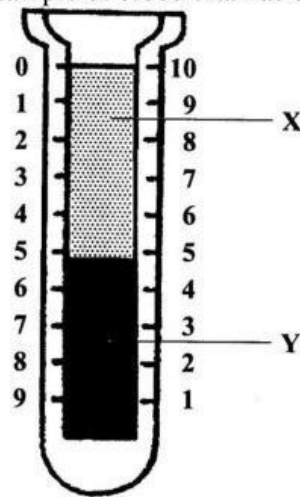1. The diagram shows a test tube with a sample of blood that has been left standing for several hours.

a. (i) Name the parts labelled **X** and **Y**.

X_____ **Y**_____[2]

(ii) What percentage of blood makes up part **X** and part **Y**?
Percentage part **X**_____
Percentage part **Y**_____   [2]

(iii) What is the major component of the part labelled **X**?
_____[1]

(iv) Name **TWO** other substances found in the part labelled **X**.
_____
_____[2]

b. Phagocytes and lymphocytes both kill germs. Explain how they differ in their function.
   i. Phagocytes
      _____
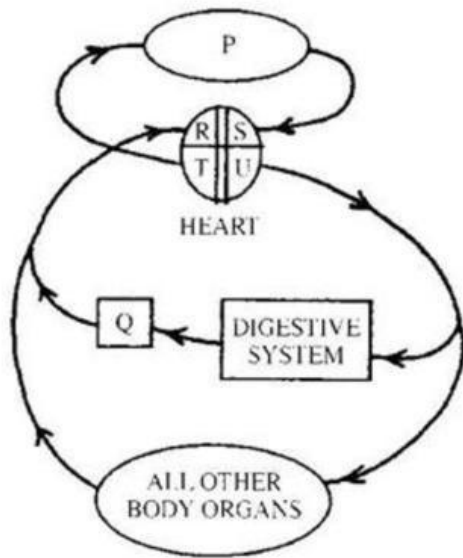   _____

   ii. Lymphocytes
      _____
      _____[2]

c. Human beings have four blood groups/types.
   Which blood group is known as "Universal Donor"?

_____[1]

TOTAL MARKS [10]

2. This diagram is a simplified plan of the human circulatory system. The arrows on the diagram represent the direction of blood flow.

R _____

S _____

T _____

U _____

[4]

a. Write the names of the parts of the diagram labelled R, S, T and U.

b. What body organs are represented by P and Q on the diagram?

P_____

Q_____   [2]

c. Describe two ways that blood changes as it flows through the part labelled P on the diagram.
   i. _____

   _____
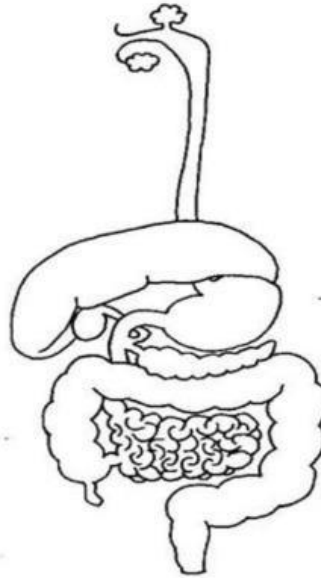
   ii. _____

   _____ [2]

d. Name the kind of blood vessels that
   i. Have valves in them_____

   ii. Have thick, muscular walls with no valves. _____[2]

TOTAL MARKS [10]

3. This diagram represents the human digestive system.

   a. On the diagram, label the stomach, the liver and the pancreas.   [3]

   b. (i) Where does the process of chemical digestion begin?

_____

      (ii) Where does the process of chemical digestion end?

_____[2]

   c. What is the function of bile? Where is it produced? Where is it stored before it is used?

     i. Function _____

     ii. Where produced_____

     iii. Where stored_____[3]

   d. Name one digestive enzyme and describe what it does (i.e. what food it acts upon and what it changes that food to).

     i. Enzyme:_____

     ii. What it does:_____[2]

TOTAL MARKS [10]