

SECOND TERMINAL EVALUATION - 2016-17
BIOLOGY

Standard - IX

Total Score: 40
Time: 1½ Hours

Instructions

1. First 15 minutes is given as cool off time. This time is to be used for reading and understanding the questions.
2. Write down answers for all questions.
3. The score and time for each question should be considered while answering.

1. Which is the odd one? Write down the common features of the others. (2)
 - a) Trachea, Lenticel, Pleura, Bronchi
 - b) Abscission of leaves, Flowering, Heart wood formation, Hydathode
2. Analyse the statement and answer the questions. (2)

"The structural peculiarity of afferent vessel and efferent vessel makes the process of filtration easy."

 - a) How do afferent vessel and efferent vessel differ in their structure?
 - b) Do you agree to the statement? Why?
3. Write the answers of the questions based on the terms given below. (3)

• Urea	• Amino acid
• Uric acid	• Haemoglobin
• Urochrome	• Glucose
• Vitamins	

 - a) What are the factors not seen in urine?
 - b) Which factor gives urine the light yellow colour? How is it formed?
4. Rewrite the following statements related to dialysis correcting if there is any error in the underlined part. (2)
 - a) Blood from the veins is pumped into the dialysis unit.
 - b) Heparin is added to prevent the coagulation of blood in the dialysis unit.
 - c) Wastes from the blood diffuse into the dialysing fluid when the blood flows through the cellophane tube.
 - d) Dialysis is the treatment method for kidney stone.
5. Choose items from B and C to match with A and rearrange the table. (3)

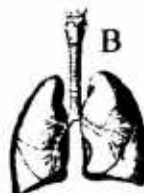
A	B	C
Fish	Tracheid	Uric acid
Butterfly	Kidneys	Urea
Mango tree	Malpighian tubules	Oxygen
XXXX	Stomata	Ammonia

6. Analyse the disease symptoms and answer the questions. (2)

- Turbid urine
- Back pain and fever
- Oedema in the face and ankles of foot

- a) Name the disease.
- b) Write the cause of the disease.

7A. Analyse the figure and answer the questions. (4)



- a) Which organs do A and B indicate?
- b) How do these organs participate in the process of excretion?
- c) Write down the name of other important excretory organ in the human body and its main function.

OR

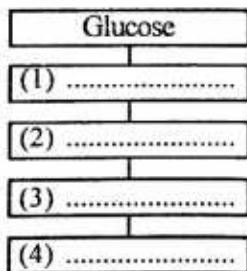
7B. Evaluate the statement and answer the questions.

"Dust particles and germs reach the nasal cavity through the nose. However there are self protective mechanisms in the trachea and the alveoli."

- a) What are the mechanisms in the nasal cavity that prevent germs and dust particles?
- b) What are the self protective measures in the trachea and the alveoli?
- c) What are the health habits to be followed by us for the protection of the respiratory system?

8. Explain how the structure and peculiarity of the alveoli become helpful for gaseous exchange. (3)

9A. Analyse the flowchart and answer the questions. (3)



Hint
(1), (3) - Parts of cell
(2), (4) - Products

- a) Which process does the flowchart indicate?
- b) Examine the hints and complete the flowchart.

OR

B. Analyse the statements and answer the questions.

- (i) Haemoglobin helps in the transport of oxygen.
 - (ii) Haemoglobin helps in the transport of oxygen and CO₂.
- a) Which of these statements is more correct? Why?
 - b) How does the decrease in haemoglobin affect the body?

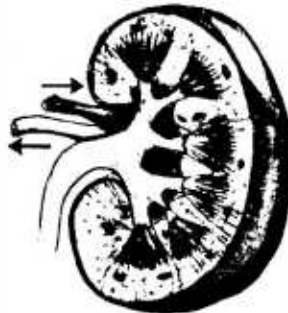
10. If the excess CO_2 formed in the body is not eliminated in time, homeostasis will be disturbed. How? (2)
11. Given below are two common activities in the kitchen. (3)
1. A spoon full of curd is added to milk.
 2. A little yeast is added to batter.
- a) What will happen to the two after 5 – 6 hours?
 - b) Which process leads to these changes?
 - c) What are the products formed in both the activities?
12. A headline in a newspaper on Antismoking Day is given below: (3)

Lives lost in Smoking!

- a) Which organ does smoking seriously affect?
 - b) Prepare a note on two diseases affecting this organ due to smoking, to be added to the excerpt.
13. Evaluate the opinion and answer the question. (2)
- “Roots cannot respire since they are under the soil”
- a) Do you agree to this? Give reason.
14. Observe the experimental setup shown below. (2)



- a) Which is the process that leads to the formation of water droplets in the bag that covered the – plant in the experiment?
 - b) How does this process help in the conduction of water through the stem?
15. Redraw the diagram and label the parts mentioned below. (4)



- a) The vessel that carries blood with high quantities of urine.
- b) Tube that carries urine
- c) Part from which urine passes to the filters.