

BINDURA UNIVERSITY OF SCIENCE EDUCATION  
FACULTY OF SCIENCE AND ENGINEERING  
DEPARTMENT: SPORTS SCIENCE  
MASTER OF SCIENCE DEGREE IN SPORTS SCIENCE  
SS509: LABORATORY TECHNIQUES IN SPORTS SCIENCE

DURATION: 3 HOURS

TOTAL MARKS: 100

### INSTRUCTIONS TO CANDIDATES

Section A is compulsory

Answer three questions from Section B.

---

#### Section A

1) A local philanthropist has bequeathed USD20 000 000.00 to the Faculty of Health Science at Bindura University. The money is to be allocated to two departments that present the most compelling projects to enhance the quality of teaching. The Sports Science Department would like to submit a bid for USD 20 000 000.00 to set up a state-of-the-art Sports Science Laboratory. You are the head of teaching and learning in the Sports Science Department and have been tasked with submitting the bid.

#### Task:

Come up with a blueprint of the equipment that you would procure. Justify your selection.

(40 marks)

#### SECTION B

2) Assume you are a sports analyst and have been tasked to assess a sports team's domain of tactical skills.

Task: From a sport of your choice, select and explain a laboratory or field test that you would use. (20 marks)

3). As a Zimbabwe national netball coach, you were tasked to conduct anthropometric tests for use in athlete evaluation.

**Task:** Describe any two laboratory or field-based tests you would use in the assessment.

**(20 marks)**

4) Assume you are a sports psychologist in an important football team and have been tasked to assess the different psychological aspects that influence sports performance.

**Task:** Select and explain two psychology tests used to evaluate important psychological aspects of the team's performance.

**(20 marks)**

5) As a gymnastics coach, you have been tasked to assess why Zimbabwean elite gymnasts are underperforming in international competitions.

**Task:** Select and explain a laboratory or field-based flexibility test that will assist in the assessment.

**(20 marks)**

6. As an established sports scientist at a High-Performance Centre, you have been tasked with conducting the fitness testing of a team comprising 10 long jump athletes.

**Task:** Explain how you would conduct field-based tests for explosive strength.

**(20 marks)**

**END OF PAPER**