ROBERT MUGABE SCHOOL OF HERITAGE AND EDUCATION

DEPARTMENT OF SCIENCE AND TECHNICAL EDUCATION

PROGRAMME:

BACHELOR OF EDUCATION (PRIMARY) (IN-SERVICE) HONOURS DEGREE

BACHELOR OF EDUCATION (SECONDARY) (IN-SERVICE) HONOURS DEGREE

PART 2 SEMESTER 2

BACHELOR OF EDUCATION (SECONDARY) (IN-SERVICE) HONOURS DEGREE

PART 4 SEMESTER 2

MODULE CODE	CPEP222/CPES222/TDSA421
MODULE NARRATION	BIOMECHANICS OF SPORT
DURATION	3 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Answer any THREE questions

2 All questions carry equal marks

1. Explain how Newton's Three Laws of Motion apply to a specific sport of your choice providing specific examples for each law. [25]
2. Describe the factors that influence the trajectory of a soccer ball during a free kick and explain how a player can optimize these factors for maximum distance and accuracy.[25]
3. Analyze the factors that determine an object's co-efficient of restitution [25]
4. i) Using examples from a sport setting, explain the 5 principles of equilibrium [15]

   ii) Define linear, angular, and general motion, and provide examples of each type of motion in a sport of your choice. [10]
5. Draw a diagram to show the following angles in impact rebound

   i) Angle of rebound

   ii) Angle of reflection

   iii) Angle of incident

   iv) Theoretical rebound

   v) Angle of approach [15]

END OF PAPER