UW

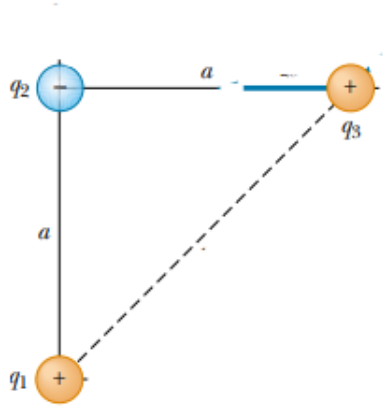
Department of Computer Science
Assignment-1

Course Code: GE-125
Course Title: Applied Physics
Total Marks: 10

Name:_____
Registration No. _____
Discipline/Semester:
Submission deadline:

Question # 01

Consider three point charges located at the corners of a right triangle as shown in figure , where $q_1 = q_3 = 5.0\ \mu C$ $q_2 = -2.0\ \mu C$ and $a = 0.10\ m$ Find the resultant force exerted on q_3 .



Question # 02

Prove that Coulomb's force obey Newton's third law i.e $\vec{F}_{12} = -\vec{F}_{21}$

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Question # 03

What must be the distance between point charge $q_1 = 26.0\ \mu C$ and point charge $q_2 = -47.0\ \mu C$ for the electrostatic force between them to have a magnitude of 5.70 N?