90166



For Supervisor's use only

### Level 1 Biology, 2008

## 90166 Describe the functioning of human digestive and skeletomuscular systems

Credits: Four 9.30 am Monday 17 November 2008

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should answer ALL the questions in this booklet.

If you need more space for any answer, use the page(s) provided at the back of this booklet and clearly number the question.

Check that this booklet has pages 2–12 in the correct order and that none of these pages is blank.

#### YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

For Assessor's use only	Achievement Criteria	
Achievement	Achievement with Merit	Achievement with Excellence
Describe biological ideas relating to the functioning of human digestive and skeletomuscular systems.	Describe biological ideas relating to the functioning of human digestive and skeletomuscular systems.	Describe biological ideas relating to the functioning of human digestive and skeletomuscular systems.
	Explain biological ideas relating to the functioning of the human digestive or the skeletomuscular system.	Discuss biological ideas relating to the functioning of the human digestive or the skeletomuscular system.
Overall Level of F	Performance (all criteria within	a column are met)

You are advised to spend 55 minutes answering the questions in this booklet.

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	be the purpose of digestion.
diagram ow.	below shows parts of the digestive system. Use it to help answer the questions that
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	be reproduced here.
A dant	d from Torrance, <i>Standard Grade Biology</i> (Sevenoaks, Kent, UK: Hodder & Stoughton, 1989), p 98.

(c)	Once food leaves the stomach, it moves into the first part of the small intestine, call <b>duodenum</b> , for further digestion.	ed the As	ssessor's use only			
	<b>Discuss</b> how digestion occurs in the duodenum.					
	In your discussion you should:					
	• explain the roles of the gall bladder and pancreas					
	• explain the changes that occur in pH and the surface area.					

#### **QUESTION TWO**

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	Sometimes things go wrong with the digestive system, for example when a person has <b>constipation</b> or <b>diarrhoea</b> .			
Exp	<b>plain</b> the difference between constipation and diarrhoea.			
	<b>cuss</b> why BOTH physical and chemical digestion are necessary for digestion to be cient.			
In y	our discussion you should:			
•	describe physical and chemical digestion			
•	<b>explain</b> why BOTH physical and chemical digestion are necessary for digestion to be efficient.			

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#### **SECTION B: HUMAN SKELETOMUSCULAR SYSTEM**

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#### **QUESTION THREE**

Explain how a	a muscle strain c	an affect mov	rement of a join	ıt.	

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diagram below shows parts of a joint with the muscle at rest (relaxed) and the muscle acted. When the muscle contracts the joint bends, as shown by the arrow.
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Adapted from http://brianbul.blogsome.com/images/Seif_hamstringmuscles.jpg
ar discussion, you should LINK the following: a <b>description</b> of the function of bones, muscles, ligaments and tendons in the movement of a joint an <b>explanation</b> of how the bones, muscles, ligaments and tendons work together to allow the joint to bend.

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use or
Question Four is
on the following page.
on one tonowing page.

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Des	<b>cribe</b> a function of the skeleton.
	eoporosis and arthritis are both conditions that affect the normal functioning of the eton.
	cuss the causes AND effects of osteoporosis AND arthritis on the normal functioning oskeleton.
In y	our discussion you should LINK the following:
•	a description of osteoporosis AND arthritis
•	an <b>explanation</b> of the causes AND effects of osteoporosis AND arthritis on the functioning of the skeleton.

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## Extra paper for continuation of answers if required. Clearly number the question.

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Question number	