General Certificate of Education June 2009 Advanced Subsidiary Examination



HUMAN BIOLOGY Investigative Skills Assignment Task Sheet

HBI3T/P09/task

The effect of exercise on pulse rate

INTRODUCTION

Your pulse rate is affected by exercise. The change in pulse rate depends on the type of exercise and how long it lasts.

You will measure your pulse rate after carrying out the same type of exercise for five different lengths of time.

Outline method

You are provided with

- a timer
- a step

You may ask your teacher for any other apparatus you require.

You should read these instructions carefully before you start work.

- 1. Record your pulse rate at rest.
- 2. Use the step provided for your exercise. Step up onto the step with one foot. Bring the other foot up to join it. Step down with one foot. Bring the other foot down. Repeat.
- 3. The rate at which you step up and down has to be fast enough to change your pulse rate. Try to maintain the same rate of stepping.
- 4. Continue to step up and down for 15 seconds, and then record your pulse rate.
- 5. After a suitable length of time carry out the step test again but increase the length of time by 15 seconds.
- 6. You should obtain results for stepping for 15, 30, 45, 60 and 75 seconds.

You will need to decide for yourself:

- the length of time you continue to record your pulse rate after exercise
- how long you wait between bouts of exercise
- how many repeats to carry out at each length of time you spend exercising.

ISA HBI3T/P09 Candidate Results Sheet: Stage 1 The effect of exercise on pulse rate					
Candidate Name	<u>,</u>				

Record your data in a table in the space below. Hand in this sheet at the end of each practical session.

ISA HBI3T/P09 Candidate Results Sheet: Stage 2					
The effect of exercise on pulse rate					
Centre Number	Candidate number				
Candidate Name					
Use the space below to process your data.					

Use the graph paper to plot a graph of your processed data. Hand in this sheet at the end of each practical session.

Hand in this sheet at the end of the practical session.

