



WelTec

Te Whare Wānanga o te Awakairangi

EE3103 3

Resistance, resistivity and resistors workbook



Student name

ASSIGNMENT 1



EE3103 Resistance, resistivity and resistors assignment 1

1) How does an increase in length affect a conductors resistance

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2) What are 4 other factors that affect resistance

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3) Write the unit symbol for the measurement of resistance

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4) Write the formula for resistivity?

5) Write the unit of measurement for resistivity?

6) What does tempco stand for?

7) What does R_0 stand for?

8) What is the resistivity of copper?

9) Explain the difference between a linear and non-linear resistor

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10) What is the difference between a fixed and variable resistor?

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11) Give an example of each of the 2 terms for Q9 and 2 terms for Q10

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12) What metal is used in a wire wound resistive element?

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13) Explain why a VDR is wired in parallel with the load?

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14) Why does an LDR use a bi metal switch to operate a luminare?

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15) What application is common for a wire wound resistor

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16) What application is common for a PTC thermistor

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17) Name each of the 7 resistors on the front of this workbook

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