

## Level 3 Cambridge Technical in Health and Social Care

05831/05832/05833/05871

### Unit 4: Anatomy and physiology for health and social care

Wednesday 6 June 2018 – Morning

Duration: 2 hours  
C442/1806



**You must have:**

- no materials required

First Name						Last Name				
Centre Number						Candidate Number				
Date of Birth	D	D	M	M	Y	Y	Y	Y		

**INSTRUCTIONS**

- Use black ink.
- Complete the boxes above with your name, centre number, candidate number and date of birth.
- Answer **all** the questions.
- Write your answer to each question in the space provided.
- If additional answer space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.

**INFORMATION**

- The total mark for this paper is **100**.
- The marks for each question are shown in brackets [ ].
- Quality of extended response will be assessed in questions marked with an asterisk (\*).
- This document consists of **16** pages.

FOR EXAMINER USE ONLY	
Question No	Mark
1	/22
2	/23
3	/17
4	/21
5	/17
<b>Total</b>	<b>/100</b>

Answer **all** the questions.

- 1 (a) Identify which part of the body has the type of joint in the table below.

Choose from the following:

**Knee**

**Cranium**

**Wrist**

**Hip**

**Neck**

Type of joint	Part of the body
Fixed joint	
Pivot joint	
Sliding joint	
Ball and socket joint	
Hinge joint	

**[5]**

- (b) Many people have arthritis that affects their joints.

Explain **two** different possible causes of arthritis.

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**[4]**

(c) Identify **four** possible treatments for arthritis.

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[4]

(d)\* Multiple Sclerosis (MS) is caused by damage to the myelin sheath. The myelin sheath is a fatty layer that surrounds and protects the nerves.

The immune system attacks the myelin sheath and damages it, sometimes damaging the underlying nerves.

This means the messages that travel along the nerves may be disrupted or slowed down.

Individuals with MS may not be able to control the movement of their joints.

Explain the likely impact MS may have on an individual’s movement.

[9]

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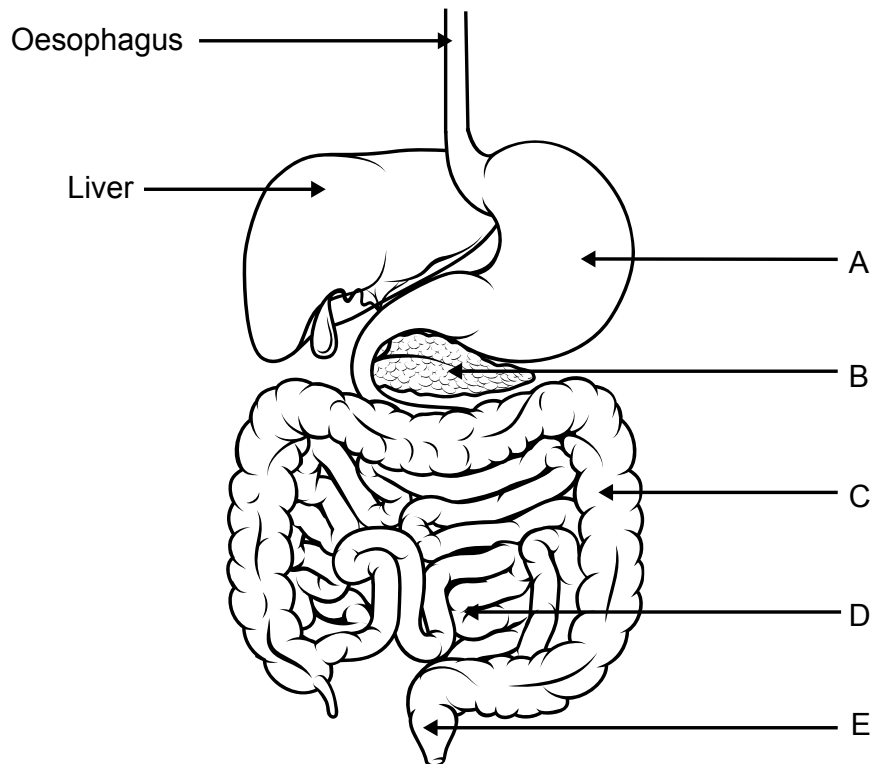
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**Question 2(a) begins on page 5**

2 The diagram below shows the digestive system.



(a) Identify the labelled parts shown on the diagram.

Choose from the words given below:

Anus

Gall bladder

Large intestine

Pancreas

Rectum

Small intestine

Stomach

Labelled part	Name of labelled part
A	
B	
C	
D	
E	

[5]

**(b) Complete this description about pancreatic juices.**

Use words from the list provided.

**acid      alkaline      enzymes      fats      large      proteins      small**

Pancreatic juices play a part in digestion. They are released from the pancreas into the \_\_\_\_\_ intestine. They neutralise the chyme (partially digested food from the stomach) because they are \_\_\_\_\_ . Pancreatic juices contain chemicals called \_\_\_\_\_ which break down the food into smaller soluble molecules. These chemicals break down all three of the major food groups - carbohydrates, \_\_\_\_\_ and \_\_\_\_\_ .

**[5]**

**(c) (i) Name a malfunction of the digestive system.**

.....[1]

**(ii) Describe how the digestive system is affected by the malfunction in (c)(i).**

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- 3 (a) Identify which part of the eye is responsible for each of the following functions.

Choose your answer from the list provided:

**Pupil    Conjunctiva    Cornea    Iris    Macula    Retina    Tear gland**

Function	Part of the eye
Produces liquid to moisten the surface of the eye	
Forms a thin protective layer (mucous membrane) covering the front of the eye and lines the inside of the eyelids	
The first part of the eye to focus the light and the outermost layer that is transparent and convex in shape	
The coloured part of the eye that controls the amount of light entering the eye	
The lining of the back of the eye that contains cells which are sensitive to light	

[5]

- (b) (i) Some people develop cataracts in their eyes.

Explain how cataracts affect the functioning of the eye.

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[3]





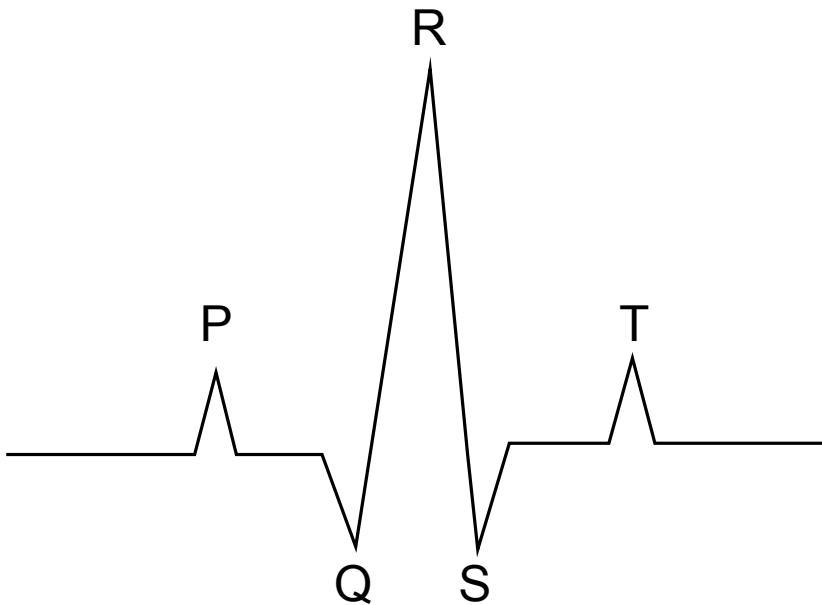
4 (a) Explain **two** reasons why the heart is referred to as a **double pump**.

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[4]

(b) The diagram below shows an electrocardiogram (ECG) trace.



An ECG is a commonly used technique for diagnosing problems with heart function.

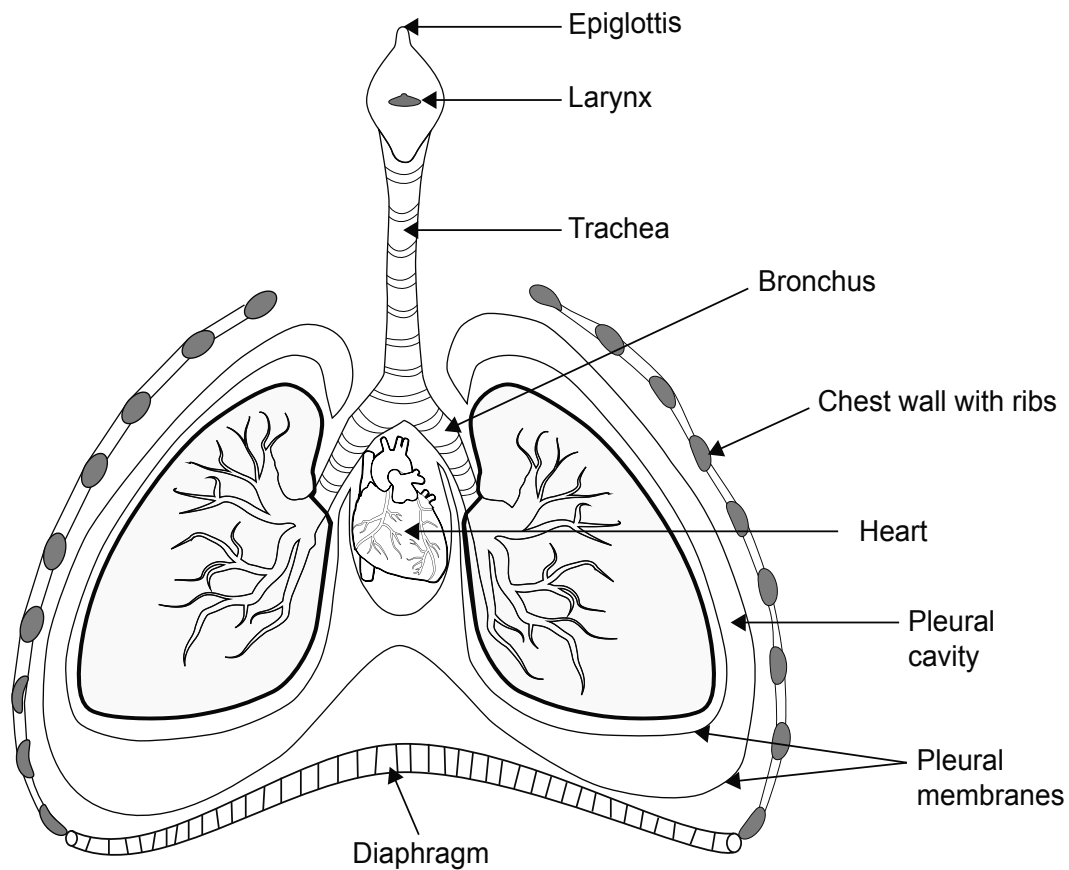
Explain what an ECG trace can tell us about what is happening in the heart.

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[4]



5 The diagram below shows the human respiratory system:



(a) Identify which parts of the respiratory system in the diagram above carry out the following functions.

Function	Part of the Respiratory system
Covers the airway during swallowing to prevent food entering the lungs	
Produces sound and speech	
Contains cartilage to keep the airway open even when lying down	

[3]





**ADDITIONAL ANSWER SPACE**

If additional answer space is required, you should use the following lined page(s). The question number(s) must be clearly shown – for example 1(a) or 3(a).

A large rectangular area containing 25 horizontal dotted lines for writing answers. A solid vertical line is on the left side of the area.

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