

BINDURA UNIVERSITY OF SCIENCE EDUCATION  
FACULTY OF SCIENCE AND ENGINEERING  
DEPARTMENT: SPORTS SCIENCE  
MASTER OF SCIENCE IN DEGREE IN SPORTS MANAGEMENT  
AND  
MASTER OF SCIENCE IN DEGREE IN SPORTS SCIENCE  
SSM503: RESEARCH METHODS FOR EXERCISE SCIENCES

NOV 2023

**DURATION: 3 HOURS**  
(Plus 15 Minutes for Case Reading)

**TOTAL MARKS: 100**

**INSTRUCTIONS TO CANDIDATES**

Section A is Compulsory. You are required to answer two (2) questions from Section B.

**Section A**

**Question 1:**

Assume you are part of a team of researchers who have been hired by the National Olympic Committee in your country to draft a research proposal for use in a study focusing on using digital resources to curb age cheating in Olympic sports codes at all levels. Members of the research team have been assigned to work on different sections of the research proposal and your task is to draft the proposed methodology for the project.

**Task:** Prepare a detailed draft of the assigned sections of the proposal.

**[30 marks]**

**Question 2:**

Assume you are part of a team of mixed methods researchers working on a research project focusing on developing strategies to improve the performance of your country's national football team in international competitions. Your role in the research team is to develop an informed consent form and non-disclosure agreement for use in the project.

**Task:** Prepare a draft of the instrument.

**[30 marks]**

**Section B**

**Question 3:**

As a researcher, select and justify the research paradigm and primary research strategies you would adopt when conducting studies with the following attributes:

- a. You have been tasked to conduct a study to determine the impact of digital coaching technology on the performance of Zimbabwean Premier League Football teams. **[5 marks]**
- b. You have been tasked to identify the content of courses used to train football coaches in Zimbabwe and establish how sports scientists feel about their content. **[5 marks]**
- c. You are researching the use of magical powers to enhance team performance by Zimbabwean Premier League Football teams, a subject which is thinly covered in literature. **[5 marks]**
- d. You have been tasked to conduct a study focusing on improving talent identification outcomes in Zimbabwean Premier League Football teams. **[5 marks]**

#### Question 4:

As a researcher, you are part of a team which is working on different projects. Select, justify and describe the approaches to literature review you would adopt under the following circumstances:

- a. You want to determine the extent to which available literature addresses the research objectives or research questions of your current study. **[5 marks]**
- b. You want to provide a snapshot of the meaning, historical evolution and current status of concepts within a particular field of research. **[5 marks]**
- c. You want to interpret the findings of previous multiple quantitative research studies. **[5 marks]**
- d. You want to evaluate the effectiveness of the methodologies used in previous studies. **[5 marks]**

#### Question 5:

Assume you are a quantitative researcher, and you have been asked to make a conference presentation on the circumstances under which it is appropriate to use parametric and non-parametric tests to analyse quantitative data. The presentation should also capture the nature, strengths and weaknesses of each approach.

OR

Make a presentation on how the Framework Analysis method and Grounded Theory are used to develop models in qualitative research.

#### Task:

Prepare a draft of your presentation.

**[20 marks]**

**Question 6:**

As a Sports Science professor, you have been tasked to make a presentation at a research seminar for Doctor of Philosophy students focusing on the circumstances in which non-probability sampling procedures can be used to select study participants in qualitative and quantitative research.

**Task:**

Prepare a draft of your presentation.

**[20 marks]****Question 7:**

As a researcher, you have been tasked to make a presentation to a class of final-year postgraduate sports science students at a dissertation writing workshop on the steps they can take to transform the following research ideas into interventional research topics:

- a. The Commercialisation of Women Sport.
- b. Sexual Harassment in Sport.

**Task:**

Illustrate how you will perform your task with the help of visual illustrations.

**[20 marks]**

**END OF PAPER**