

TALEEMI DUNYA

Test Syllabus: Unit # 2

St. Name		Test	PHYSICS	T. Marks	30	Time	60 Min
F.Name		Class	12 th	T. Code	U#2	T. Date	

NOTE: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that Question with Marker or Pen ink. Cutting or filling two or more circles will result in zero mark in that question. **6.**

1	Specific resistance of a material depends upon:						
(a)	Length	(b)	Area	(c)	Temperature	(d)	Both A & B
2	mho-m ⁻¹ is the unit of:						
(a)	Resistance	(b)	Resistivity	(c)	Conductance	(d)	Conductivity
3	Temperature coefficient of resistance (α) is equal:						
(a)	$R_t + R_o / R_o \Delta t$	(b)	$R_o - R_t / R_o \Delta t$	(c)	$R_t - R_o / R_o \Delta t$	(d)	None of these
4	Resistance tolerance for gold colour is:						
(a)	50%	(b)	40%	(c)	30%	(d)	5%
5	In carbon resistors, which colour band indicates the tolerance of $\pm 10\%$?						
(a)	White	(b)	Silver	(c)	Gold	(d)	Violet
6	Potentiometer is used to:						
(a)	Compare emf of two cells	(b)	Detect internal resistance of cells	(c)	Measure potential difference	(d)	All of these

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Q.2 Write short answers of the following questions.

(8x2=16)

1. A wire of length 10 m has resistance 100 Ω . If the wire is stretched to increase its length three times what will be its new resistance.
2. Differentiate between resistance and resistivity, their units.
3. Define Tolerance, give an example.
4. Give colour code of carbon resistor.
5. What is meant by the tolerance? Find the resistance of the resistor with colors Red-violet-orange silver.
6. How is rheostat used as potential divider?
7. What are Thermistor?
8. Is the filament resistance lower or higher in a 500W 220V light bulb than in 100W 220V bulb?

Q.3 Write long answers of the following questions.

(4+4=8)

- (a) What is wheat stone bridge? Give its principle, construction and working. How can it be used to? Find unknown resistance of a wire?
- (b) The resistance of an iron wire at 0°C is $1 \times 10^{-4} \Omega$. What is the resistance at 500°C if temperature. Coefficient of resistance of iron $5.2 \times 10^{-3} K^{-1}$.