Term test -1, Time: 50 Minute, Full marks: 20, Answer any Two

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|---|---|---|
| 1(a) | Define Couloumb. | 2 |
| (b) | Describe quantization of charge. | 4 |
| (c) | Show that the electrical force is about $10^{39}$ times stronger than the gravitational force. | 4 |
| 2(a) | Define electric dipole moment and electric field. | 3 |
| (b) | Calculate the electric field **E** for points on the ring at a distance x from its center. If $x >> a$, show that the ring behaves like a point charge. Where "a" is the radius of the ring. | 7 |
| 3(a) | What is line of force? Draw the lines of force for the (a) Positive point charge, (b) Negative point charge, (d) dipole and (e) Two positive charges. | 1+2 |
| (b) | How can we are able to produce Uniform electric field. | 2 |
| (c) | When a particle of mass and charge +q is placed at rest in a uniform electric field and released, describe its motion. | 5 |

Apne Me