A. Multiple choice questions:

1. The diagram shows human alimentary canal. In which part does protein digestion begin?

2. Which nutrient is deficient in the diet of a child with kwashiorkor?
   a) calcium  b) iron  c) protein  d) vitamin D

3. Anaerobic reaction in muscles, results formation of _____ and _____ from glucose.
   a) lactic acid, energy  b) energy, water  c) lactic acid, water  d) none of the above

4. The diagram shows the outside of the human heart. Which is a coronary artery
5. What is the function of lymphocytes in the blood?
   a) Antibody production
   b) Blood clotting
   c) phagocytosis
   d) transport of hormones

6. Where is urea made and where is it removed?

<table>
<thead>
<tr>
<th></th>
<th>Made</th>
<th>Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>kidney</td>
<td>bladder</td>
</tr>
<tr>
<td>b</td>
<td>kidney</td>
<td>kidney</td>
</tr>
<tr>
<td>c</td>
<td>liver</td>
<td>kidney</td>
</tr>
<tr>
<td>d</td>
<td>liver</td>
<td>rectum</td>
</tr>
</tbody>
</table>

7. What shows the sequence of organs through which urea passes as it travels from where it is produced to where it is removed from the blood?
   a) kidneys → heart → lungs → heart → liver
   b) kidneys → heart → liver → lungs → heart
   c) liver → heart → lungs → heart → kidneys
   d) liver → lungs → heart → kidneys → heart

8. Which is the equation for anaerobic respiration in yeast?
   a) \( C_6H_{12}O_6 \rightarrow 2C_2H_5OH + 2CO_2 \)
   b) \( C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O \)
   c) \( 2CO_2 + 2C_2H_5OH \rightarrow C_6H_{12}O_6 \)
   d) \( 6CO_2 + 6H_2O \rightarrow C_6H_{12}O_6 + 6O_2 \)

**Paper – 4**

B. **Answer the following questions:**

1. Define the following.
   a) Absorption
   b) veins

2. Explain how diarrhea can be treated.

3. Distinguish between aerobic and aerobic respiration.

4. Where does respiration take place in the body?
5. State the functions of blood and lymphatic vessels.

6. Describe what is meant by the term double circulation. State one advantage of double circulation.

7. Explain how platelets can protect us from infection.

8. Explain why urea has to be produced.

**Paper – 6**

C. **Alternative to practical:**

1. Fig 5.1 shows the Human breathing system.

   Name the structures labelled J, K, L and M.
   Write your answers on Fig.5.1

   ![Fig. 5.1](image)

2. Fig 8.1 shows the structures that produce urine and excrete it from the body.

   Name the structures labelled L and M.
   Write your answers on Fig 8.1.

   ![Fig. 8.1](image)

**Note:** This is just a model, not the exam paper.