



# SMART TEST SERIES

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Name:		Subject:	Physics-12
Roll # :		Unit(s):	13,
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) What is short-circuit and open circuit mean to you?
- (ii) Do bends in wire affect the electrical resistance? Explain.
- (iii) Find out equivalent resistance when resistances are connected in series and in parallel.
- (iv) A wire of length 10 m has resistance 100  $\Omega$ . If the wire is stretched to increase its length three times what will be its new resistance.
- (v) Give colour code of carbon resistor.
- (vi) What is rheostat? Write its one use.
- (vii) What are Thermistor?
- (viii) Under what conditions emf of a cell and terminal potential difference become equal?
- (ix) State Kirchhoff's 2<sup>nd</sup> rule and write its mathematical relation.
- (x) Why we prefer potentiometer in place of voltmeter for measuring potential difference?

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

- (i) Define Conventional Current and Electronic Current.
- (ii) Define conventional current and solar cell.
- (iii) What is the effect of current passing through a long straight wire?
- (iv) Define Ohm's Law. Also define ohmic and non ohmic devices.
- (v) Do bends in wire affect the electrical resistance? Explain.
- (vi) Differentiate between resistance and resistivity, their units.
- (vii) Define temperature co-efficient of resistivity.
- (viii) Define Tolerance, give an example.
- (ix) What is meant by an electromotive force (emf) give its unit?
- (x) What is Wheatstone bridge? Sketch its circuit diagram.

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

- (i) What is unit of electric current? Define it.
- (ii) A charge of 90 C passes through a wire in 1 hour and 15 minutes. What is the current in the wire?
- (iii) Write about any two sources of current.
- (iv) Why does the resistance of a conductor rise with temperature?
- (v) Define resistance. Also define its unit.
- (vi) What is meant by the tolerance? Find the resistance of the resistor with colors Red-violet-orange-silver.
- (vii) What are thermistors? How are they made?
- (viii) Explain why the terminal potential difference of battery decreases when the current drawn from it is increased?
- (ix) Write down the rules for finding the potential changes along a circuit.