ST. JOSEPH STUDY CENTRE

12th STD: Unit Test - 3   **PHYSICS**   **Time: 1 Hr / Total Marks: 25**

I. Answer any 3 of the following questions: **[3 x 2 = 6]**

1. Define Current Density with unit.

2. Define temperature coefficient of resistance.

3. What is Joule's heating effect?

4. What is known as Thomson effect?

II. Answer any 3 of the following questions: **[3 x 3 = 9]**

5. State and illustrate Kirchoffs Voltage law.

6. Explain any three applications of Joules law of heating.

7. On what factor does the resistivity of the material depends on.

8. Write the differences between Electric power and electric Energy.

III. Answer any 2 of the following questions: **[2 x 5 = 10]**

9. Obtain the macroscopic from of Ohm's law from its microscopic form.

10. Obtain the condition for bridge balancing in case of Wheatstone bridge.

11. Determine the internal resistance of cell using potentiometer.

--ALL THE BEST--

Test should be written under the supervision of your parents and get the answer paper signed from them.

No corrections should be made after the test timings. We expect your honesty.

Test Papers have to be submitted after the completion of all the 4 tests.

Submission Date of Test Papers: 27th June, 28th June, 29th June   Timings: 9.30 AM – 1.00PM