

ٹیسٹ سے پہلے کم از کم تین بار درود شریف پڑھ لیں۔

Student Name:		Roll No:	Date: / /
سوچ بدلیں، معاشرہ بدلیں		Class 2nd Year	Ch#12
T- Marks - 40		Subject: Physics	Time: 45 - M
		Obtained Marks:	
Objective Type			
Q#1		Encircle the Correct Option	10X1=10

1. SI unit of energy density of electric field is .

a	J/C	b	J/V	c	J/m ³	d	J/F ³
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2. The term RC has same unit as that of

a	Potential	b	Capacitance	c	Energy	d	Time
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3. The unit of electric field intensity other than N/C is

a	V/A	b	V/m	c	V/C	d	N/V
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4. The force on an electron in a field of 1.8×10^8 N/C

a	2.6×10^{-8} N	b	2.88×10^{-11} N	c	2.6×10^{-19} N	d	1.6×10^{-27} N
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5. If potential difference between plates of parallel plate capacitor is doubled then energy stored in it will

a	Two time	b	Four time	c	Eight time	d	Remains same
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6. The value of maximum electric flux is obtained when angle between E and A.

a	90°	b	0°	c	270°	d	180°
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7. If the distance between two point charges is doubled then force between them will be comes

a	Half	b	Double	c	Four times	d	One fourth
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8. SI unit of coulomb constant

a	Nm ² C ²	b	C ² N ² m ⁻²	c	N ⁻¹ C ² m ²	d	Nm ² C ²
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9. Sec/ohm is equal to.

a	Farad	b	Coulomb	c	Joule	d	Ampere
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10. Millikan and Fleter could find the charge on oil droplets in.

a	Thermal equilibrium	b	Electric equilibrium	c	Mechanical equilibrium	d	Unstable equilibrium
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Q # 2

Short Questions

10 x 2 = 20

1. Define electrostatic?
2. What are the electric field line write its properties?
3. Write four differences b/w electric and gravitational force?
4. Is E necessary zero inside a charged rubber balloon if the balloon is spherical.
5. How can you identify that which plate of capacitor is positively charged.
6. Write application of Gauss law.
7. Prove that 1 Newton /1columb =1 Volt/1 meter
8. What is ev?
9. Prove that 1.6×10^{-19} J.
10. Define electric field.

Q # 3

Long Questions

2 X 5 = 10

1. State and prove Gauss's law .
2. Compare magnitude of electrical and gravitational force exerted on an object
Mass=10.og charged =20.0μc by an identical object that is placed 10.0cn from the first.