

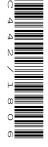
# Level 3 Cambridge Technical in Health and Social Care

05831/05832/05833/05871

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

## Wednesday 6 June 2018 - Morning

Duration: 2 hours C442/1806



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YOU	must	have.

· no materials required

First Name		Last Name									
Centre Number						Cano Num	didate ber				
Date of Birth	D	D	M	M	Υ	Υ	Υ	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				
Total	/100				

Neck

Hip

### Answer **all** the questions.

Wrist

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

Cranium

Choose from the following:

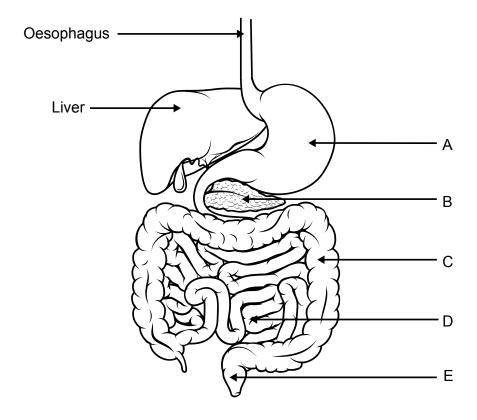
Knee

	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 jo	pints.
b)	Many people have arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects their joe Explain <b>two</b> different possible causes of arthritis that affects the causes of arthritis that affects the cause are the cause and the cause are the cause and the cause are	
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b)	Explain <b>two</b> different possible causes of arthr	

(0)	identify <b>four</b> possible treatments for arthritis.
	1
	2
	3
	4
	[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]


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 blad	der	r Large intestine		
	Rectum	Small intestine	Stomach		
	Labelled part	ı	lame of labelled part		
	Α				
	В				
	С				
	D				
	E				

[5]

(b)	Complete this	description about	pancreatic juices.
121	OUITIDICIC IIII3	acaci ibtion about	bancicatic idices.

Use words from the list provided.

	acio	l alkaline	enzymes	fats	large	proteins	small	
	Pan	creatic juices play	a part in digesti	ion. They a	ire released	from the pand	creas	
	into	the		intestine.	They neutr	alise the chym	e (partially	
	dige	sted food from the	e stomach) beca	use they a	re			
	Pan	creatic juices cont	ain chemicals c	alled		v	/hich	
	brea	k down the food i	nto smaller solul	ble molecu	les. These	chemicals brea	ak down	
	all th	nree of the major f	ood groups - ca	rbohydrate	es,			
	and							[5]
(c)	(i)	Name a malfund	_					
	(ii)	Describe how the	e digestive syste					[1]
								[4]

(d)*	Homeostasis regulates the conditions inside our body. Body temperature, blood sugar level and water content are all examples of the internal conditions it regulates.
	Negative feedback mechanisms are used in the body to achieve homeostatic control.
	Describe how the negative feedback mechanisms work in the body.

Tear gland

Iris

Macula

Retina

2	<b>(</b> -)	Idontifi	, which	nart of tha	ava ia raa	ponsible for	acab of t	aa fallawina	functions
J	(a)	IUCIIIII	/ WHILCH I	טמונ טו נוופ	CVC 15 1 CS	DOLISIDIE IOI	each of the	ie ioliowiiic	i iulicuolis.

Cornea

Choose your answer from the list provided:

Conjunctiva

Pupil

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 ines the inside of the eyelids	
The first part of the eye to focus the light and ne outermost layer that is transparent and onvex 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 ells which are sensitive to light	

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

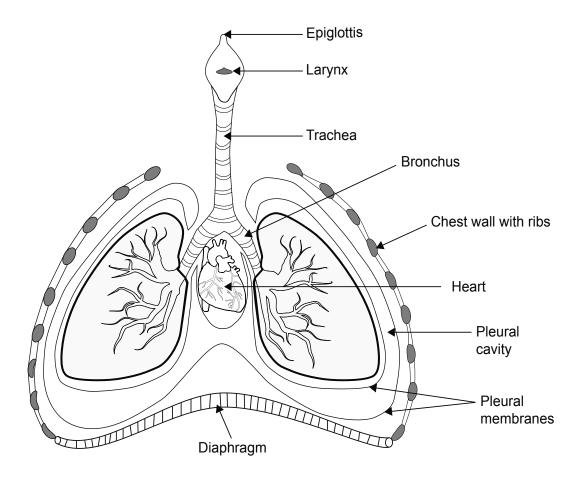
Explain how cataracts affect the functioning of the eye.

(11)	Describe the monitoring and treatments used for cataracts.
	[
Ner	ve cells are made up of several different components which have different functions.
Ner	Nerve cells have long processes called axons and dendrons.
	Nerve cells have long processes called axons and dendrons.  What is the difference between the function of an axon and the function of a
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4	(a)	Explain <b>two</b> reasons why the heart is referred to as a <b>double pump</b> .
		1
		2
	(b)	[4] The diagram below shows an electrocardiogram (ECG) trace.
		$\begin{array}{c} P \\ \\ Q \\ \end{array}$
		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.

(c)	Des	cribe how blood plasma becomes tissue fluid and lymph.
		[4]
(d)	(i)	Identify two functions of the kidney.
		1
		2
		[2
	(ii)*	Describe how the kidney carries out its functions.

**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]

	(b)	)*	Explain	how	breathing	takes	place
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You	r answer should refer to some of the labelled parts of the diagram.
	[6
(i)	Name the part of the brain which controls breathing.
(ii)	Identify <b>one</b> other process that is controlled by this part of the brain.
	[1

(i)	Identify a respiratory malfunction.
	[1]
(ii)*	Evaluate the possible methods of monitoring and treatment available for the respiratory malfunction in <b>(d)(i)</b> .

### **END OF QUESTION PAPER**

(d)

#### **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).



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