

U.G. 6th Semester Examination-2025**PHYSIOLOGY****[HONOURS]****Discipline Specific Elective (DSE)****Course Code : PHYSIOL-H-DSE-T-3****(Sports & Exercise Physiology)****Full Marks : 40****Time : $2\frac{1}{2}$ Hours***The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***GROUP-A**

1. Answer any five from the following questions:

 $2 \times 5 = 10$

- a) What is anorexia athletica?
- b) Define aerobic and anaerobic exercise with example.
- c) What is the importance of warm up before exercise?
- d) What is lactic O_2 debt?
- e) What is meant by physiological fatigue?

[Turn Over]

- f) What is the concept of placebo in sports performance?
- g) What is the importance of ice in sports injury?
- h) What do you mean by ergogenic aids?

GROUP-B

2. Answer any two from the following questions:

5×2=10

- a) What is meant by physical fitness of an individual?
- b) Briefly discuss about the main energy systems used during exercise.
- c) Describe the impact of diet in enhancing sports performance.
- d) Discuss about the relationship between blood doping and endurance performance.

GROUP-C

3. Answer any two from the following questions:

10×2=20

- a) What is possibly the most important adaptation that the body makes in response to endurance training which allows for an increase in both $\text{VO}_{2\text{max}}$ and performance? Through what mechanisms do these changes occur?

2+8=10

- b) Explain the effect of detraining on enzyme activity and lactate accumulation. 5+5=10
- c) What is dynamic work? Discuss about the role of exercise and sports in injury prevention and rehabilitation. 2+8=10
- d) Describe the effects of graded exercise on the cardio-respiratory system. 10