



**Daffodil International University**  
**Department of Computer Science and Engineering**  
**Faculty of Science & Information Technology**  
**Class Test -1, Spring-2025**  
**Course Code: PHY-102, Marks: 15**

1. *What do you mean by Conservation of charge? Discuss briefly with example. [1]*
2. *State Coulombs law and give the final equation. [1]*
3. *Explain Electric Flux? [2]*
4. *Explain Gauss's Law. Also derive Coulomb's law from Gauss's law. [4]*
5. *What will be the value of Electric Field at a point near a straight uniform Rod of infinite length? [4]*
6. *Determine the magnitude of the two identical charges, when the electrostatic force between these two identical charges is 1000 N and are separated by a distance of 0.1 m. [3]*