explain the two-way selection (if, if-else, nested if-else, cascaded if else) in C language with syntax.
 - (b) Explain the different types of loops in C with syntax and example.
 - (c) Explain the switch statement with syntax and example.
- **4.** (a) Write a program to find factorial of a number.
 - (b) What is the difference between & and * operators in C?
 - (c) What is Operator? What are the different types of operator available in C?
- **5.** (a) Write a program for arranging the element of array in descending order.

- (b) What is an array? Explain the declaration and initialization of one and two-dimensional arrays with example.
- (c) Find original array from encrypted array (An array of sums of other elements) using C language.
