CITY COLLEGE
Internal Assessment 2021
Physics (Hons.) CBCS Semester 2
Paper: CC3
Time: 1 Hour; Full Marks: 20

Answer any _ten_ questions from the following: **10×2 = 20**

1. What is superposition principle as applied in electrostatics?
2. What do you mean by electric field?
3. What do you mean by electric potential?
4. State Coulomb's law in electrostatics.
5. What are surface and volume charge densities in electrostatics?
6. What do you mean by Dirac Delta function? State the properties of the function.
7. What do you mean by flux of electric field?
8. State Gauss's law in electrostatics.
9. Obtain Coulomb's law from Gauss's law in electrostatics.
10. What do you mean by an electric dipole?
11. What is the electric potential due to an electric dipole?
12. What is the force on a dipole placed in an electric field?
13. What do you mean by dielectric polarization?
14. State Gauss's theorem in dielectrics.
15. What do you mean by electric susceptibility of the dielectric?

Answer scripts must be emailed to **sem2hcityphysics@gmail.com** within 15 minutes of the end of the examination.