Roll No. .....

Y – 3121 (A)

M.Sc. (Physics) (Second Semester) (SPECIAL) EXAMINATION, August 2021

(SECOND CHANCE)

Paper – 204

DIGITAL ELECTRONICS, NUMERICAL ANALYSIS AND COMPUTER PROGRAMMING

Time : Three Hours

Maximum Marks : 85 *Minimum Pass Marks : 29*

Note—Attempt *all* questions.

1. Answer *all* questions—
   (a) What are flip-flops ? How they are useful in digital electronics ? 6
   (b) What are Transcedental equations ? Name various methods used to solve them. 6
   (c) Explain Simpson 1/3 Rule. 5
2. Write short notes on Multiplexers and De-multiplexers. 17
3. Describe Gauss elimination and Gauss Seidal methods. 17
4. Write Lagrange interpolation formula and obtain its solution. 17
5. Obtain the numerical solution of Schrödinger equations. 17