After graduating from State University after 7 years of grueling undergraduate engineering classes, you go to work for XYZ Industries. XYZ Industries manufactures microwave ovens and other kitchen appliances. As your first task, you are asked to test a series of microwave ovens to test their defrosting capability. You proceed to your lab where you find a few dozen microwave ovens in their boxes waiting for you to start your tests. You notice that every brand of microwave oven is here, including all of XYZ’s competitors’ brands.

You unpack all of the microwave ovens and begin your tests. It is kind of boring testing microwave ovens (you have to wait up to five minutes to defrost some of the test items), so you begin to dig through the cabinets in your lab to see what is there. You quickly find out that this used to be the lab where they tested the microwave oven doors for radiation permeability (the amount of radiation that could escape through the glass door of the microwave ovens). You find a neat little piece of hand-held equipment which apparently was used to measure radiation levels. Being an engineer, you can’t resist trying it out. You switch on the meter and point it around the room and out the window, etc. You notice that when you point it at some of the microwave ovens it goes off the scale. You quickly turn off all of the other microwaves, and discover that the reading is not some fluke. Two particular microwave ovens are emitting higher-than-average levels of radiation. One of these ovens is from XYZ and the other is from ABC, XYZ’s arch-rival. These microwave ovens are currently the best-selling ovens on the market, because they are the cheapest ones available. It appears that these bargain ovens may not be as safe as they seem.

Sensing something fishy, you decide to look around a little more. You find the test report that discusses the radiation emissions from all of XYZ’s models of microwave ovens. You learn that only the top of the line and the mid-level microwaves were tested. The bargain ovens’ results had been extrapolated from the test results from the other ovens. What should you do?

1) (50 pts) Specifically, outline your intended course of action or inaction. Justify your course of action or inaction by the use of one or more concepts or ideas that we have discussed this semester. In your discussion you should discuss possible "stumbling blocks" (e.g., your boss does not agree with your plans) and how you would "work around" these stumbling blocks. Again, justify your work-arounds by the use of one or more concepts or ideas that we have discussed this semester.

2) After you make your boss (VP of Engineering) aware of your findings, she decides to write a letter to ABC Corp. and make them aware of the situation - requesting that they respond within two weeks with a plan of action. Four weeks have passed and XYZ did not get a response from ABC and you notice that the microwaves are still on the market. Answer ANY TWO of the three questions.

   a) (25 pts) Would you go to the press with what you know? Justify your answer based on one or more ethical theories.

   b) (25 pts) Would you report your findings to an appropriate government authority? Justify your answer based on the use of codes of ethics.

   c) (25 pts) Would you go directly to ABC Corp and try to find out more information/answers? Justify your answer based on the concepts of responsibility.