

G622: Monitoring the Activity of the Human Body – Worksheet D

Unit Name: Monitoring the Activity of the Human Body	Unit Number: G622
Assignment Title: Electrocardiography and diagnosis – assessment material	Assignment: G622 Worksheet D
Date Set:	Due Date:

Assignment Brief:

The question presented in this task is one example of the way the topic may be assessed in the written examination paper for Unit G622.

Task:

- Spend some time reviewing the information you have gathered in preparing for the task in *G622 Worksheet C* (including use of the suggested website).
- Attempt this task without any reference material.
- Check your work against your reference material to establish where your knowledge and understanding may be lacking.
- Correct your response where necessary.

Resources / Notes:

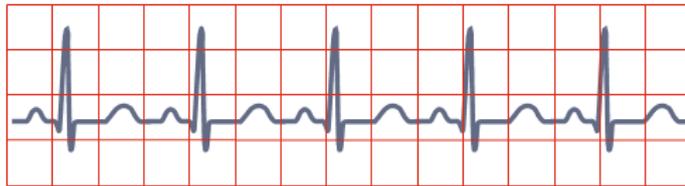
- Assessment material attached.

G622: Monitoring the Activity of the Human Body – Worksheet D Assessment Material

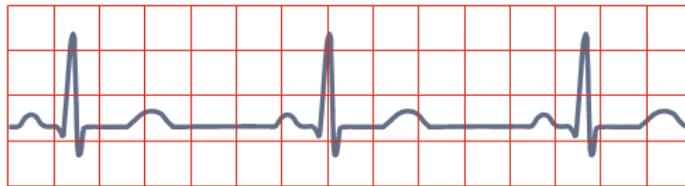
- 1 As part of their training, a doctor must learn about electrocardiogram (ECG) traces.

Fig. 1 shows ECG traces for a number of patients. Additional information about each condition has also been supplied.

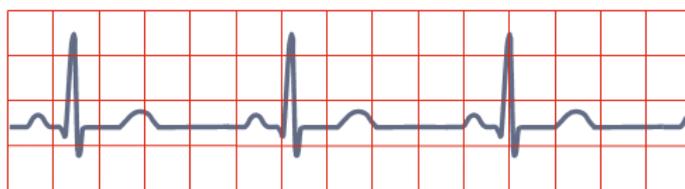
Trace for patient A. The pulse rate for patient **A** is greater than $100 \text{ beats min}^{-1}$



Trace for patient B. The pulse rate for patient **B** is less than $60 \text{ beats min}^{-1}$



Trace for patient C. The pulse rate for patient **C** is $60\text{-}100 \text{ beats min}^{-1}$



Trace for patient D. The pulse of patient **D** is very irregular or absent.

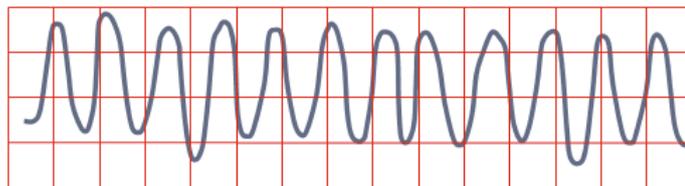


Fig. 1

- (a) Using the information shown in Fig. 1, complete Table 1. One has been done for you.

Table 1

patient	condition
.....	bradycardia
A	sinus tachycardia
.....	sinus arrhythmia
D

- (b) Suggest a cause of sinus tachycardia, as shown in patient **A**. [3]

.....
[1]

- (c) Athletes usually show bradycardia. Suggest two reasons why bradycardia may be useful to athletes.

1.

 2.
[2]

- (d) Look at the trace for patient **C**.

- (i) Describe the pattern shown by peaks **X** to **Z**.

.....
[1]

- (ii) Suggest two reasons for this pattern.

1.

 2.
[2]

(e) Patient D has a very irregular heartbeat, or at times, no pulse at all.

Suggest three reasons for this.

1.

.....

2.

.....

3.

.....

[3]