



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
Plot 91, Cadastral Zone, University Village,  
Nnamdi Azikiwe Expressway, Jabi, Abuja  
**Faculty of Education**  
**Department of Human Kinetics & Health Education**  
**2025\_2 EXAMINATIONS**

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Course Code: KHE 436

Course Title: Physiology Applied to Physical Conditioning

Time: 2hours

Instruction: Answer question one (1) and any other two.

1. a. Explain the following components of physical fitness
  - I. Health related components
  - II. Skill related components
  - III. Physiological components (15 Marks)
- b. Discuss three (3) benefits each for the following terms
  - I. Physical Fitness
  - II. Physical conditioning (15 Marks)
2. a. Explain any five (5) basic principles of body conditioning (10 Marks)
- b. Describe the following as they relate to exercise
  - I. Aerobic dancing
  - II. Step Aerobics
  - III. Water Aerobics (6 Marks)
- c. Mention any four (4) benefits of physical activity (4 Marks)
3. a. Write notes on the following
  - i. Biochemical adaptations to training
  - ii. Stroke volume
  - iii. Cardiac output
  - iv. Physiological adaptations to training (16 Marks)
- b. Differentiate between Interval training and Continuous training (4Marks)
4. a. With the aid of a well labelled diagram, identify the organs of the respiratory system (15 Marks)
- b. Mention any two (2) functions of the respiratory system (5 Marks)
5. a. Write notes on the following
  - I. Acute injuries
  - II. Overtraining
  - III. Warm up
  - IV. Cool down (16 Marks)
- b. Mention any four (4) benefits of strength training (4 Marks)