

Section A (20 marks)

Answer all questions in this section.

Figure 1 is a diagram showing a cell. Use it to answer questions 1 and 2.

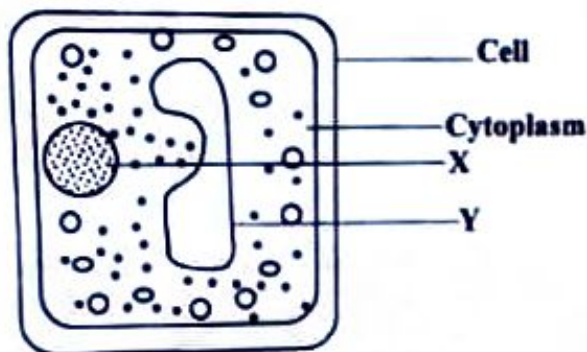


Figure 1

1. Name the part labelled Y.
 - A. cytoplasm
 - B. cell membrane
 - C. vacuole
 - D. protoplasm
2. What is the function of the part labelled X?
 - A. protects the cell
 - B. gives the cell its shape
 - C. site for protein synthesis
 - D. controls cell division
3. Which of the following diseases is caused by a bacterium called shigella?
 - A. cholera
 - B. typhoid
 - C. dysentery
 - D. syphilis
4. Which of the following is a monosaccharide?
 - A. lactose
 - B. glucose
 - C. maltose
 - D. sucrose
5. In which part of the alimentary canal does chemical digestion start?
 - A. stomach
 - B. mouth
 - C. small intestines
 - D. large intestines
6. Which of the following organisms is an example of molluscs?
 - A. hookworms
 - B. snails
 - C. spiders
 - D. crabs
7. Which of the following organisms is a fish?
 - A. butterfly
 - B. catfish
 - C. cuttle fish
 - D. tilapia fish
8. To which of the following phylum does the octopus belong?
 - A. sponges
 - B. crustacea
 - C. echinodermata
 - D. mollusca
9. Which of the following are characteristics of amphibians?
 1. moist bodies
 2. bodies with scales
 3. live in water
 4. have feathers
 - A. 2 and 4
 - B. 1 and 2
 - C. 3 and 4
 - D. 1 and 3

Continued/...

10. Which of the following is a correct food chain?
- grass → goat → lion
 - grass ← goat ← lion
 - grass → lion → goat
 - grass ← lion ← goat
11. Which of the following is the correct way of writing scientific name of human?
- Homo sapiens
 - Homo Sapiens
 - homo sapiens
 - Homosapiens
12. Which of the following part of human brain controls speech?
- cerebrum
 - cerebellum
 - hypothalamus
 - medulla oblongata
13. Which of the following is an example of conifer plants?
- cypress
 - peas
 - ferns
 - liver warts
14. Which of the following structure in a moss produces spores?
- setas
 - rhizoids
 - rhizomes
 - leaves
15. The stalk of a moss is called
- seta
 - rachis
 - rhizoids
 - rhizomes

Figure 2 is a diagram showing part of human digestive system. Use it to answer questions 16 to 19.



Figure 2

16. Name the part labelled Y.
- duodenum
 - pancreas
 - ileum
 - sphincter
17. Name the enzyme produced by part marked Y in adult humans?
- maltose
 - trypsin
 - rennin
 - pepsin
18. Name the part labelled X.
- pancreas
 - duodenum
 - stomach
 - bile duct
19. Which of the following is the enzyme that works in the part labelled X?
- salivary amylase
 - trypsin
 - pepsin
 - maltase
20. Which of the following is the function of semi circular canals?
- hearing
 - balancing
 - vibrating
 - collecting

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Section B (50 marks)

Answer all the questions in this section in the spaces provided.

21. Figure 3 is a diagram showing animal X and Y. Use it to answer the questions that follow.

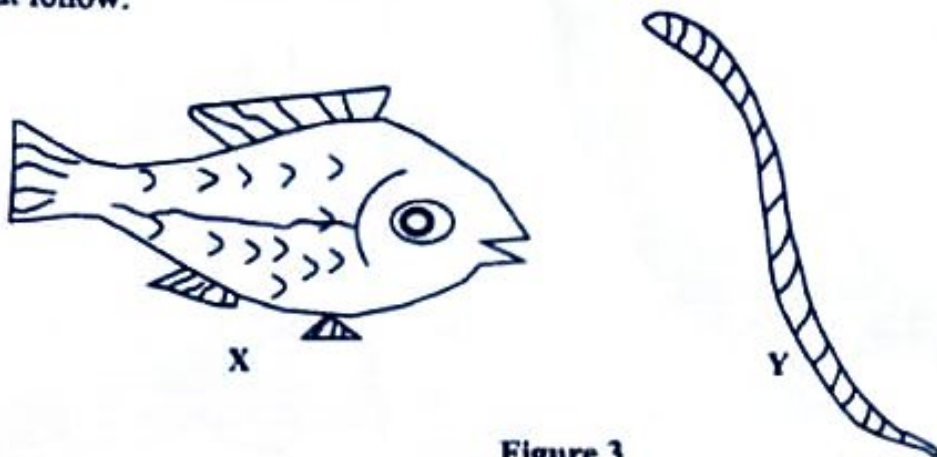


Figure 3

- a. To which group of animals do X and Y belong?

X: _____

Y: _____

(2 marks)

- b. How does Y reproduce?

(1 mark)

- c. State the structure which is used for locomotion in X.

(1 mark)

- d. Give any two characteristics that could be used to classify X.

(2 marks)

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22. a. Mention the **three** components of the human circulatory system.

(3 marks)

- b. State **one** function of each of the following blood vessels.

- (i) arteries

(1 mark)

- (ii) capillaries

(1 mark)

23. a. Name the part of the ear that performs each of the following functions:

- (i) helps in maintaining body balance.

(1 mark)

- (ii) equalises the air pressure on both sides of the eardrum.

(1 mark)

- b. Explain any **two** ways of caring for the eyes.

(4 marks)

Continued/...

24. a. State the sexually transmitted infections that cause blindness.

(2 marks)

- b. Explain any two ways of preventing sexually transmitted infections.

(4 marks)

25. State four features of a good report in biology experiments.

(4 marks)

26. Figure 4 is a diagram showing the human brain. Use it to answer the questions that follow.

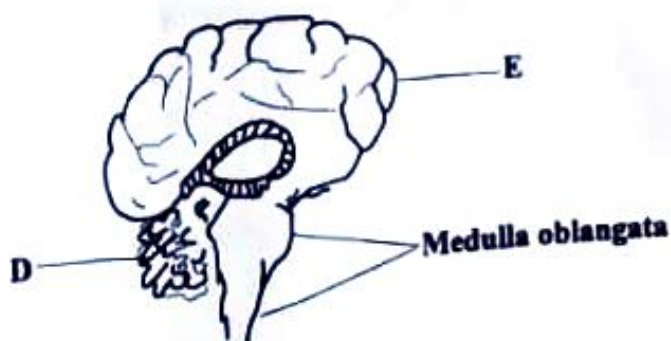


Figure 4

- a. Name the part labelled D.

(1 mark)

Continued/...

26. (Continued)

- b. Give any two functions of the part labelled E.

(2 marks)

- c. Mention any two effects of alcohol on the nervous system.

(2 marks)

27. Figure 5 is a diagram showing a lung model. Use it to answer the questions that follow.

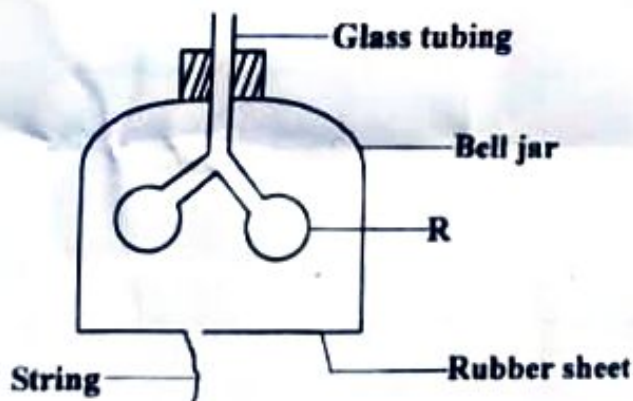


Figure 5

- a. What does each of the following represent in the human body?

- (i) glass tubing

(1 mark)

- (ii) rubber sheet

(1 mark)

- (iii) R

(1 mark)

Continued/...

29. (Continued)

- b. Explain any one function of small intestines in the human body.

(2 marks)

30. Figure 6 is a diagram of a worm. Use it to answer questions that follow.

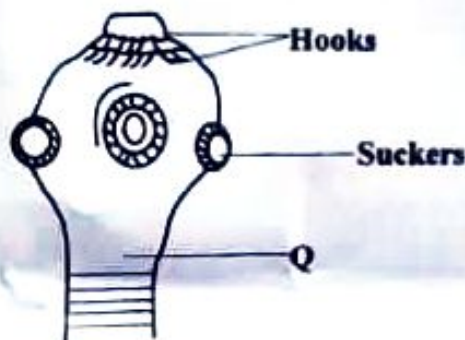


Figure 6

- a. Name the part labelled Q.

(1 mark)

- b. State any two signs and symptoms of the worm infection mentioned in (a) above.

(i)

(1 mark)

(ii)

(1 mark)

- c. Which part of the human body does the mature worm live?

(1 mark)
Continued/...

27. (Continued)

- b. Give one limitation of lung model.

 (1 mark)

28. a. Mention the deficiency disease which is characterised by each of the following:

- (i) bleeding gum

 (1 mark)

- (ii) enlargement of the thyroid gland

 (1 mark)

- b. Explain any one effect of deficiency diseases.

 (2 marks)

- c. Give any one way of preventing obesity.

 (1 mark)

29. The Table shows related food substances, enzymes and products.

Food substance	Enzyme	Product
Starch	(i)	maltose
Sucrose	Sucrase	(ii)
(iii)	Peptidase	amino acids

- a. Complete the table above.

(3 marks)

Continued/...

Section C (30 marks)

Answer all the questions in this section. Your answers should be in an essay form.

31. Explain any five characteristics of living things.

(10 marks)

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32. Describe any **five** defects the eye.

(10 marks)

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33. Explain any five methods of preserving food from being damaged by microorganisms.

(10 marks)

END OF QUESTION PAPER

This paper contains 12 printed pages.