BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE AND ENGINEERING

DEPARTMENT: SPORTS SCIENCE
MASTER OF SCIENCE IN SPORTS MANAGEMENT & MASTER OF SCIENCE IN SPORTS SCIENCE

SSM503(3): RESEARCH METHODS FOR EXERCISE SCIENCES

DURATION:3 HOURS   TOTAL MARKS: 100
(Plus 15 Minutes for Case Reading)

JUN 2025

INSTRUCTIONS TO CANDIDATES

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

Section A

1. You are drafting the ethical considerations section of a research proposal investigating the effects of extreme environmental conditions on athletic performance or sexual harassment in university sport in your country.
Task:

a. Identify the key ethical issues related to conducting this type of research, particularly concerning participant safety, anonymity, confidentiality and informed consent.   (15 Marks)

b. Propose strategies to mitigate potential risks and ensure that the study adheres to ethical guidelines in sports science research.   (15 Marks)

2. You have conducted focus groups with coaches to explore their experiences and attitudes towards new coaching technologies. The data is rich in narrative content, revealing various themes related to technology adoption, challenges, and benefits.

Task:

Explain how you would conduct a thematic analysis of this data and ensure that the analysis reflects the perspectives of the participants accurately.   (30 Marks)

Section B

3. You are designing a mixed methods study focusing on overcoming resistance to the use of digital technology in sports officiating, coaching and management in your country.
Task:

a. Describe the sampling procedure you would use to select participants for your study. **(12 Marks)**

 b. Explain how you would determine the sample sizes for the qualitative and quantitative strands of study. **(18 Marks)**

4. After conducting a research study on doping prevention in sports, you have developed a model from your research findings and you need to validate it before publication.
Task:

a. Discuss the methods you would use to select experts to review and validate your model. **(6 Marks)**

b. Explain how you would achieve consensus among the experts regarding the validity and reliability of the model. **(7 Marks)**

c. Describe how the feedback from the experts would be used to refine the model.

(7 Marks)

5. Your research on fan engagement strategies reveals surprising patterns in fan behaviour that do not fit well with current theories of consumer behaviour in sports.
Task:

Explain how you would use an abductive approach to develop a new theory or refine existing theories to account for these unexpected patterns. **(20 marks)**

6. Your research team is studying the psychological factors that influence athlete performance in elite football teams in your country. You are tasked with creating an interview guide for semi-structured interviews with athletes.

Task:

Develop a set of interview questions that explore the psychological experiences of athletes. **(20 Marks)**

7. You are researching the factors influencing the adoption of digital technology in sports coaching and management. You want to develop a new theory from the

findings.

Task:

a. Describe how you would use grounded theory as a methodology to develop a theory from your data. **(10 Marks)**

b. Explain the steps you would take to collect, code, and analyze the data iteratively and ensure that the emerging theory is grounded in the data. **(10 Marks)**

END OF PAPER