

Course Code: GE-125

Course Title: Applied Physics

Total Marks: 10

Name: \_\_\_\_\_

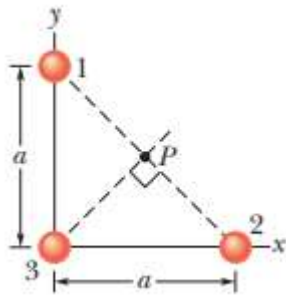
Registration No. \_\_\_\_\_

Discipline/Semester:

Submission deadline: 25-11-2024

Q No.1

In fig three particles are fixed in place and have charges  $q_1 = q_2 = +e$ . and  $q_3 = +2e$ . Distance  $a = 6 \times 10^{-6}m$ . What is magnitude of electric field at point P due to the particles ?



Q-2 [ PLO3,CLO1 ] A dipole consists of two charges  $+2e$  and  $-2e$  separated by a distance of  $0.78nm$ . It is in electric field strength of  $3.4 \times 10^6 N/C$ .

Calculate the magnitude of torque when dipole moment is Parallel, at right angle and opposite to electric field ?