## Rajiv Gandhi University of Health Sciences, Karnataka

 Second Year Master of Physiotherapy Degree Examination - 24-Nov-2023[Time: 3 Hours]
[Max. Marks: 100]

## Basic Medical Sciences for Sports Physiotherapy - Paper II (RS-4) Q.P. CODE: 8133

Your answers should be specific to the questions asked. Draw neat, labeled diagrams wherever necessary.

## Answer All The Questions

$10 \times 10=100$ Marks

1. Define the concept of 'Proprioception' and its role in human movement control in sports rehabilitation with examples.
2. Explain the physiological changes that occur in the cardiovascular and respiratory systems due to aerobic training.
3. Outline the dual role of a sports physiotherapist as both an administrator and a team collaborator.
4. Conduct an analysis on the effectiveness of pain neuroscience education. Compare and contrast the outcomes of pain neuroscience education with traditional pain management approaches.
5. Outline the concept of carbohydrate loading for endurance athletes. Provide recommendations for implementing a carbohydrate-loading diet effectively.
6. Identify the biomechanical factors contributing to ACL injury. Evaluate the considerations for designing a comprehensive rehabilitation plan tailored to this injury.
7. Examine the application of principles of training in sports rehabilitation. Evaluate how these principles can influence rehabilitation outcomes.
8. Evaluate a periodized training plan for a professional sprinter aiming to improve their 100 m race performance, incorporating the principles of training and exercise conditioning. Justify the rationale behind each phase of the plan.
9. Explain the role of thermoregulation in sports performance.
10. Explain the significance of tailoring exercise programs for athletes with Type 2 Diabetes Mellitus.
