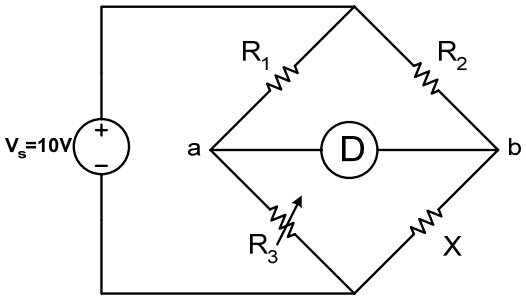
King Fahd University of Petroleum and Minerals

University Diploma Programs
Electronic Equipment Maintenance
EET-027, Electronics Instrumentation
Lab Quiz # 2

1. In the following bridge circuit shown below, R1=120 ohms and R2=120 ohms, resistance R3 is varied to balance the bridge and the value of R3 is set at 4.596 ohms. Find the value of X.



2. In the following figure, the J-type thermocouple is used and heated, the value of V is measured as 5.159 Volts. Find the voltage V_1 and temperature T_1. The seebeck coefficient for J-type thermocouple is 51 μV/^{o}C.

3. Experiment is setup according to the following figure with J-type thermocouple. The ambient temperature is found to be 21 ^{o}C. The voltage V is measured as 7.290 Volts. Find the voltage V_1 and temperature T_1. The seebeck coefficient for J-type thermocouple is 51 μV/^{o}C.

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