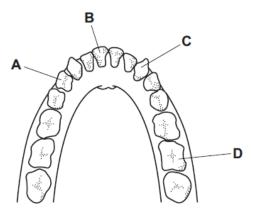
## <u>Human nutrition – 2023 November IGCSE 0610</u>

#### 1. Nov/2023 /Paper\_ 0610/11/No.13

The diagram shows the teeth in the lower jaw of a human.

Which tooth is a molar?



#### 2. Nov/2023 /Paper\_ 0610/11/No.14

What is meant by chemical digestion?

- A Large insoluble molecules are broken down into small soluble molecules.
- **B** Large soluble molecules are broken down into small insoluble molecules.
- C Small insoluble molecules are built up into large soluble molecules.
- D Small soluble molecules are built up into large insoluble molecules.

#### **3.** Nov/2023 /Paper 0610/11/No.15

Which food is a good source of vitamin C?

- A bread
- B cheese
- C chicken
- D oranges

#### **4.** Nov/2023 /Paper\_ 0610/13/No.13

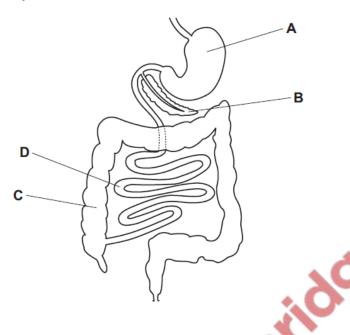
Which human teeth are used for biting and cutting food?

- A canines and molars
- B incisors and canines
- C molars and premolars
- D premolars and incisors

# **5.** Nov/2023 /Paper\_ 0610/13/No.14

The diagram shows part of the human digestive system.

Which organ produces hydrochloric acid?



# **6.** Nov/2023 /Paper\_ 0610/13/No.15

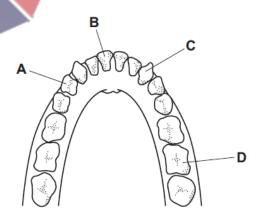
Which part of a balanced diet is missing if a person develops rickets?

- A carbohydrates
- B iron
- C vitamin C
- D vitamin D

# **7.** Nov/2023 /Paper\_ 0610/21/No.13

The diagram shows the teeth in the lower jaw of a human.

Which tooth is a molar?



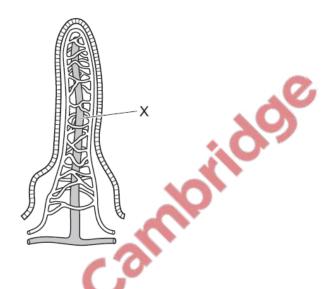
## **8.** Nov/2023 /Paper\_ 0610/21/No.14

What is meant by chemical digestion?

- A Large insoluble molecules are broken down into small soluble molecules.
- **B** Large soluble molecules are broken down into small insoluble molecules.
- C Small insoluble molecules are built up into large soluble molecules.
- **D** Small soluble molecules are built up into large insoluble molecules.

# **9.** Nov/2023 /Paper\_ 0610/21/No.15

The diagram shows a villus in the small intestine.



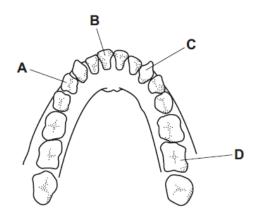
What is absorbed at X?

- A fatty acids
- **B** glucose
- C glycogen
- D starch

# 10. Nov/2023 /Paper\_ 0610/22/No.13

The diagram shows the teeth in the lower jaw of a human.

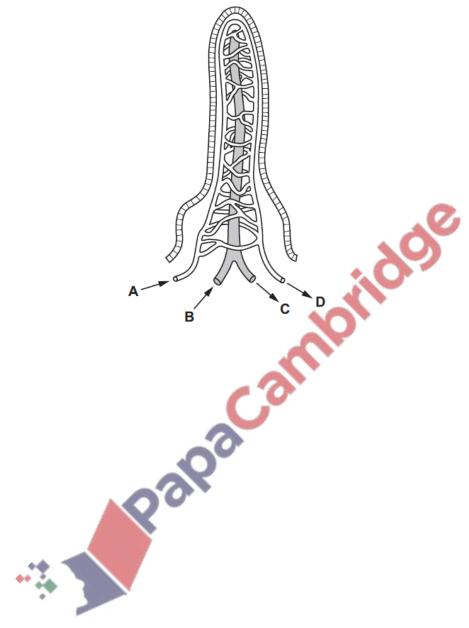
Which tooth is a premolar?



## 11. Nov/2023 /Paper\_ 0610/22/No.15

The diagram shows a villus. The arrows show the direction of flow within vessels associated with the villus.

Which vessel carries blood to the liver?



## 12. Nov/2023 /Paper\_ 0610/23/No.13

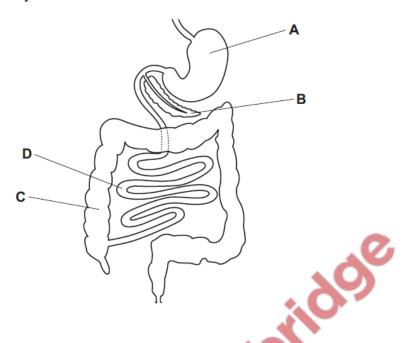
Which human teeth are used for biting and cutting food?

- A canines and molars
- B incisors and canines
- C molars and premolars
- D premolars and incisors

## **13.** Nov/2023 /Paper\_ 0610/23/No.14

The diagram shows part of the human digestive system.

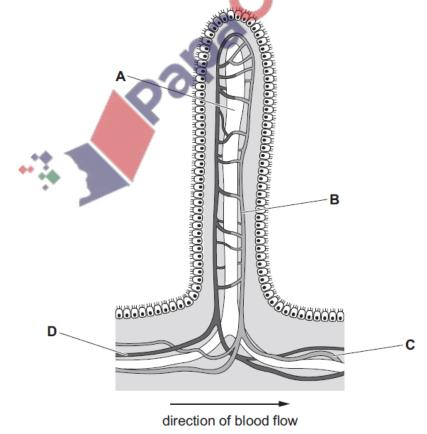
Which organ produces hydrochloric acid?



# 14. Nov/2023 /Paper\_ 0610/23/No.15

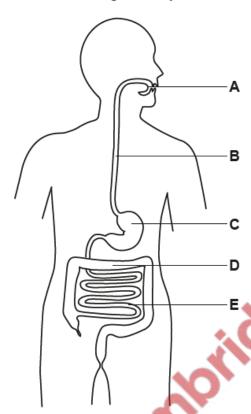
The diagram shows the structure of a villus. The artery, capillary, lacteal and vein are labelled with letters.

Which letter shows where nutrients are absorbed into the blood?



15. Nov/2023 /Paper\_ 0610/31/No.2

Fig. 2.1 is a diagram of part of the human digestive system.



(a)	Using the information in Fig. 2.1, state the letters where:		
	chemical digestion of proteins begins		
	hydrochloric acid is produced		
	physical digestion of food occurs.	and	[4]
(b)	State the names of three parts of the larg	ge intestine.	ניין
	1		
	2		
	3		
			[3]

(c) Many processes occur in the digestive system.

The boxes on the left show some of the processes.

The boxes on the right show descriptions of some processes.

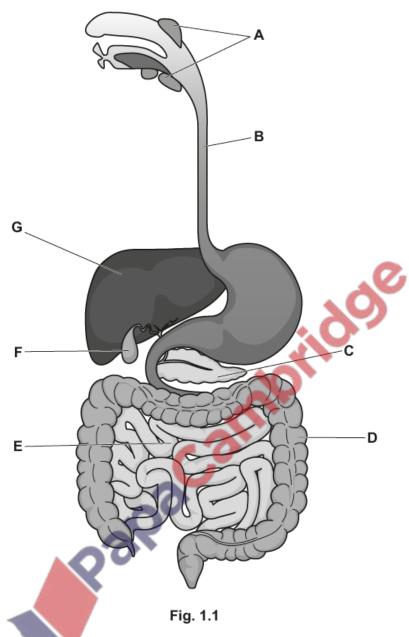
Draw one line to link each process to its description.

Draw four lines.

process	description
	breakdown of food
absorption	
	movement of nutrients from the intestines into the blood
digestion	
	removal of undigested food from the body as faeces
egestion	
	taking substances into the body
ingestion	
	uptake and use of nutrients by cells
	[4]
	[Total: 11]

# **16.** Nov/2023 /Paper\_ 0610/32/No.1

(a) Fig. 1.1 is a diagram of the digestive system.



(i) State the letter from Fig. 1.1 that represents:

[4]

(ii)	Sta	ate one function of the hydrochloric acid in the st	omach.
	••••		
			[1]
(b)	Amy	ylase is an enzyme.	
	(i)	Describe the function of amylase.	
			rol
	(ii)	Define the term enzyme.	. 200
			[2]
		oacain.	[Total: 9]
		Pale	
		***	

# **17.** Nov/2023 /Paper\_ 0610/41/No.2

(a) The small intestine is lined with many villi and is adapted to absorb glucose.

Fig. 2.1 shows two villi from the lining of the small intestine.

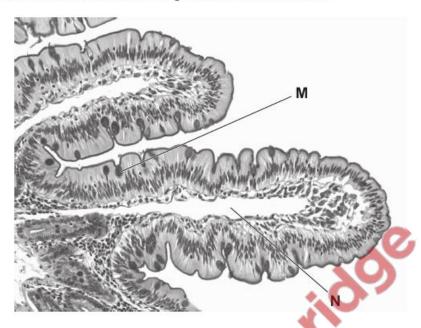


Fig. 2.1

(ii) State the name of structure N in Fig. 2.1.

[1]

(iii) Cell M in Fig. 2.1 secretes mucus.

State the name of cell M.

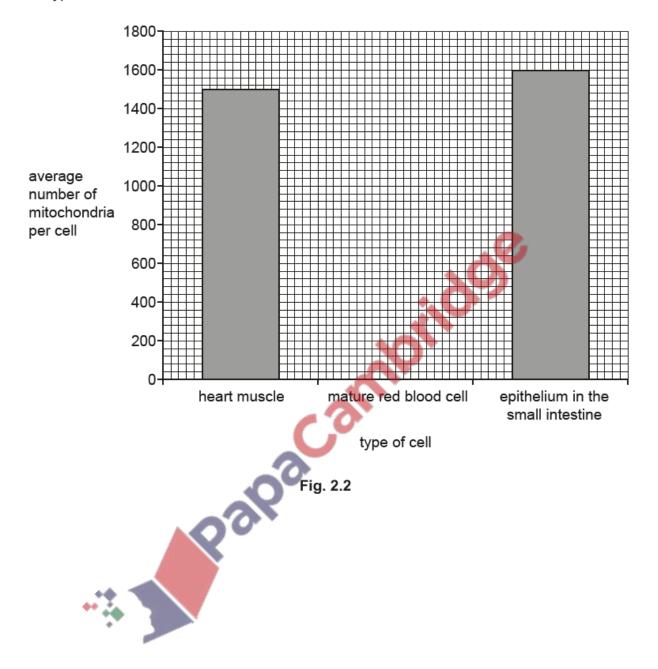
[1]

(iii) State one other place in the body where mucus secreting cells are found.

	(iv)	Describe and explain how the structure of a villus is adapted for its function.
		[4
b)	Stat	e the name of the main blood vessel that takes blood from the small intestine to the liver
		[1
c)	All c	cells develop from stem cells.
	Des	cribe what is meant by the term stem cell.
		[2

(d) Some cells in the small intestine have many mitochondria.

Fig. 2.2 shows the variation in the average number of mitochondria found in three different types of cell.



Explain the differences in the average number of mitochondria in each type of cell.
[5]
[Total: 15]
Par
***