SMART TEST SERIES

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Name:		Subject:	Physics-12
Roll # :		Unit(s):	14,
Class:	Inter Part-II	Test:	Type 4 - SQs + LQs Test - Marks=40
Date:		Time:	

Q.1 Write short answers of the following questions. (15x2=30)

(i) If a charged particle moves in a straight live through some region of space can you say that magnetic field in the region is zero?

(ii) What is right hand rule to find the direction of lines of force?

(iii) Define magnetic flux and its unit.

(iv) Define Tesla. Write its mathematical formula.

(v) A plane conducting loop is located in a uniform magnet field that is directed along x-axis. For what orientation of loop is flux, a maximum.For what orientation is flux a minimum?

(vi) Why is B' non-zero outside a solenoid?

(vii) Can an electron at rest be set in motion with a magnet? Explain.

(viii) How can you explain the wave form of various voltages formed in CRO?

(ix) What is the function of 'X' and 'Y' plates in C.R.O?

(x) A loop of wire is suspended between poles of a magnet with its plane parallel to the pole faces. What happens if a direct current is put through the coil? What happens if an alternating current is used instead?

(xi) What is dead beat galvanometer?

(xii) Why the resistance of an ammeter should be very low?

(xiii) What is an ohmmeter?

(xiv) What is digital multimeter? Give its two advantages over AVO meter.

(xv) Write down the formula for magnetic force on current carrying conductor in a uniform magnetic field of strength $\rightarrow B$

Q.2 Write long answers of the following questions. (5x2=10)

1. State Ampere's Law and apply it to find the magnetic field due to current carrying solenoid.

2. you are asked to design a solnoid that will give a magnetic field of 0.10 T, yet the current must not exceed 10.0 A. Find the number of turns per unit length that the solenoid should have.