

**THIRD SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2024**  
**(Regular/Improvement/Supplementary)**

**BSM**  
**GBSM3A02T: FUNDAMENTALS OF SPORTS SCIENCES**

**Time: 2 ½ Hours**

**Maximum Marks: 80**

**SECTION A: Answer the following questions. Each carries *two* marks.**  
**(Ceiling 25 marks)**

1. Define sports science.
2. What are carbohydrates and proteins?
3. Explain VO<sub>2</sub> Max.
4. What is team cohesion?
5. State the concept of 'sport as a science'.
6. Comment on force and torque in biomechanics.
7. Enlist the scope of test & measurements in sports.
8. Mention the importance of injury rehabilitation.
9. What are the major components of the skeletal system?
10. Explain the concept of athletic safety.
11. What is doping?
12. Comment on wearable technologies.
13. Define exercise physiology.
14. List down the fundamental movements in sports biomechanics.
15. Draw a flow chart of respiratory pathway.

**SECTION B: Answer the following questions. Each carries *five* marks.**  
**(Ceiling 35 marks)**

16. Explain the meaning and definition of kinesiology.
17. Give an account on motivation and goal setting in sports.
18. Discuss the physiological factors affecting sports performances.
19. Explain safety measures during training and competitions.
20. Elaborate on the principle of movement in corrective exercises.
21. Write the scope of physiotherapy in sports.
22. Describe on ergogenic aids in sports.
23. Give an account on the importance of sports nutrition.

**SECTION C: Answer any *two* questions. Each carries *ten* marks.**

24. Write an essay on the functions and classification of Nervous system.
25. Discuss the needs, importance and scope of sports medicine.
26. Explain the historical development and emergence of sports science.
27. Explain aims, goals and objectives of adapted physical education.

**(2 x 10 = 20 Marks)**