Roll No. ....

Y – 3127

M.Sc. (Physics) Fourth Semester EXAMINATION, May/June-2021

Paper – 404-(C)

COMPUTER APPLICATIONS IN PHYSICS-II

Time : Three Hours

Maximum Marks : 85   *Minimum Pass Marks : 29*

Note—Attempt *all* questions.

Unit-I

1. What do you mean by fundamental of network and management ? Why it is needed ? Explain with example.   17

Unit-II

2. What do you mean by Bresenham's algorithms ? To draw a line between two given points using DDA algorithm as well as Bresenham's algorithm. Why the result differs in both the cases ?   17

Unit-III

3. What do you mean by 3-D Transformation ? Obtain transformation matrix for translation in 3-D drawing. Discuss the quadratic surface.   17

Unit-IV

4. Write the program for charging and discharging of a capacitor ? Draw the potential energy curve and explain resonance in LC Circuit.   17

Unit-V

5. Write formula to find solution of an ordinary differential equation using different initial conditions. Discuss the Schrödinger's equation with the help of example.

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