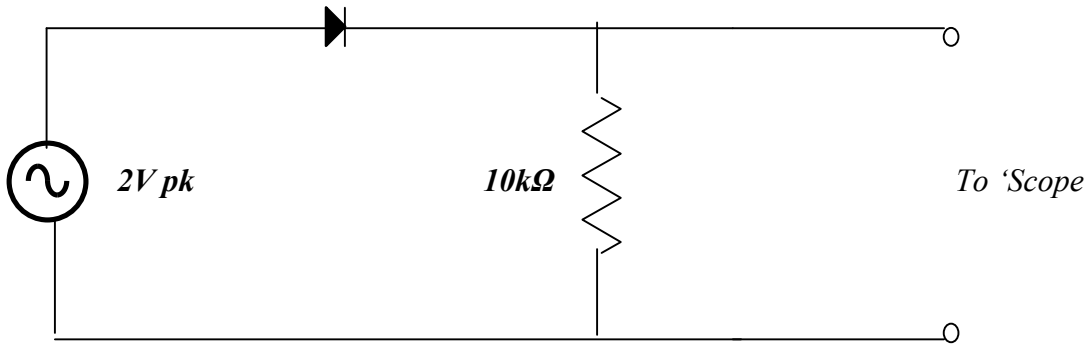
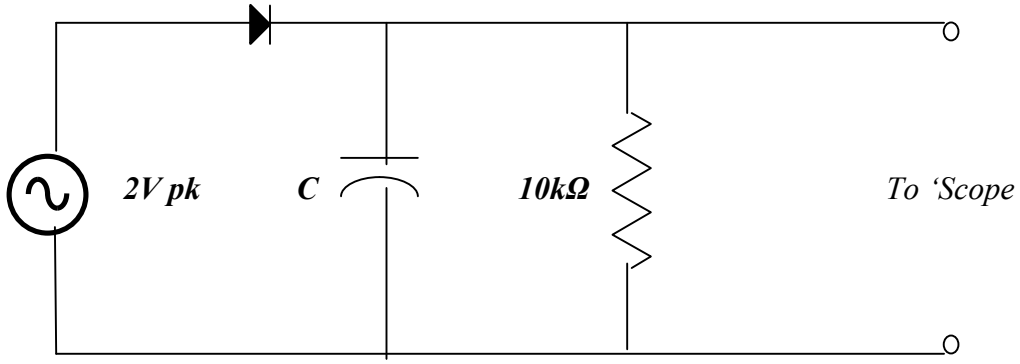
CS1025 Laboratory Experiment 3:

1) Connect the circuit shown in the following diagram:



2) Compare the input and output waveforms on the oscilloscope and interpret your results.
3) Plot the input and output.
4) Now place a 1μF capacitor across R as shown in the following diagram. Set the supply frequency first to 200Hz and then to 2KHz. Observe the output.



5) Plot the input and output in both cases.
6) Repeat with a 10μF capacitor.
7) Explain your results.
8) The above circuits are simpleac to dc converters. Suggest some applications.

Laboratory Report:

Reports should be submitted via Blackboard before the subsequent laboratory session for your group.
Your name, student number, date the experiment was performed, your lab session and details of any attachments such as letters of permission etc. should be clearly indicated on the cover page.
The report for this experiment should include the circuit diagrams and the respective measurements in tabular and graphical form as appropriate.
The report should be neatly written. Students should note that ~25% of marks are awarded for presentation of results, ~75% for explanation and interpretation of results – assuming the experiment was performed correctly. If you discover following your lab session that you have made a mistake then your report should identify that mistake and explain how it should be corrected.