Roll No. ....

Y – 3121

M.Sc. (Physics) (Second Semester)

EXAMINATION, May/June 2021

PHYSICS

Paper–204

DIGITAL ELECTRONICS, NUMERICAL ANALYSIS AND COMPUTER PROGRAMMING

Time : Three Hours

Maximum Marks : 85   *Minimum Pass Marks : 29*

Note—Attempt *all* questions.

Unit-I

1. Describe various logic gates used in electronic circuits. How half and full adders are constructed using these gates ?   17

Unit-II

2. Taking suitable example explain Newton Raphson method.   17

Unit-III

3. Explain Newton's forward and backward interpolation.   17

Unit-IV

4. Explain the Euler's method used to solve differential equation.   17

Unit-V

5. Write short notes on any *two* of the followings—   17

    (i) Standard arithmetic function.

    (ii) Input and output statements.

    (iii) Control statements.

    (iv) Main and sub programs.