

25MP21

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Name :

Reg. No :

SECOND SEMESTER M.P.E.S. DEGREE EXAMINATION, APRIL 2026

CC25SPEMIIC1905 – PHYSIOLOGY OF SPORTS AND EXERCISE

(2025 Admission – Regular)

Time: 3.00 Hours

Maximum: 75 Marks

Credit : 4

Part A

Answer any **three** questions. Each question carries 15 marks.

1. Justify how exercise physiology contributes to improving athletic performance.
2. Defend thermodynamic principles in muscle activity.
3. Evaluate oxygen debt and its significance.
4. Validate the effects of alcohol on sports performance.
5. Generate a weight control program for athletes.
6. Discuss the environmental effects on endurance.

(3 × 15 = 45 Marks)

Part B

Answer any **four** questions. Each question carries 5 marks.

7. Explain the differences among voluntary, involuntary, and cardiac muscles.
8. Outline the structure and function of neuromuscular junction.
9. Explain the immediate physiological responses to exercise.
10. Comment on the role of nutrients in performance.
11. Assess lifestyle factors affecting performance.
12. Explain the principles of body weight control.

(4 × 5 = 20 Marks)

Part C (Short notes)

Answer any **five** questions. Each question carries 2 marks.

13. Illustrate the significance of exercise physiology in sports science.
14. Classify different types of muscles with examples.
15. Apply principles of thermodynamics in muscle work.
16. Explain immediate cardiovascular responses to exercise.
17. Define balanced diet.
18. Evaluate post-exercise nutrition strategies.
19. Define obesity.
20. Explain work capacity in hot climate.

(5 × 2 = 10 Marks)
