Quiz 02

PHY-106 Applied Physics
The respondent's email address (phy106ef20@gift.edu.pk) was recorded on submission of this form.

The respondent's email address (**201370210@gift.edu.pk**) was recorded on submission of this form.

Which of the following statement is wrong? * 1 point

- (●) There is no field near an isolated charge at rest
- ( ) Charge is Quantized
- ( ) Charge is conserved
- ( ) A moving charge produces both electric and magnetic field

In the region where the field lines are parallel and equally spaced, the field is * 1 point

- ( ) Zero
- (●) Uniform
- ( ) Non-Uniform
- ( ) Negative

What is the minimum electrostatic force between two charged bodies placed at a distance of 1m? * 1 point

$6.2 \times 10^{-34}\ N$

Option 1

$2.3 \times 10^{-28}\ N$

Option 2

$1.02 \times 10^{-23}\ N$

Option 3

$1 \times 10^{-19}\ N$

Option 4

Why a positively charged object is made neutral (discharged) by someone touching it? * 1 point

- Electrons flow from the object
- Protons flow onto the object
- Protons flow from the object
- Electrons flow onto the object

Which of these is not a method of charging? * 1 point

- [ ] Friction or rubbing
- [ ] Induction
- [ ] Contact or touching
- [x] Convection

Which method of charging is involved in making lighting? * 1 point

- [ ] Friction
- [ ] Convection
- [ ] Induction
- [x] Contact

The permitivity of a medium * 1 point

- [ ] Is a measure of its density
- [ ] is dependent on charge density of a medium
- [x] Determines the magnitude of an electric field that can established by the medium
- [ ] None of these

The total electric intensity at a point in the region of number of charges is equal to * 1 point

- ○ The algebraic sum of the intensities at the point
- ◉ The vector sum of the intensities at the point
- ○ The sum of electric charges acting at the point
- ○ None of these

The coulomb's force between the 2 point charges 10μC and 5μC placed at a distance of 150 cm is * 1 point

- ○ 10 N
- ○ 2 N
- ○ 0.5 N
- ◉ 0.2 N

* 1 point

If Q_1 charge exerts some force on Q_2 charge. When a third charge Q_3 in brought near, then the force of Q_1 exerted on Q_2 will

- ○ Become infinite
- ◉ Remains unchanged
- ○ Decreases
- ○ Increases

The force exerted by the two charged bodies on another obeys Coulomb's law provided that * 1 point

- ○ Both bodies are in the same medium
- ○ The charges are not too greater
- ○ On body does not lie inside the other
- ◉ The charges are very small than the distance between them

Dielectric constant for a metal is * 1 point

- ◉ Infinite
- ○ 1
- ○ 0
- ○ None of these

The direction of electric field intensity in an electric field can be represented by drawing * 1 point

- ○ points
- ○ images
- ○ circles
- ◉ lines

The direction of Electric Field due to -5 negative charge is * 1 point

- [x] Away from the charge
- [ ] Towards the charge
- [ ] None of these
- [ ] Both a and b

Which of the following does not reflect the law of static charges * 1 point

- [ ] Like charges repel
- [ ] Opposite charges attract
- [x] Neutral charges repel
- [ ] Neutral objects are attracted to charged ones

The direction of free test charge will be the direction of * 1 point

- [ ] coulomb's force
- [ ] magnetic intensity
- [x] electric intensity
- [ ] protons

Which of the following statement is true? * 1 point

- (●) Electrostatic force is a conservative force.
- ( ) Potential at a point is the work done per unit charge in bringing a charge from any point to infinity.
- ( ) Electrostatic force is non-conservative
- ( ) Potential is the productof charge and work.

What information is given by the tangent to a field line at the point of electric field * 1 point

- (●) Direction
- ( ) Magnitude
- ( ) Proper unit
- ( ) Dimensions

Which of the following is the largest measure of charge? * 1 point

$10^{-7}\mu C$

Option 1

$10^{12}eV$

Option 2

100 eV

$10\mu C$

Option 3

The value of k in coulomb's law depends upon * 1 point

magnitude of charges

distance between charges

medium between two charges

all of above

Google Forms