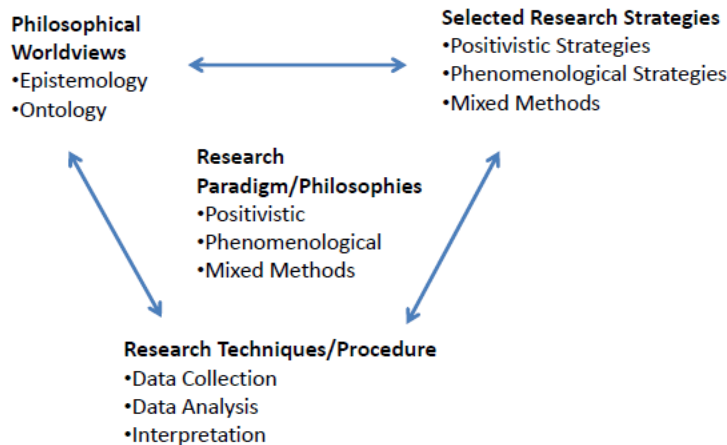




### Question 1 [20 marks]

A group of fellow PhD students have invited you to join their start up consultancy firm to provide consultancy services on research training and development. Your first assignment is train new employees at ResearchGate International on “How to conduct a scientific research”. The best approach is to use your own example of how you would write a research proposal. You choose to begin with writing the methodology...nothing wrong with that at al. You have chosen to use “Framework for Research Design” adapted from Creswell (2009) that was discussed in your Research Design PhD seminar and which is included below. Using this framework discuss how you would write your methodology. Please be VERY SPECIFIC to your topic and avoid being too general. You MUST discuss the philosophical views, research strategies, research philosophies and research techniques and procedures that fit the context of your study.

#### Framework for Design adapted from Creswell (2009)



Your answer should be structured as follows

- Philosophical worldview – justify your choice **(5 marks)**
- Selected research paradigm – justify your choice **(7 marks)**
- Selected research techniques/procedures – justify your choice(s) **(8 marks)**

### Question 2 [20 marks]

Research trends in IT Security have focused on either design research (artifacts) or analytical (empirical or behavioral). Using an illustration discuss the stages of research in both design research (R&D) and (analytical or behavioral) research in IS. Discuss each approach separately.

### **Question 3 [20 marks]**

The research onion was developed by Saunders et al. (2007). It illustrates the stages that must be covered when developing a research strategy. When viewed from the outside, each layer of the onion describes a more detailed stage of the research process (Saunders et al., 2007). The research onion provides an effective progression through which a research methodology can be designed. Its usefulness lies in its adaptability for almost any type of research methodology and can be used in a variety of contexts (Bryman, 2012). In reference to this model discuss seven different types of research strategies and four different types of research philosophies.

### **Question 4 [20 marks]**

- a) According to Saunders *et. al.* (2007) and Cooper and Schindler (2006) research process involves six steps. Briefly describes these steps and outline their importance in IS research **(10 marks)**
  
- b) Joseph Maxwell in discussing the model of research design identifies five components, each of which addresses a different set of issues that are essential to the coherence of a study: Using a diagram discuss these five issues and their role in addressing rigor in Information Systems research. **(10 marks)**

### **Question 5 [20 marks]**

The ability to clearly articulate a problem statement has often been a challenge in proposal writing among postgraduate students. One of the most important things at the early stages of research proposal development is to determine whether a problem should be researched.

- a. Briefly discuss any 5 questions to ask in an effort to determine whether a problem is researchable. **(10 marks)**
  
- b. Briefly discuss any five guidelines you would use for writing “Purpose Statement”, that’s the purpose of the study in quantitative research. **(5 marks)**
  
- c. Briefly discuss any five guidelines you would follow when writing research questions in quantitative research. **(5 marks)**