

NALANDA V Nalanda Vidyalaya – Colombo 10 DA VIDYALAYA

NALANDA VIDYALAY

Unit Test Project

NALANDA VIDYALAYA

Grade 8

Science

Unit 7 - Measurements associated with electricity.

Underline the most suitable answer.

- 1) The voltage of a car battery is
 - 1) 5V
- 2) 3V
- 3) 6V
- 4) 12V
- 2) The symbol of an ammeter is,
 - 1) —<u>A</u>—
- 2) —(V)—
- 3) —(G)—
- 4) —X—

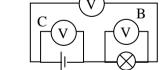
- 3) SI unit of Resistance is,
 - 1) Ampere
- 2) Volt
- 3) Ohm
- 4) Milliampere
- 4) A) Electrical current in a circuit is measured using ammeter.
 - B) The unit of measuring current is ohm.
 - C) Resistance is measured using the ammeter.

Which of the above statement / statements is / are correct,

1) Only A

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- 2) Only B
- 3) B and C only
- 4) A and C only
- 5) The incorrect statement about potential difference is,
 - 1) Positive terminal has higher potential than the negative terminal of a dry cell.
 - 2) Potential difference can be also named.
 - 3) Electric current flows from a lower electric potential to higher electric potential
 - 4) Voltmeter is used to measure the potential difference.
- 6) If you want to measure the voltage between the terminals of the which position that the voltmeter should be connected Δ
 - 1) Only to "A"
- 2) Only to "B"
- 3) Only to " C "
- 4) Both "8" and "C"



- 7) The symbol of the resistor is
 - 1) ______
- 2) <u>(v)</u>
- 3) ——(A)——
- 4) <u>(x)</u>
- 8) One Ampere is equal too
 - 1) 100 mA
- 2) 100 mA
- 3) 1000MA
- 4) 1000 MA



10)

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9)

- 1) Ω
- 2) I

The symbol used to denote resistance

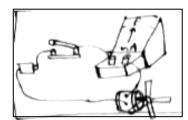
- 3) A
- 4) R
- 10) The instrument that can be used to identify the direction is a
 - 1) Voltmeter

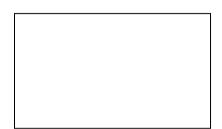
2) Ammeter

3) Center – zero galvanometer

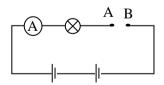
4) Millimeter

Part II





- a) Draw the symbolic diagram off the above circuit in the given box
- b) Mark the direction of current flow with the symbol of electric current in the circuit
- c) To change the direction of the motion of centre zero millimeter and rotational direction of the motor, What change that you can do in the circuit
- d) Write 2 things that you should consider when connecting an ammeter to a circuit
- 2. a) Define the following terms
 - i) Electric current
- ii) Potential difference
- iii) Resistance
- b) Write down 2 instances where accurate measurements of current and voltage have to be taken
- c) Name and draw an instrument which can be used to measure a small current in a circuit.
- 3. Given below is a set up arranged to find out whether the resistance of a conductor affect the flow of current through it



- 4. Nature of the illumination of the bulb and the ammeter readings were recoded when each piece of nichrome and a copper wire same connected separately to A and B terminals
 - a) When which wire was connected between A,B terminals will the bulb lights brightly?
 - b) What is the reasons for the above observation?
 - c) What is the relationship between the resistance and the current flow of a conductor
 - d) Copy the above circuit diagram and draw how the way you would connect a voltmeter, to measure the potential difference across dry cells.

