

1 (a) Describe what is meant by the term physical digestion.

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..... [2]

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

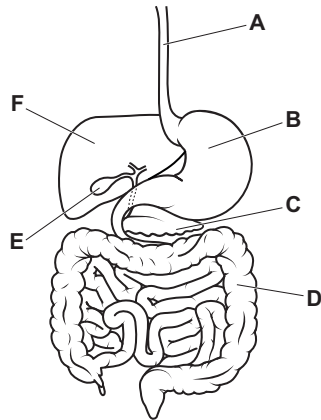


Fig. 1.1

State the letter from Fig. 1.1 that shows one part where:

physical digestion occurs

glucagon is produced

bile is produced.

[3]

(c) Explain the role of bile in physical digestion.

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..... [3]

(d) Physical digestion also occurs in the mouth.

State the names **and** functions of **two** types of human teeth.

1

.....

2

..... [2]

A black and white micrograph of a histological section of the spinal cord. The central canal is visible as a bright, vertical structure in the center. The surrounding tissue shows various cellular structures, including nuclei and cytoplasm. A box labeled 'X' highlights a region of the spinal cord tissue, and a line labeled 'Y' points to the central canal.

magnification $\times 800$

Fig. 1.2

Identify **and** explain the roles of the parts labelled **X** and **Y** in Fig. 1.2.

[4]

[Total: 14]

A line drawing of the human digestive system. The diagram shows the mouth, pharynx, esophagus, stomach, liver, gallbladder, pancreas, small intestine, large intestine, and rectum. Labels A through M point to various parts of the system.

- A: Mouth
- B: Esophagus
- C: Gallbladder
- D: Pancreas
- E: Small intestine
- F: Large intestine
- G: Rectum
- H: Cecum
- J: Duodenum
- K: Liver
- L: Stomach
- M: Salivary gland

Fig. 1.1

Table 1.1 shows information about some of the structures shown in Fig. 1.1.

Complete Table 1.1, using Fig. 1.1.

Table 1.1

name of the structure	function	letter in Fig. 1.1
		G
	produces amylase	
gall bladder		
	transports food to the stomach	

..... [3]

State the name of the product of this reaction.

..... [1]

..... [1]

[6]

[Total: 15]