2019

3rd Semester Examination

ELECTRONICS (Honours)

Paper - C7P

(Electromagnetic Lab)

Full Marks : 20 Time : 3 Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

Answer any one question selecting it by a lucky draw.

1. Write a program in SCILAB/or any other free ware to transform the vector of cartesian coordinates into spherical polar coordinates.

2. Write a program in SCI LAB/any other free ware to find the magnetic field intensity of a current carrying filament.

3. Write a program in SCILAB/any other free ware to find the scalar potential for the electric field due to a point charge q at the origin.

[Turn Over]

4. Write a program in SCI LAB/any other free ware to compute $\vec{\nabla} \times (\vec{K} \times \vec{r})$.

5. Write a program in SCI LAB/any other free ware verify Gauss's theorem.

6. Write a program in SCI LAB/any other free ware to verify stoke's theorem.

7. Write a program in SCI LAB/any other free ware to find the phase angle between two vectors.

8. Write a program in SCILAB/any other free ware to calculate surface charge density, Fluk density, Field Intensity of coakial cable.

9. Write a program in SCILAB/any other free ware to calculate the capacitance of a parallel plate capacitor.

10. Write a program in SCI LAB/any other free ware to find the V number of a step index fiber.

Distribution of Marks:

Experiment	: 15 Marks
Laboratory Note Book	: 02 Marks
Viva-voce	: 03 Marks
Total	: 20 Marks