S.No. 5778 16 SCCPE 3

(For candidates admitted from 2016–2017 onwards)

B.Sc. DEGREE EXAMINATION, APRIL 2022 .

Part III — Physical Education, Health Education and Sports – Major

EXERCISE PHYSIOLOGY

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20)

Answer ALL questions.

1. Define Exercise Physiology
2. Define Physiotherapy
3. Define Energy Metabolism
4. Write the meaning of ATP?
5. Define Muscle hypertrophy
6. Define Fast Glycolytic fibre.
7. Write the meaning of systole and diastole?
8. Define Pulse rate

9. Define Vital capacity

10. Define Internal respiration

PART B — (5 × 5 = 25)

Answer ALL questions, choosing either (a) or (b).

11. (a) Explain the physiological basis of Cool down exercises.

Or

(b) Explain the improvements in sports equipments.

12. (a) Explain the relationship between energy and nutrition.

Or

(b) Differentiate Aerobic and Anaerobic energy in detail.

13. (a) Explain the types of muscles with example.

Or

(b) Discuss the relation between fiber distribution and performance.

14. (a) Compare and contrast cardiac output before and after activity.

Or

(b) Describe the structure of heart.

15. (a) Describe the role of respiratory muscles.

Or

(b) Explain the process of respiration in detail.

PART C — (3 × 10 = 30)

Answer any THREE questions.

16. Explain in detail the meaning scope, need and importance of Exercise Physiology in detail.

17. Discuss the mechanism of sliding filament theory in detail.

18. Explain the Structure of Skeletal muscle and enumerate the properties of skeletal muscle in detail.

19. Discuss the stroke volume response to exercise and regulation of stroke volume in detail.

20. Explain ventilation during exercise and exercises to develop endurance capacities.

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