

Federal University of Technology, Owerri  
School of Health Technology  
Department of Biomedical Technology  
BMT 322: SPORTS MEDICAL TECHNOLOGY  
2015/2016 Rain semester Examinations  
23<sup>rd</sup> September, 2016.

(2.5 Hours)

Time: 9am

**Instruction: Answer only five questions**

1. a. What is exercise? (4 marks)  
b. Emphasize the importance of exercise in health and aging. (6 marks)  
c. Explain the role of physiology in sports. (4 marks)  
d. What is the difference between sport physiology and exercise physiology?  
(6marks)
2. a. Give the basic physiologic features of NMJ of an athlete. (8 marks)  
b. Identify 2 exogenous factors that may influence NMJ activities.(2 marks)  
c. Physiologically, explain how an athlete starts off a sport event.(10 marks)
3. a. Enumerate 5 changes expected in the muscle fibre types when a non-athlete initiates endurance training to become a marathoner. (10 marks)  
b. With physiological reasons, compare and contrast the sport performance of males and females. (10 marks)
4. a. Outline two (2) changes that may occur in the heart during sport training. (4marks)  
b. Discuss the physiological menace of doping, with 2 examples. (6 marks)  
c. As a member of the sports medical team in Nigeria, discuss all your roles as a biomedical engineer or engineering technologist? (10 marks)
5. a. What are sport injuries? (4 marks)  
b. Mention 4 major causes of sport injuries. (4 marks)  
c. List 5 common types of sport injuries and explain (6 marks)  
d. Distinguish between an acute sport injury and a chronic sport injury.(6 marks)
6. a. What is first aid? (3marks)  
b. List 10 essential materials or tools found in a standard first aid box. (5marks)  
c. State 6 proper measures an athlete should take to prevent sport injuries. (12marks)
7. a. Write short notes on the following  
i. Thermotherapy ii. Cryotherapy iii. Physiotherapy (12 marks)  
b. Distinguish between Puncture and Laceration. (4 marks)  
c. With the aid of a diagram, explain 2 different types of fractures. (4 marks)