

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

**FACULTY OF FACULTY OF SCIENCE AND ENGINEERING**

**DEPARTMENT: SPORTS SCIENCE**

**PROGRAMME: BACHELOR OF SCIENCE HONOURS DEGREE IN SPORTS SCIENCE AND  
MANAGEMENT**

**COURSE CODE: SSM114 (3): NARRATION: HUMAN ANATOMY AND PHYSIOLOGY**

**DURATION: 3 HOURS**

**TOTAL MARKS: 100**

JUN 2025

**INSTRUCTIONS TO CANDIDATES**

Answer any **four** questions

---

1. Evaluate the importance of having knowledge about human anatomy and physiology in sports coaching. (25 Marks).

2.a) Define homeostasis. (5 Marks)

b) Explain how the body maintains a constant internal temperature during exercise in extremely hot and cold environments. (20 Marks).

3. Describe the functions of the following hormones during physical activity.

a) adrenaline (5 Marks).

b) insulin (5 Marks).

c) cortisol (5 Marks).

d) testosterone

(5 Marks).

e) endorphins

(5 Marks).

4. Explain the physiological changes that occur in the respiratory system during acute exercise. (25 Marks).

5. Describe the chronic physiological adaptations of the musculoskeletal system to regular aerobic training. (25 Marks).

6. Discuss the interrelationship between the digestive system and the cardio muscular system during physical activity. (25 Marks).

END OF PAPER