

## SELF ASSESSMENT TEST SOLUTIONS

1. (a) The saliva contains an enzyme called salivary amylase which breaks down starch which is a complex molecule to give sugar. The pancreas secretes pancreatic juices which contain enzymes like trypsin for digesting proteins and lipase for breaking down emulsified fats. The walls of the small intestine contain glands which secrete intestinal juice. The enzymes present in it finally convert the proteins to amino acids, complex carbohydrates into glucose and fats into fatty acids and glycerol.  
  
(b) **Figure**
2. (i) **Figure**  
  
(ii) (a) mushroom/bread mould  
  
(b) lice/tapeworm
3. (a) **Figure**  
  
Locomotion.  
  
(b) Salivary glands produce salivary amylase which break starch into sugar.  
Pancreas produce pancreatic amylase (juice) which digest starch.  
Intestinal glands produce intestinal amylase which digest starch.  
  
(c) pH in stomach is maintained by hydrochloric acid secreted by stomach. In small intestine it is due to bile (liver)/pancreatic juice (pancreas).
4. (a) **Figure**  
  
(b) (i) So that there is sufficient time for oxygen to be absorbed.  
  
(ii) It filters the air such that dust particles stick to it.
5. (a) **Figure**  
  
(b) Right side of heart – deoxygenated blood  
Left side of heart – oxygenated blood  
  
(c) Auricles – receiving ; Ventricles - sending
6. (a) **Figure**  
  
(b) (i) Blood transports food, oxygen and waste materials in our bodies. Blood consists of a fluid medium called plasma in which the cells are suspended. Plasma transports food, carbon dioxide and nitrogenous wastes in dissolved form. Oxygen is carried by the red blood cells. Many other substances like salts, are also transported by the blood.  
  
(ii) Through the pores present in the walls of capillaries some amount of plasma, proteins and blood cells escape into intercellular spaces in the tissues to form the tissue fluid or lymph. It is similar to the plasma of blood but colourless and contains less protein. Lymph drains into lymphatic capillaries from the intercellular spaces, which join to form large lymph vessels that finally open into larger veins. Lymph carries digested and absorbed fat from intestine and drains excess fluid from extra cellular

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space back into the blood.

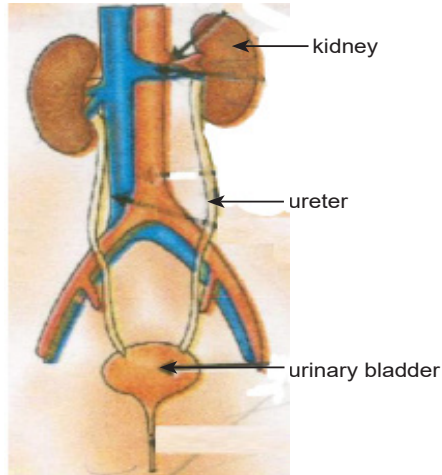
7. (a) Process involved in removal of nitrogenous and harmful metabolic waste from the body.

(b) Nephron.

(c) (i) kidney

(ii) ureter

(iii) urinary bladder



8. (a) **Figure**

(b) Urine is produced by filtration of blood. The nitrogenous wastes such as urea and uric acid are removed from blood in the kidneys. After the filtration certain substances like water and glucose are reabsorbed. The urine eventually enters into ureter and is stored in the urinary bladder, which is eventually eliminated out through urethra.