Exercise Physiology Questions & Answers

89 pages

General Introduction

A wide variety of styles of question are used; for example OBJECTIVE (multiple choice, matching pairs, multiple completion) and SUBJECTIVE (structured and essay); each designed to assess different levels of understanding, and to maintain interest. Some will also provide experience of the types of question found in most examinations.

A LINK ON EACH QUESTION PAGE TAKES YOU TO THE RELEVANT ANSWER PAGE

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Muscles & Bones in Action Questions

Multiple Choice Questions

For each of the following questions, choose the **ONE** response which best answers the question.

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Which one of the following is the basic unit of the sliding filament mechanism?

- A Sarcomere.
- **B** Myofibril.
- C Sarcoplasm.
- D Muscle fibre.

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go to answer page

Which one of the statements below, referring to the sliding filament mechanism, is NOT correct?

- A single cross bridge may undergo many reconnections per second with the actin filament during a muscle contraction.
- **B** In isometric contractions where the contracting muscle is prevented from shortening, the cross bridges do not operate.
- **C** The coupling and uncoupling of the cross bridges continues if sufficient calcium ions are present.
- **D** In the absence of free calcium ions, tropomyosin and troponin prevent the connection of cross bridges between myosin and actin.

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Which one of the following features is NOT characteristic of typical slow twitch (Type I) muscle fibres, when compared to fast twitch (Type II) muscle fibres?

- **A** More myoglobin.
- **B** More and larger mitochondria.
- **C** Same amount of actin.
- **D** More myosin.
- **E** Better blood supply.