RESEARCH DESIGN

Duration: 2 Hours
Total Marks: 100 marks

Internal Examiner: Pietermaritzburg Staff
External Examiner: Professor K Dumont, University of Fort Hare

INSTRUCTIONS: ANSWER 4 QUESTIONS AS INDICATED BELOW

Answer question 1 and question 2

1. Three randomised controlled trials were conducted in Africa to determine whether a man’s risk of contracting HIV through heterosexual sex is decreased if he is circumcised. HIV prevention trials enrol HIV-negative participants. Therefore male volunteers were tested for HIV before they were enrolled in the trial. Those who were negative were randomly assigned to an experimental group (these men were circumcised) or a control group (these men were not circumcised). At the end of the follow up period, results showed that significantly more men in the control group were HIV infected than in the experimental group. Therefore researchers concluded that male circumcision does in fact help prevent HIV infection at a rate of about 50%.

   a. Distinguish randomisation from random sampling [3 marks]
   b. Outline the threats to internal and external validity identified by Campbell (1957), explaining why or why not this study is subject to these threats? [18 marks]
   c. Given that participants and researchers cannot be blinded in such a study, what are the potential effects of non-blinding? [4 marks]

   (25 marks)

2. The qualitative research paradigm has rejected positivist notions of generalisability, reliability and validity. Critically discuss an alternative way of dealing with these concepts in qualitative research, drawing on Babbie and Mouton (2005), and Starks and Brown Trinidad (2007).

   (25 marks)

Answer EITHER question 3 or question 4

3. You have been awarded the contract to evaluate the effectiveness of a large World AIDS Day programme that is to be staged in Pietermaritzburg. This programme will involve many simultaneous events and the programme will run across the entire day with some events taking place early in the morning and others taking place right across the length of the day, including the evening. These events will take place in a variety of settings and will target different groups of people including school children, university students and ordinary citizens of the city.
You and your assistants will be unable to attend every event. You need to obtain a sample of people exposed to the programme, and you need to sample to the different events that will be staged, and you need to sample events across the length of the day.

Describe how you design a sampling plan for this programme evaluation. Justify your decisions referring to appropriate theory and literature.  

(25 marks)

OR

4. The following hypothetical survey results were reported in a local community newspaper:

“Seventy percent of South Africans would support the introduction of laws that would permit any security personnel at shopping centres to amputate the hands of any person accused of shoplifting prior to notifying the authorities. Fifty percent also believe that public execution of all criminals is entirely justified”.

a. What important information is missing from the above extract in order for this to be considered accurate survey reporting practice? (10)

b. Outline the considerations for writing questions in a survey questionnaire. (15)

(25 marks)

Answer either 5a or 5b or 5c

5a. Describe the design of a case-control study and discuss the key issues involved in the selection of cases and controls.  

(25 marks)

OR

5b. Discuss the design and problems associated with cohort studies (prospective and retrospective). Illustrate your answer with examples based on research questions for which this design is suited.  

(25 marks)

OR

5c. Describe a randomised controlled trial study design, discuss the problems associated with this design and illustrate your answer with a few examples of intervention study research question for which this design is suited.  

(25 marks)