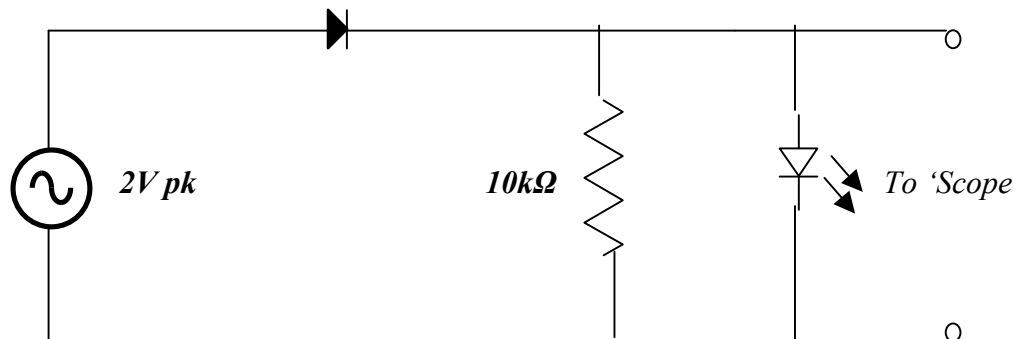
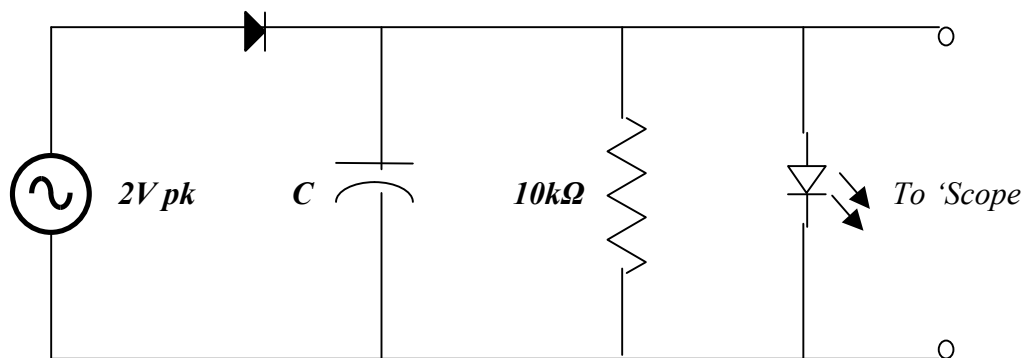


### **CS1025 Laboratory Experiment 3:**

- 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  $1\mu F$  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  $10\mu F$  capacitor.
- 7) Explain your results.
- 8) The above circuits are simple ac to dc converters. Suggest some applications for them.

### **Laboratory Report:**

Reports should be handed up at the subsequent laboratory session for your group. Your name, group number and the date should be clearly indicated on the cover page. The report should be written with a pen and be neat and concise (use a ruler for the circuit diagrams and tables). Explanations should be brief but complete. Marks will be awarded ~25% for presentation of results and ~75% for the explanation and

interpretation of these results. The work should be completed on A4 paper – duly bound.