



SMART TEST SERIES

www.notespk.com : info@notespk.com

Name:		Subject:	Physics-12
Roll # :		Unit(s):	12,
Class:	Inter Part-II	Test:	Type 2 - SQs Test - Marks=40
Date:		Time:	

SHORT QUESTIONS TEST

1- Write short answers to any 7 questions: (7x2=14)

- (i) Define xerography and photoconductor.
- (ii) Mention two situations of vector area in electric flux.
- (iii) Show that $1 \text{ N/C} = 1 \text{ v/m}$.
- (iv) Define electric potential difference with unit.
- (v) A particle carrying a charge of $2e$ falls through a potential difference of 3.0 V calculate the energy acquired by it.
- (vi) Describe the force or forces on a positive point charge when placed between parallel plates with similar and equal charges.
- (vii) What is the effect of polarization on the capacitance of a capacitor?
- (viii) What is time constant?
- (ix) Draw a graph between $(q-t)$ for charging and discharging of a capacitor in case of R-C Circuit.
- (x) Define time constant for RC circuit also draw $(q-t)$ graph for charging capacitor in RC circuit.

2- Write short answers to any 7 questions: (7x2=14)

- (i) Electric lines of forces never cross one another why?
- (ii) Comment on the Uni-direction of electric line of force.
- (iii) If a point charge " q " of mass " m " is released in a non-uniform electric field with field lines pointing in the same direction, will it make a rectilinear motion?
- (iv) Write the names of main parts of xerography and draw its diagram.
- (v) What is meant by EEG and ERG?
- (vi) How sharks locate their prey. Explain briefly.
- (vii) Write two similarities and dissimilarities among electric force and gravitational force?
- (viii) Describe the force or forces on a positive point charge when placed between parallel plates a) With similar and equal charges b) With opposite and equal charge
- (ix) What is polarization and how dipoles are formed in dielectric?
- (x) How much is the amount of charge at start of discharging of capacitor and start of charging of a capacitor.

3- Write short answers to any 6 questions: (6x2=12)

- (i) What is the effect of medium between the charges upon coulomb's force? Explain.
- (ii) If a point charge " q " of mass " m " is released in a non-uniform electric field with field lines pointing in the same direction, will it make a rectilinear motion?
- (iii) Describe working of inkjet printer briefly.
- (iv) Define electric flux. Mention the factors upon which it depends.
- (v) Comment on electric field in region of constant potential.
- (vi) Differentiate between electrical potential difference and electric potential at a point.
- (vii) What is the difference between electric and gravitational force?
- (viii) How can you identify that which plate of a capacitor is negatively charged?
- (ix) Define electric polarization.