

## LIFE PROCESSES Worksheet for CBSE 10<sup>th</sup> Std

- 1 Which life processes converts light energy into chemical energy ?  
a) Nutrition                      b) Respiration  
c) Photosynthesis              d) Transportation
- 2 What is the color of iodine-starch complex ?  
a) Blue-Black      c) Dark black      c) purple              d) Orange
- 3 Villi present in the inner lining of intestinal wall  
a) Secrete enzyme for digestion  
b) Secrete hormones  
c) Decreases the surface area of absorption  
d) increases the surface area of absorption
- 4 The basic filtration unit of kidneys are  
a) Bowman's capsule      b) Neurons      c) Glomerulus      d) Nephrons
- 5 In photosynthesis atmospheric carbon dioxide is \_\_\_\_\_ to carbohydrates.  
a) Oxidised      b) Reduced      c) Neutralised      d) Burnt
- 6 The enzyme pepsin is inactive in the stomach without the presence of :  
a) Nitric Acid      b) Hydrochloric Acid      c) Acetic Acid      d) Butyric acid
- 7 Alimentary canal is usually longer in  
a) carnivores      b) herbivores      c) omnivores      d) insectivores
- 8 Which of the following blood vessel brings de-oxygenated blood from lower part of the body to the right atrium ?  
a) Aorta      b) Superior venacava  
c) Inferior Venacava      d) Pulmonary artery
- 9 The non-return valve connecting the right atrium to right ventricle is \_\_\_\_\_  
a) Pulmonary valve      b) Tricuspid valve      c) Mitral Valve      d) Aortic valve
- 10 The normal blood pressure of human body 120/80. 120 represents  
a) Diastole      b) Systole      c) atmospheric pressure      d) osmotic pressure
- 11 Digested fat is absorbed in the intestine by  
a) Blood capillaries      b) blood arteriole  
c) blood venule      d) lymph capillary
- 12 Which of the following takes part in respiration ?  
a) Platelets      b) RBC      c) WBC      d) Plasma
- 13 In which of the following groups of organisms, food material is broken down outside the body and absorbed?  
(a) Mushroom, green plants, *Amoeba*  
(b) Yeast, mushroom, bread mould  
(c) *Paramecium*, *Amoeba*, *Cuscuta*

- (d) Cuscuta, lice, tapeworm
- 14 If salivary amylase is lacking in the saliva, which of the following events in the mouth cavity will be affected?
- (a) Proteins breaking down into amino acids
  - (b) Starch breaking down into sugars
  - (c) Fats breaking down into fatty acids and glycerol
  - (d) Absorption of vitamins
- 15 Which part of alimentary canal receives bile from the liver?
- (a) Stomach
  - (b) Small intestine
  - (c) Large intestine
  - (d) Oesophagus
- 16 Choose the function of the pancreatic juice from the following
- (a) trypsin digests proteins and lipase carbohydrates
  - (b) trypsin digests emulsified fats and lipase proteins
  - (c) trypsin and lipase digest fats
  - (d) trypsin digests proteins and lipase emulsified fats
- 17 Which of the following statement(s) is (are) true about respiration?
- (i) During inhalation, ribs move inward and diaphragm is raised
  - (ii) In the alveoli, exchange of gases takes place i.e., oxygen from alveolar air diffuses into blood and carbon dioxide from blood into alveolar air
  - (iii) Haemoglobin has greater affinity for carbon dioxide than oxygen
  - (iv) Alveoli increase surface area for exchange of gases
- (a) (i) and (iv) (b) (ii) and (iii)  
(c) (i) and (iii) (d) (ii) and (iv)
- 18 Which of the following statement (s) is (are) true about heart?
- (i) Left atrium receives oxygenated blood from different parts of body while right atrium receives deoxygenated blood from lungs
  - (ii) Left ventricle pumps oxygenated blood to different body parts while right ventricle pumps deoxygenated blood to lungs
  - (iii) Left atrium transfers oxygenated blood to right ventricle which sends it to different body parts
  - (iv) Right atrium receives deoxygenated blood from different parts of the body while left ventricle pumps oxygenated blood to different parts of the body
- (a) (i) (b) (ii)  
(c) (ii) and (iv) (d) (i) and (iii)
- 19 Choose the event that does not occur in photosynthesis
- (a) Absorption of light energy by chlorophyll
  - (b) Reduction of carbon dioxide to carbohydrates
  - (c) Oxidation of carbon to carbon dioxide
  - (d) Conversion of light energy to chemical energy

- 20 Lack of oxygen in muscles often leads to cramps among footballers. This results due to  
 (a) conversion of pyruvate to ethanol  
 (b) conversion of pyruvate to glucose  
 (c) non conversion of glucose to pyruvate  
 (d) conversion of pyruvate to lactic acid
- 21 Match the words of Column (A) with that of Column (B)  
 Column (A)      Column (B)  
 (a) Phloem              (i) Excretion  
 (b) Nephron            (ii) Translocation of food  
 (c) Veins                (iii) Clotting of blood  
 (d) Platelets            (iv) Deoxygenated blood
- 22 The main function of the ureter is to  
 (a) control the pressure of urine in urinary bladder.  
 (b) take urine from kidneys to urinary bladder.  
 (c) filter blood and remove it to urine.  
 (d) connect the parts of excretory system.
- 23 During deficiency of oxygen in tissues of human beings, pyruvic acid is converted into lactic acid in the  
 (a) cytoplasm  
 (b) chloroplast  
 (c) mitochondria  
 (d) golgi body
- 24 Which of the following statement(s) is (are) true about respiration?  
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 (ii) In the alveoli, exchange of gases takes place, i.e., oxygen from blood into alveolar air.  
 (iii) Haemoglobin has greater affinity for carbon dioxide than oxygen.  
 (iv) Alveoli increase surface area for exchange of gases.  
 (a) (i) and (iv) (b) (ii) and (iii) (c) (i) and (iii) (d) (ii) and (iv)
- 25 Select the correct statement.  
 (a) Heterotrophs do not synthesise their own food.  
 (b) Heterotrophs utilise solar energy for photosynthesis.  
 (c) Heterotrophs synthesise their own food.  
 (d) Heterotrophs are capable of converting carbon dioxide and water into carbohydrates.

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The correct sequence of anaerobic reactions in yeast is

- (a) Glucose  $\xrightarrow{\text{cytoplasm}}$  Pyruvate  $\xrightarrow{\text{mitochondria}}$  Ethanol + Carbon dioxide
- (b) Glucose  $\xrightarrow{\text{cytoplasm}}$  Pyruvate  $\xrightarrow{\text{cytoplasm}}$  Lactic acid
- (c) Glucose  $\xrightarrow{\text{cytoplasm}}$  Pyruvate  $\xrightarrow{\text{mitochondria}}$  Lactic acid
- (d) Glucose  $\xrightarrow{\text{cytoplasm}}$  Pyruvate  $\xrightarrow{\text{cytoplasm}}$  Ethanol + Carbon dioxide

27 Choose the correct path of urine in our body:

- (a) kidney → ureter → urethra → urinary bladder
- (b) kidney → urinary bladder → urethra → ureter
- (c) kidney → ureters → urinary bladder → urethra
- (d) urinary bladder → kidney → ureter → urethra

28 Fill in the blanks :

\_\_\_\_\_ : It is the movement of materials in solution form within an organism especially in phloem and/ or xylem of plants.

\_\_\_\_\_ : It is the loss of water in vapour form from the aerial and exposed parts of a plant.

\_\_\_\_\_ : It is the upward movement of absorbed water or sap from root to the top of the plant. It occurs through xylem.

\_\_\_\_\_ : It is a bunch of fine blood vessels or capillaries present in the depression of Bowman's capsule where ultrafiltration occurs.

\_\_\_\_\_ : It is a broad, blind cup-shaped, proximal end of a nephron in which glomerulus is located for ultrafiltration