

November 2025
M.Sc.
Third Semester
DISCIPLINE SPECIFIC ELECTIVE – 01
ANTHROPOLOGY
Course Code: MAND 3.11 (A)
(Kinanthropometry & Ergonomics)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Differentiate aerobic and anaerobic conditioning. Compare the effects of high-intensity interval training (HIIT) and cross-training on cardiovascular system, muscular morphology, and metabolism. 4+10=14
2. Evaluate, with reasoning, how active and passive recovery regimens influence kinanthropometric variables and overall fitness. 14

UNIT-II

3. Discuss the different types of doping. Do performance enhancement drugs undermine the integrity and spirit of sports? Discuss. 6+8=14
4. Discuss in detail the components and considerations in nutrition for athletes. 7+7=14

UNIT-III

5. Discuss the interdependency of the five primary ergonomic goals – safety, posture, efficiency, comfort, and clearance/reach – in the designing of a modern ergonomic workstation. 14
6. Trace the historical evolution of ergonomics from its foundational origins to its modern role and discuss how key historical periods and events shaped operational designing. 14

UNIT-IV

7. Discuss the importance of ergonomics in designing a proper workplace environment. With a neatly labelled diagram, design an ergonomic workplace environment for 10 staffs and a manager in a room of 30 feet by 20 feet with all the proper necessary equipment's and implements of an office. 7+7=14
8. Discuss in detail the different types of clothing in ergonomics and explain the conditions to be considered while designing any clothing. 7+7=14

UNIT-V

9. What do you understand by the term thermoregulation? Explain the mechanisms by which the human body maintains thermoneutrality during athletic activities in a cold environment. 5+9=14
 10. Analyse the mechanisms and impacts of cardiovascular strain, dehydration, and metabolic alterations on sports performance in hot environments. 14
-