

Circle the letter that correctly matches each statement.

1 Identify the correct statement about sensitivity.

- a) All organisms respond to stimuli quickly.
- b) Only animals respond to stimuli.
- c) Only organisms with sense organs respond to stimuli.
- d) All organisms respond to stimuli.

[1 mark]

2 Which of these make up the central nervous system?

- a) Brain and nerves
- b) Spinal cord and nerves
- c) Brain and spinal cord
- d) Brain, spinal cord and nerves

[1 mark]

3 The main control areas of the body are located in the:

- a) spinal nerves and spinal cord
- b) spinal nerves and brain
- c) brain and spinal cord
- d) spinal cord and spinal nerves

[1 mark]

4 Which hormone affects the normal use of sugar in the body?

- a) Adrenalin
- b) Thyroxin
- c) Oestrogen
- d) Insulin

[1 mark]

5 When adrenalin is released into the blood which of the following is MOST LIKELY to occur?

- a) The heart beats slower
- b) Digestion speeds up
- c) Muscle activity increases
- d) Mental processes slow down

[1 mark]

6 What is the name of the small gaps between neurons?

- a) Dendrites
- b) Synapses
- c) Axons
- d) Myelin sheaths

[1 mark]

- 7 The following observations were made in an experiment carried out on female rabbits.

Action taken	Age	Observations
The pituitary gland removed	Young	Ovaries did not develop
	Mature	Ovaries and uterus stopped working

What do these results indicate?

- a) The ovary hormone influences the uterus.
- b) Hormones from the ovaries influence the pituitary.
- c) There is a feedback of ovaries to the uterus.
- d) The pituitary gland influences the ovaries and the uterus.

[1 mark]

- 8 Which gland is also referred to as the master gland?

- a) Thyroid
- b) Pituitary
- c) Ovary
- d) Adrenal

[1 mark]

- 9 Which of the following statements are TRUE of hormones? They:

- I. are secreted directly into the blood
- II. digest food stuffs
- III. are secreted by the endocrine glands
- IV. influence physical and mental changes

- a) I, II and III
- b) I, II and IV
- c) I, III and IV
- d) II, III and IV

[1 mark]

10 The pancreas is not producing any hormones. What would happen to the glucose levels?

- a) High in the blood and urine
- b) Low in the blood and urine
- c) High in the blood and low in the urine
- d) Low in the blood and high in the urine

[1 mark]

11 Ms Graham's students are all anxiously waiting for class to begin. The school bell always rings to signal the start of classes and each room has a clock.



FIG 5.1

a) i. What two things would the students use to know that it is the start of class, and which sense would they use for each?

Item	Sense used

[2 marks]

ii. If one of the students had his head on the table how would he know that class had started?

iii. Lunch is served. What senses are involved in **eating** the lunch? [1 mark]

iv. Use the diagram of the tongue below to show where the various tastes from the lunch would be detected. Write answers on the lines provided. [2 marks]

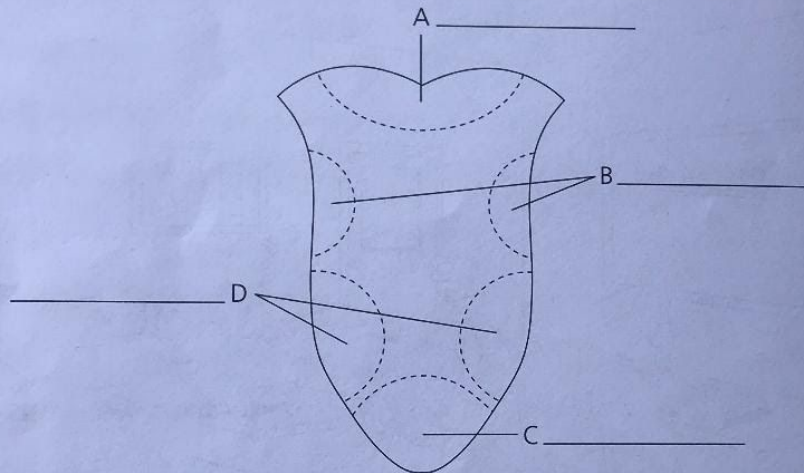


FIG 5.2

[4 marks]

b) Name the nerve which takes messages to the brain from the:

i. eye: _____ nerve

ii. nose: _____ nerve

iii. ear: _____ nerve

[3 marks]

c) Ronald has a cold, and complains that he cannot seem to taste whatever he eats. Explain to Ronald why this happens.

[2 marks]