



# BIOLOGY

## BOOKS - BETOPPERS

### LIFE PROCESSES

#### Worksheet 1

1. Photosynthesis is an important process in not only that it is the primary process of food production but also that its bye-products are

used by animals for respiration. Which gas is produced by plants during the synthesis of food?

A. Carbon monoxide

B. Oxygen

C. Hydrogen

D. Carbon dioxide

**Answer: B**



**Watch Video Solution**

2. Plants use carbon dioxide and energy from sunlight to form complex molecules, Plants prepare food in the form of

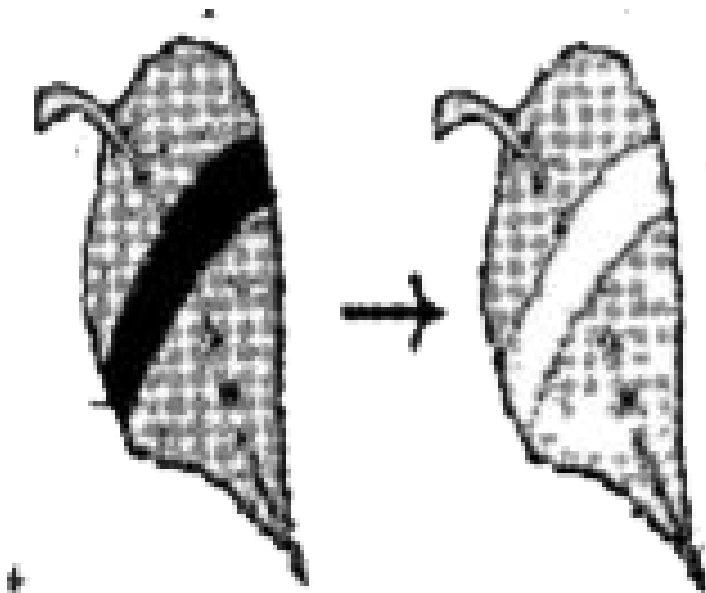
- A. amino acids
- B. carbohydrates
- C. sulfates
- D. fats

**Answer: B**



**Watch Video Solution**

3. A leaf wrapped with a dark tape, as shown in the figure, was kept for a week. Following this, the part of leaf that was wrapped was tested for the presence of starch. The test result was negative.



What is the possible reason for the absence of starch?

A. Non-availability of oxygen

B. Non-availability of carbon dioxide

C. Non-availability of sunlight

D. Non-availability of water

**Answer: C**



**Watch Video Solution**

4. The sugar manufactured by plants is transported to other tissues through

A. xylem

B. pollens

C. phloem

D. arteries

**Answer: C**



**Watch Video Solution**

5. In a certain experiment, a potted plant was kept in an inverted bell jar such that no external air passed into the bell jar. After a

span of two weeks, the air in the bell jar was tested on various parameters

It can be concluded from the above experiment that the air in the bell jar had

- A. low concentration of oxygen
- B. high concentration of oxygen
- C. low concentration of water vapor
- D. high concentration of carbon dioxide

**Answer: B**



**Watch Video Solution**

6. In a certain experiment, plant cells are allowed to grow in a nutrient medium. The cell culture is kept in a dark room. After a week, they are removed and studied. It can be concluded from the above experiment that

A. all cells will die

B. cells will perform photosynthesis, multiply, and grow

C. photosynthetic cells will die



D. cells will be alive but will not perform  
photosynthesis

**Answer: D**



**Watch Video Solution**

7. Which process uses carbon dioxide and produces oxygen as a waste product?

A. Transpiration

B. Respiration

C. Photosynthesis

D. Osmosis

**Answer: C**



**Watch Video Solution**

**8. The raw materials for photosynthesis are**

A.  $CO_2$  &  $O_2$

B. sunlight and  $CO_2$

C. water and chlorophyll

D.  $CO_2$  and water.

**Answer: D**



**Watch Video Solution**

9. Most of the photosynthesis (80%) which takes place on this earth is carried out by

A. green plants on land

B. algae présent in fresh water

C. algae found in ocean

D. algae present in ocean and fresh water sources.

**Answer: D**



**Watch Video Solution**

**10. Which of the following has no digestive enzyme ?**

A. Saliva

B. Bile

C. Gastric juice

D. Intestinal juice

**Answer: B**



**Watch Video Solution**

**11. Plants are green in colour because**

A. they absorb green light only

B. they reflect green light

C. they absorb green light but reflect all other lights

D. none of the above are correct.

**Answer: B**



**Watch Video Solution**

**12. Full form of NADP is**

A. Nicotinamide dinucleotide phosphate

B. Nicotine adenine dinuceotide phosphate

C. Nicotinamide adenine dinucleotide  
phosphate

D. None of the above

**Answer: C**



**Watch Video Solution**

**13.** The wavelength of visible light is

A. 200 - 400 nm

B. 400 - 700 nm

C. 700-900 nm

D. 100 - 200 nm

**Answer: B**



**Watch Video Solution**

**14.** The presence of sugar in onion leaves can be tested with

A. iodine

B. copper sulphate solution



C. lime water

D. benedict's solution

**Answer: D**



**Watch Video Solution**

**15.** Chemical reaction takes place during dark reaction of photosynthesis is

A. photolysis

B. hydrolysis

C. carbon dioxide is bonded with RUBP

D. nitrogen fixation

**Answer: C**



**Watch Video Solution**

**16.** Dark reaction and light reaction of photosynthesis takes place in

A. stroma and grana of chloroplast  
respectively

B. grana and stroma of chloroplast

respectively grana only

C. grana only

D. stroma only

**Answer: A**



**Watch Video Solution**

17.  $CO_2$  acceptor during dark reaction of photosynthesis is

A. RUBP

B. PEP

C. NADPH

D. ATP

**Answer: A**



**Watch Video Solution**

**Worksheet 2**

1. The raw materials for photosynthesis are

A.  $CO_2$  &  $O_2$

B. sunlight and  $CO_2$

C. water and chlorophyll

D.  $CO_2$  and water

**Answer:**



**Watch Video Solution**

2. Most of the photosynthesis (80%) which takes place on this earth is carried out by

A. green-plants on land

B. algae present in fresh water

C. algae found in ocean

D. algae present in ocean and fresh water sources.

**Answer:**



**Watch Video Solution**

3. Which of the following has no digestive enzyme ?

A. Saliva

B. Bile

C. Gastric juice

D. Intestinal juice

**Answer: C**



**Watch Video Solution**

4. Plants are green in colour because

A. they absorb green light only

B. they reflect green light

C. they absorb green light but reflect all  
other lights

D. none of the above are correct.

**Answer:**



**Watch Video Solution**



5. Digestion of food in human starts from

- A. duodenum
- B. small intestine
- C. mouth
- D. large intestine

**Answer: C**



**Watch Video Solution**

6. The digestion of food is completed in the

A. ileum

B. duodenum

C. stomach

D. large intestine

**Answer: A**



**Watch Video Solution**

**7.** The most important function of villi in the small intestine is

A. to provide strength to the intestine

B. to provide space for capillaries and  
lacteals

C. to provide increased surface area for  
absorption of digested food

D. to provide habitat for bacteria

**Answer: C**



**Watch Video Solution**

8. Which of the following sections does not contain enzymes ?

A. Bile

B. Pancreatic juice

C. Intestinal juice

D. Saliva

**Answer: A**



**Watch Video Solution**

9. The breakdown of food is completed in the

A. large intestine

B. small intestine

C. stomach

D. rectum

**Answer: B**



**Watch Video Solution**

10. The saliva present in mouth helps in the

A. mixing of food with gastric juices

B. breakdown of proteins

C. mixing of food with bile juice

D. breakdown of carbohydrates

**Answer: D**



**Watch Video Solution**

**11.** Which organ is a part of respiratory as well as digestive system?

A. Larynx

B. Trachea

C. Bronchus

D. Pharynx

**Answer: D**



**Watch Video Solution**

**12.** Different parts of the digestive system are involved in different functions. Maximum

absorption of nutrients from the digested food takes place in the

- A. stomach
- B. esophagus
- C. small intestine
- D. large intestine

**Answer: C**



**Watch Video Solution**



**13.** Bile juice is secreted by liver and is stored in the gall bladder. Bile juice is chiefly involved in the digestion of

- A. proteins
- B. carbohydrates
- C. fats
- D. glucose

**Answer: C**



**Watch Video Solution**

**14. Liver secretes**

- A. bile juice
- B. pancreatic juice
- C. insulin
- D. glycogen

**Answer: A**



**Watch Video Solution**

**15.** Where does the digestion of proteins start in the human body?

A. Mouth

B. Stomach

C. Liver

D. Small intestine

**Answer: B**



**Watch Video Solution**

**16.** Which part of the alimentary tract is not involved in digestion?

A. Stomach

B. Mouth

C. Esophagus

D. Small intestine

**Answer: C**



**Watch Video Solution**

17. The absorption of water from undigested food takes place in the

A. small intestine

B. large intestine

C. stomach

D. liver

**Answer: B**



**Watch Video Solution**

**18.** The absorption of water from undigested food takes place in the

A. small intestine

B. large intestine

C. stomach

D. liver

**Answer: C**



**Watch Video Solution**

**19.** Esophagus connects the

- A. Presence of microbes
- B. Elogated structure
- C. Position in the digestive tract
- D. Surface are of villus

**Answer: D**



**Watch Video Solution**

**20.** Which is the longest part of the digestive tract?

A. Esophagus

B. Stomach

C. Small intestine

D. Large intestine

**Answer: C**



**Watch Video Solution**



21. Which type of molecule does pepsin digest?

A. Fat

B. starch

C. Protein

D. Lipid

**Answer: C**



**Watch Video Solution**

22. Which of the following organs is a part of the alimentary tract and secretes digestive enzymes?

A. Liver

B. Stomach

C. Pancreas

D. Gall bladder

**Answer: B**



**Watch Video Solution**

**23.** What is involved in digesting food in the mouth?

A. Teeth

B. Tongue

C. Saliva

D. Jaws

**Answer: C**



**Watch Video Solution**

24. Which organ precedes anus?

A. Large intestine

B. Small intestine

C. Rectum

D. Stomach

**Answer: C**



**Watch Video Solution**

**25.** Which of the following functions is not performed by stomach?

- A. Digestion of protein
- B. Collection of food
- C. Digestion of carbohydrates
- D. Production of bile juices

**Answer: D**



**Watch Video Solution**

**26.** Which of the following organs is a part of the small intestine?

A. Colon

B. Villi

C. Appendix

D. Rectum

**Answer: B**



**Watch Video Solution**

27. Which of the following fluids is not secreted by stomach?

A. Bile juice

B. Hydrochloric acid

C. Pepsinogen

D. Mucus

**Answer: A**



**Watch Video Solution**

**28.** Which is the longest part of the digestive tract with respect to length?

- A. Esophagus
- B. Small intestine
- C. Large intestine
- D. Colon

**Answer: B**



**Watch Video Solution**



**29.** Salivary glands are present in the

A. mouth

B. throat

C. tongue

D. esophagus

**Answer: A**



**Watch Video Solution**

**30.** If stomach were not a part of the digestive system, then

- A. it would not have been possible to  
consume large quantities of food
- B. the organs of the excretory system  
would become highly inefficient
- C. one would continuously feel hungry
- D. it would not be necessary to chew food  
at all

**Answer: A**



**Watch Video Solution**

## Worksheet 3

1. The process of respiration is concerned with
  - A. liberation of oxygen
  - B. liberation of carbon dioxide
  - C. liberation of energy

D. intake of oxygen

**Answer: C**



**Watch Video Solution**

2. The common immediate source of energy for cellular activity is

A. NAD

B. ATP

C. DNÁ

D. RNA

**Answer: B**



**Watch Video Solution**

**3. The tissue respiration refers to**

A. inspiration

B. external respiration

C. internal respiration

D. expiration

**Answer: C**



**Watch Video Solution**

4. If the  $CO_2$  concentration in the blood increases, the rate of breathing will

A. decrease

B. stop

C. increase

D. have no effect

**Answer: C**



**Watch Video Solution**

**5. Vocal cords occur in**

A. pharynx

B. glottis

C. bronchial tube

D. larynx In man,

**Answer: D**



**Watch Video Solution**

6. Which of the following structures is analogous to the spiracles of cockroach ?

A. Alveoli

B. Lungs

C. Bronchioles

D. Nostrils

**Answer: D**







[Watch Video Solution](#)

7. Which of the following prevents collapsing of Trachea

A. Diaphragm

B. Ribs

C. Cartilaginous ring

D. Muscles

**Answer: C**



[Watch Video Solution](#)

8. Which of the following gases makes the most stable combination with the hemoglobin of red blood cells.

A.  $CO_2$

B.  $CO$

C.  $O_2$

D.  $N_2$

**Answer: B**



**Watch Video Solution**

9. Volume of air inspired or expired with each normal breath is known as

- A. tidal volume
- B. inspiratory capacity
- C. total lung capacity
- D. residual volume

**Answer: A**



**Watch Video Solution**

**10.** Most of the carbon dioxide in the blood is carried in the form of

A. carbonic acid

B. bicarbonates

C. carbaminohaemoglobin

D. dissolved  $CO_2$

**Answer: B**



**Watch Video Solution**

11. What is not produced during cellular respiration?

- A. Carbon dioxide
- B. Water molecules
- C. Glucose molecules
- D. ATP molecules

**Answer: C**



**Watch Video Solution**

**12.** The respiratory gases are exchanged in

A. villi

B. pharynx

C. alveoli

D. bronchi

**Answer: C**



**Watch Video Solution**

**13.** The movement of carbon dioxide-rich air out of the body is known as

A. exhalation

B. perspiration

C. inhalation

D. transpiration

**Answer: A**



**Watch Video Solution**

**14.** Where does the gaseous exchange take place in land animals?

A. Nostrils

B. Trachea

C. Skin

D. Alveoli

**Answer: A**



**Watch Video Solution**



**15.** Which of the following statements about thoracic diaphragm is true?

A. The thoracic diaphragm relaxes during inhalation and exhalation

B. The thoracic diaphragm contracts during inhalation,

C. The thoracic diaphragm contracts during inhalation and exhalation

D. The thoracic diaphragm relaxes during inhalation

**Answer: B**



**Watch Video Solution**

**16.** The exchange of gases is possible in lungs because of its

A. large surface area

B. large internal volume

C. suitable temperature

D. suitable humidity

**Answer: A**



**Watch Video Solution**

**17.** Human lungs help in the

A. digestion of blood

B. oxygenation of blood

C. transportation of blood

D. circulation of blood

**Answer: B**



**Watch Video Solution**

**18.** Which of the following components is required only for respiration?

A. Energy

B. Chlorophyll

C. Carbon dioxide

D. Oxygen

**Answer: D**



**Watch Video Solution**

**19. What are the products of respiration?**

A. Carbon dioxide, water, ATP

B. Carbon dioxide, glucose, ATP

C. Oxygen, water, ATP

D. Oxygen, glucose, ATP

**Answer: A**



**Watch Video Solution**

**20.** The oxygen evolved as a by-product during photosynthesis comes from

A. water

B. carbon dioxide

C. glucose

D. chlorophyll

**Answer: A**



**Watch Video Solution**

**21.** Breathing rate in mammals is controlled by a part of the brain called the

A. thalamus

B. hypothalamus

C. medulla oblongata

D. cerebellum

**Answer: C**



**Watch Video Solution**

**22. In anaerobic respiration**

A.  $O_2$  is taken in

B.  $CO_2$  is taken in

C.  $O_2$  is given out

D.  $CO_2$  is given out

**Answer: D**





[Watch Video Solution](#)

**23.** Disease called pleurisy is due to

- A. inflammation of pleura
- B. inflammation of trachea
- C. inflammation of alveoli
- D. none of these above

**Answer: A**



[Watch Video Solution](#)

**24.** Leaves respire with the help of

A. lenticels

B. stomata

C. plasmodesmata

D. cuticle

**Answer: B**



**Watch Video Solution**

**25.** Correct statement is

A. roots of plant respire through lenticles and stomata.

B. stem of plant respire through lenticles

C. both A and B are correct

D. both A and B are incorrect

**Answer: B**



**Watch Video Solution**

**26.** Which of the following is not a characteristic of good respiratory surface?

- A. Thin and moist
- B. Large surface area
- C. Close to oxygen and gas transport
- D. Thick and dry surface

**Answer: D**



**Watch Video Solution**

## 27. Respiration in yeast

- A. takes place in the presence of oxygen
- B. yields lactic acid and carbon dioxide
- C. in anaerobic and produces carbon dioxide
- D. takes place only in darkness

**Answer: C**



**Watch Video Solution**

**28.** Muscle cells engaged in vigorous activity build up a high concentration of

- A. lactic acid
- B. pyruvic acid
- C. alcohol
- D. cholesterol

**Answer: A**



**Watch Video Solution**

**29.** Exchange of respiratory gases takes place in an earthworm through

A. moist skin

B. gills

C. trachea

D. lungs

**Answer: A**



**Watch Video Solution**

30. Oxygen is transported in blood mainly by

- A. leucocytes
- B. erythrocytes
- C. thrombocytes
- D. blood plasma

**Answer: B**



**Watch Video Solution**



1. In plants, water is transported through

A. petals

B. xylem

C. phloem

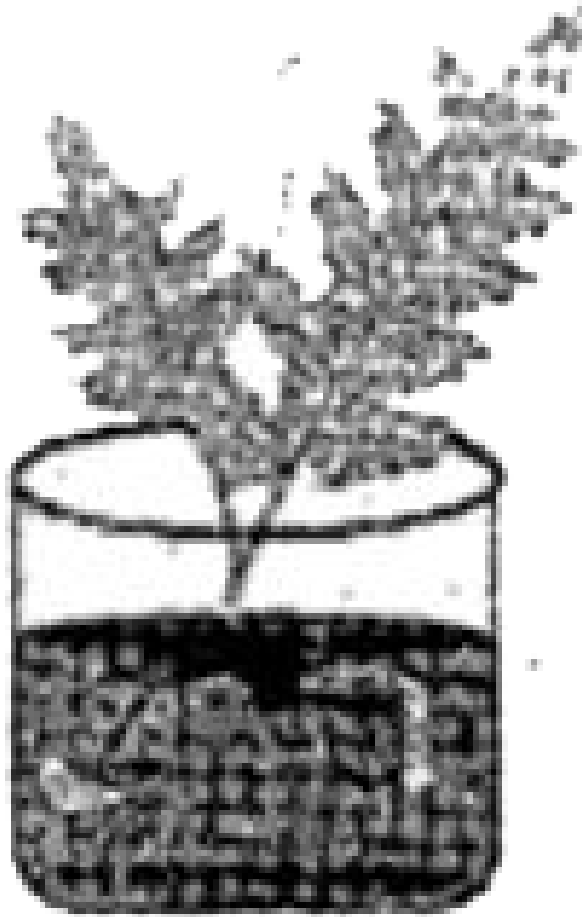
D. pollens

**Answer: B**



**Watch Video Solution**

2. A plant stem was cut and kept in a red colored solution for approximately one hour. Following this, a thin transverse section was sliced from the plant stem and was observed under a microscope. Few tissues of the sliced section showed red color while others did not.



Which tissue showed red color under the microscope?

A. Meristem

B. Cork

C. Xylem

D. Phloem

**Answer: C**



**Watch Video Solution**

3. Xylem is made up of tracheids and vessel elements. Tracheids and vessel elements help plants in being upright against gravity. Which-factor explains the above function of tracheids?

A. Water pressure

B. Chemical composition

C. Tracheids are dead tissues ...

D. Tracheids consist of phloem

**Answer: A**



**Watch Video Solution**

**4.** The organic nutrients manufactured by plants are present in the

A. flowers

B. xylem

C. barks

D. phloem

**Answer: D**



**Watch Video Solution**

5. A certain plant is kept in a flask containing blue colored water. After an hour, a cross section of its tissue is observed under

microscope. It can be concluded from the above observation that the

A. meristematic tissues will not be stained blue

B. phloem will not be stained blue

C. companion cells will be stained blue

D. phloem will be stained blue

**Answer: B**



**Watch Video Solution**

6. Which tissue supplies organic nutrients to the growing tip?

A. Parenchyma

B. Xylem

C. Meristem

D. Phloem

**Answer: D**



**Watch Video Solution**



7. In a potato plant, food is manufactured in the leaves that are exposed to the Sun. This food is transported to the underground stem of the potato for storage. Which plant tissue is responsible for the movement of food molecules?

A. Xylem

B. Phloem

C. Parenchyma

D. Fibers

**Answer: B**



**Watch Video Solution**

**8.** Which plant tissue is responsible for the upward displacement of water and minerals?

A. Fibers

B. Collenchyma

C. Phloem

D. Xylem

**Answer: D**



**Watch Video Solution**

**9. Which plant tissue carries water in roots?**

A. Phloem

B. Collenchyma

C. Xylem

D. Parenchyma

**Answer: C**



Watch Video Solution

**10.** Osmosis is the movement of

A. solute particles from higher concentration to lower concentration

B. solvent particles from higher water potential to lower water potential through a semi permeable membrane

C. solute particles from higher concentration to lower concentration

through a semipermeable membrane

D. solvent particles from lower water potential to higher water potential.

**Answer: B**



**Watch Video Solution**

**11.** The ultimate cause for the movement of water against the gravity in a tree is

A. Osmosis

B. transpiration

C. imbibitions

D. photosynthesis

**Answer: B**



**Watch Video Solution**

**12.** Which one of the following is connected with transport of water in plants ?

A. Phloem

B. Xylem

C. Epidermis

D. Cambium

**Answer: B**



**Watch Video Solution**

**13.** Which of the following contributes most to transport of water from the ground to the leaves of a tall tree?

A. Breakdown of ATP

B. Capillary rise of water is xylem

C. Cohesion of water and transpiration pull

D. Root pressure.

**Answer: C**



**Watch Video Solution**

**14.** The process of transpiration in plants helps  
in (



A. opening of stomata

B. absorption of  $CO_2$  from atmosphere

C. upward conduction of water and  
minerals

D. absorption of  $O_2$  from atmosphere

**Answer: C**



**Watch Video Solution**

**15. Opening and closing of stomata is due to**

- A. pressure of gases inside the leaves
- B. changes of turgor pressure in guard cells
- C. effect of hormones
- D. their genetic constitution

**Answer: B**



**Watch Video Solution**

**16.** The carbohydrates synthesized in the leaves are transported through sieve tubes most commonly in the form of

A. glucose

B. starch

C. sucrose

D. cellulose

**Answer: C**



**Watch Video Solution**

**17.** In a closed circulatory system, blood is completely enclosed with in

A. sinuses

B. vessels

C. heart

D. skeleton

**Answer: B**



**Watch Video Solution**

18. An artery is a vessel that carries blood

A. with high concentration of oxygen

B. with high concentration of  $CO_2$

C. away from the heart

D. both A&C

**Answer: D**



**Watch Video Solution**

1. The given figure shows the human heart.



The portion of the heart. Labeled I is known as

A. atrium

B. aorta

C. ventricle

D. vena cava

**Answer: A**



**View Text Solution**

2. Circulatory system is composed of \_\_\_i\_\_\_ i  
and blood vessels, which includes \_\_\_\_ii\_\_\_\_,  
\_\_\_\_iii\_\_\_\_ and \_\_\_\_iv\_\_\_\_ .

The above statement is completed by the  
information provided in which alternative?

A. i - kidney, ii - alveoli, .iii - arteries, iv - valves

B. i- valves, ii - arteries, iii - alveoli, iv - heart

C. i-heart, ii - kidney, iii - valves, iv - veins

D. i - heart, ii - arteries, iii - veins, iv - Capillaries

**Answer: D**



**Watch Video Solution**



3. Which is the only vein that carries oxygenated blood?

- A. Hepatic vein
- B. Pulmonary vein
- C. Cardiac vein
- D. Renal vein

**Answer: B**



**Watch Video Solution**

4. Which is the only artery that carries deoxygenated blood?

A. Pulmonary artery

B. Hepatic artery

C. Cardiac artery

D. Renal artery

**Answer: A**



**Watch Video Solution**

5. Deoxygenated blood is transported from the tissues to the heart through

A. arteries

B. veins

C. lymph

D. ventricles

**Answer: B**



**Watch Video Solution**

6. Oxygenated blood is transported from the heart to the tissues through

A. veins

B. arteries

C. lymph

D. auricles

**Answer: B**



**Watch Video Solution**

7. In the human body, carbon dioxide is transported through

A. blood

B. wind

C. lymph

D. oxygen

**Answer: A**



**Watch Video Solution**

**8. Heart is divided into**

- A. two auricles and two ventricles
- B. three auricles and one ventricle
- C. one auricle and three ventricles
- D. two auricles and one ventricle

**Answer: A**



**Watch Video Solution**

9. The deoxygenated blood collected from the body is poured into the

A. ventricles

B. auricles

C. lungs

D. arteries

**Answer: B**



**View Text Solution**

10. Oxygenated blood flows from lungs into the left atrium through the

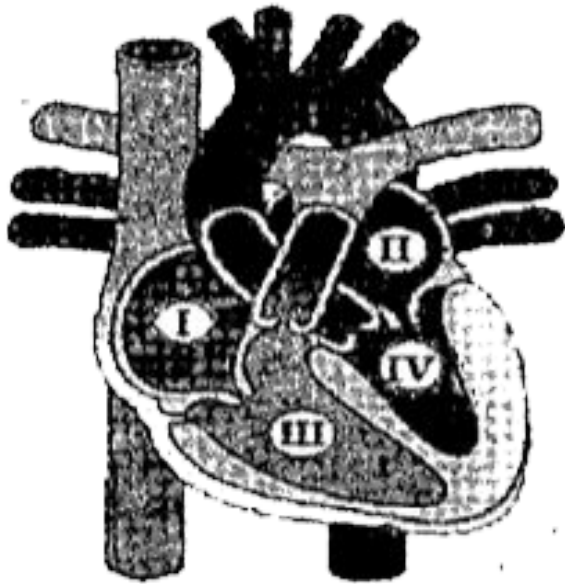
- A. pulmonary artery
- B. pulmonary vein
- C. inferior vena cava
- D. superior vena cava

**Answer: B**



**View Text Solution**





11.

Deoxygenated blood flows from the body into the

A. I

B. II

C. III

D. IV

**Answer: A**



**Watch Video Solution**

12. Blood is carried away from the heart by I and carried back to the heart by II .

Which alternative completes the above sentence?

A. i - kidney, ii - Lungs

B. i - arteries, ii - veins

C. i'- lungs, ii - kidney

D. i - veins, ii - arteries

**Answer: B**



**Watch Video Solution**

**13.** Which blood vessel carries deoxygenated blood from the upper parts body to the heart?

A. Pulmonary vein

B. Inferior vena cava

C. Superior vena cava

D. Pulmonary artery

**Answer: C**



**Watch Video Solution**

**14.** The oxygenated blood to be supplied to all parts of the body arises from the heart through the

A. arteriole

B. pulmonary artery

C. pulmonary artery

D. pulmonary vein

**Answer: D**



**Watch Video Solution**

**Worksheet 6**

1. Which of the following parts of a kidney contains the lowest concentration of urea ?

- A. Loop of Henle
- B. Branches of renal vein
- C. Bowman's capsule
- D. Glomerulus

**Answer: B**



**Watch Video Solution**

2. Uriniferous tubules of a kidney are concerned with formation of

A. glucose

B. amino acids

C. hormones

D. urine

**Answer: D**



**Watch Video Solution**

3. Excretion is removal of

A.  $CO_2$

B. harmful and useless ingredients

C. extra water

D. metabolic wastes

**Answer: D**



**Watch Video Solution**



4. Main functions of kidney is

- A. passive absorption
- B. ultrafiltration
- C. selective reabsorption
- D. Both B and C

**Answer: D**



**Watch Video Solution**

5. Ammonia is converted into urea in

A. kidney

B. spleen

C. liver

D. nephron

**Answer: C**



**Watch Video Solution**

**6. Function of loop of Henle is**

A. conservation of water

B. formation of urine

C. filtration of blood

D. passage of urine

**Answer: A**



**Watch Video Solution**

7. Urea is transported through

A. RBCs

B. WBCs

C. Plasma

D. All of the above

**Answer: C**



**Watch Video Solution**

**8. Major function of contractive vacuole is**

- A. excretion
- B. circulation
- C. osmoregulation
- D. all the above

**Answer: C**



**Watch Video Solution**

9. Which one is an accessory extretory organ ?

A. Liver

B. Stomach

C. Intestine

D. Heart

**Answer: A**



**Watch Video Solution**

**10. Healthy human kidneys excrete**

- A. essential proteins
- B. nitrogenous wastes
- C. insoluble fats
- D. soluble sugars

**Answer: B**



**Watch Video Solution**

**11.** What connects kidneys to the bladder?

A. Nephron

B. Urethra

C. Ureter

D. Uterus

**Answer: C**



**Watch Video Solution**



**12. Kidneys perform which function?**

A. Digestion

B. Reproduction

C. Excretion

D. Respiration

**Answer: C**



**Watch Video Solution**

**13.** Which of the following organs is not an excretory organ?

A. Urethra

B. Kidneys

C. Lungs

D. Heart

**Answer: D**



**Watch Video Solution**

**14.** What are the structural units of kidney?

A. Neurons

B. Alveoli

C. Nephron

D. Axons

**Answer: C**



**Watch Video Solution**

**Competitive Worksheet**

## 1. Match the column I with Column II.

### Column-I

- A. Step – I
- B. Step – II
- C. Step – III
- D. Step – IV

### Column-II

- P. Electron transport chain
- Q. Glycolysis
- R. Krebs's cycle
- S. Oxidative decarboxylation



**Watch Video Solution**

## 2. Match the column I with Column II.

### Column-I

- A. Unicellular protozoan's
- B. Coelenterates and sponges
- C. Flatworms and round worms
- D. Annelids

### Column-II

- P. Cell membrane
- Q. Excretory tubes
- R. Nephridia
- S. Contractile vacuoles



**Watch Video Solution**

### 3. Match the column I with Column II.

#### Column-I

- A. Phototropism
- B. Chemotropism
- C. Hydrotropism
- D. Geotropism

#### Column-II

- P. Direction of gravitational force
- Q. Direction of chemicals
- R. Direction of light
- S. Direction of water



**Watch Video Solution**

4. Spot the mistakes in the given statements and correct them.

a) The process of acquiring oxygen through breathing and making it available for cells is called Transportation

b) Respiration is the process by which food

and water are carried from one organ to the other.



**Watch Video Solution**

5. Spot the mistakes in the given statements and correct them.

a) Certain gymnosperms lack chlorophyll and have mycorrhizal roots.

b) The plant absorbs nourishment from humus through their mycorrhizal roots.



**Watch Video Solution**

6. Spot the mistakes in the given statements and correct them.

a) The complex food swallowed is broken down to simpler molecules by action of enzymes of the digestive juices.

b) Air we breathe contains starch, which is the source of energy.



**Watch Video Solution**

7. Spot the mistakes in the given statements and correct them.

a) With the complete oxidation of pyruvic acid, glycolysis comes to an end.

b) The second step of aerobic respiration occurs in cytoplasm.



**Watch Video Solution**

8. Spot the mistakes in the given statements and correct them.



- a) In amoeba and hydra, dissolved oxygen in water diffuses through cell membrane, carbon dioxide produced passively diffuses into water.
- b) Respiration in frog occurs through gills.



**Watch Video Solution**

**9.** Spot the mistakes in the given statements and correct them.

- a) The alveoli surrounded by blood capillaries provide a surface where exchange of gases takes place.

b) Rings of cartilage are present in the throat which keep the air passage closed.



**Watch Video Solution**

**10.** Spot the mistakes in the given statements and correct them.

a) Translocation occurs with the help of companion cells only in downward direction.

b) Materials like sucrose are transferred into phloem using energy from into phloem using energy from ATP.



**Watch Video Solution**

**11.** Spot the mistakes in the given statements and correct them.

a) Blood picks up waste products like salts from the cells.

b) Plasma is otherwise called lymph.



**Watch Video Solution**

**12.** Assertion (A): In xylem, vessels and tracheids are inter connected to form a

continuous system of water conducting channels.

Reasoning (R): Root hair cells release ions.

Choose the correct option

A. A is correct and R is the correct explanation of A.

B. A is correct and R is not the correct explanation of A.

C. A is correct and R is wrong.

D. A is wrong and R is correct.

**Answer:**



**Watch Video Solution**

**13. Assertion (A):** Loss of water from aerial parts of the plant is known as transpiration.

**Reasoning(R):** During the day when the stomata are open, the transpiration pull becomes the major driving force in the movement of water in the xylem.

Choose the correct answer

A. A is correct and R is the correct explanation of A.

B. A is correct and R is not the correct explanation of A.

C. A is correct and R is wrong.

D. A is wrong and R is correct.

**Answer:**



**Watch Video Solution**

**14.** Assertion(A):  $CO_2$  diffuses out of amoeba when it starts accumulating to harmful levels in the cell. Reasoning(R): In large organisms, diffusion alone is far too slow for adequate distribution of oxygen and food. Choose the correct answer

A. A is correct and R is the correct explanation of A.

B. A is correct and R is not the correct explanation of A.

C. A is correct and R is wrong.

D. A is wrong and R is correct.

**Answer:**



**Watch Video Solution**

**15.** Assertion(A): Fihses are called ammoniatelic animals

Reasoning(R): They contains nephrons which filter the blood and form the urine and large



amount of ammonia is found in fish excreta.

Choose the correct answer

A. A is correct and R is the correct explanation of A.

B. A is correct and R is not the correct explanation of A.

C. A is correct and R is wrong.

D. A is wrong and R is correct.

**Answer:**



**Watch Video Solution**

**16.** Assertion (A): Mammals are called ureotelic animals.

Reasoning (R): In mammals urea is the main excretory products so they are called ureotelic animals.

Choose the correct option

A. A is correct and R is the correct explanation of A.

B. A is correct and R is not the correct explanation of A.

C. A is correct and R is wrong.

D. A is wrong and R is correct.

**Answer:**



**Watch Video Solution**

**17. Assertion (A):** All coordinations in the body occur as conscious processes.

**Reasoning (R):** In insects, well developed

sensory organ for vision and antennae for olfactory function are present. Choose the correct option

A. A is correct and R is the correct explanation of A.

B. A is correct and R is not the correct explanation of A.

C. A is correct and R is wrong.

D. A is wrong and R is correct.

**Answer:**





**Watch Video Solution**

**18.** The organisms that live on other organisms for nourishment are called \_\_\_\_\_



**Watch Video Solution**

**19.** The plants or animals in which the parasites live for nourishment are called \_\_\_\_\_



**Watch Video Solution**

20. Saprophytes obtain nutrients from \_\_\_\_\_



**Watch Video Solution**

21. WBCs in vertebrates are in \_\_\_\_\_function,



**Watch Video Solution**

22. WBC's engulf the invading germs by producing \_\_\_\_\_around the germs and digest the germs.





[Watch Video Solution](#)

23. In \_\_\_\_\_ digestion, food is directly taken into the cells and is digested within the cell



[Watch Video Solution](#)

24. During respiration, food materials are (oxidized / reduced)



[Watch Video Solution](#)

25. The energy released during respiration is stored in \_\_\_\_\_



**Watch Video Solution**

26. The two types of respirations are \_\_\_\_\_ and \_\_\_\_\_



**Watch Video Solution**

27. The energy associated with \_\_\_\_\_ is used to synthesis of ATP.





**Watch Video Solution**

**28.** Anaerobic respiration is also known as \_\_\_\_\_



**Watch Video Solution**

**29.** In Amoeba and Hydra, respiration takes place through \_\_\_\_\_



**Watch Video Solution**

30. \_\_\_\_\_ is the energy currency for most cellular processes.



**Watch Video Solution**

31. The respiratory passage is lined with \_\_\_\_\_.



**Watch Video Solution**

**32.** \_\_\_\_\_ are present in the throat which prevent the air passage from collapsing.



**Watch Video Solution**

**33.** The air passage branches repeatedly into smaller tubules which end in \_\_\_\_\_



**Watch Video Solution**

**34.** The plant transport systems will mobilize energy stores, food from and raw materials from \_\_\_\_\_



**Watch Video Solution**

**35.** In Xylem \_\_\_\_\_ and \_\_\_\_\_ are the conducting elements.



**Watch Video Solution**

**36.** Evaporation of water molecules creates a \_\_\_\_\_ which pulls water from xylem cells of roots.



**Watch Video Solution**

**37.** Transport of soluble products of photosynthesis is called \_\_\_\_\_ and it occurs in \_\_\_\_\_.



**Watch Video Solution**

**38.** Translocation takes place in \_\_\_\_\_ of phloem.



**Watch Video Solution**

**39.** Materials like sucrose are transferred into phloem, which increases \_\_\_\_\_ pressure in the tissue.



**Watch Video Solution**

40. In amoeba and paramoecium, useful substances are distributed by a process called\_\_\_\_\_.



**Watch Video Solution**

41. Oxygen enters amoeba through \_\_\_\_\_



**Watch Video Solution**

42. Fish: Ammoniatelic , Birds : \_\_\_\_\_



**Watch Video Solution**

**43.** Glomerulus filters\_\_\_\_\_ part of the blood  
to from urine



**Watch Video Solution**

**44.** Muscles work together during movement.  
This is an example for\_\_\_\_\_



**Watch Video Solution**



**45.** In earthworm, the ganglia act as\_\_\_\_\_ and eye spots act as



**Watch Video Solution**

**46.** Nervous system consists of tissues which conduct messages called\_\_\_\_\_



**Watch Video Solution**

**47.** In touch - me - not, the response to stimulus is \_\_\_\_\_(Delayed / Immediate)



**Watch Video Solution**

**48.** The secretions of endocrine system are called \_\_\_\_\_



**Watch Video Solution**

**49.** The common character of enzymes and hormones is that they acts as \_\_\_\_\_



**Watch Video Solution**

**50.** The process of obtaining energy through consumption of food is called \_\_\_\_\_



**Watch Video Solution**

51. Autotrophic nutrition is the process by which autotrophic plants consume substances from external sources and convert them into \_\_\_\_\_



**Watch Video Solution**

52. Pick the odd one out from the following.

Nutrition. Plaving Respiration. Excretion



**Watch Video Solution**

**53.** Pick the odd one out in relation to autotrophic nutrition.

Photosynthesis, Plants, Chlorophyll, Deer



**Watch Video Solution**

**54.** Pick the odd one out with respect to raw materials of photosynthesis.

$CO_2, O_2$  Water, Chlorophyll



**Watch Video Solution**

**55.** Pick the odd one out respect to intra cellular digestion.

Animals, Green plants, Saprophytes, Parasites



**Watch Video Solution**

**56.** Pick the odd one out respect to intra cellular digestion.

Parasite, host Mycorrhizal roots, haustoria



**Watch Video Solution**

57. Pick the odd one out with respect to intra cellular digestion.

Human beings, Amoeba, Paramoecium, Sponges.



**Watch Video Solution**

58. Pick the odd one out with regard to digestive juices.

Mouth, stomach, oesophagus, duodenum,



**Watch Video Solution**

**59.** Pick the odd one out with respect to respiratory system of human beings.

Nostrills, Gills, Lungs, Alveoli



**Watch Video Solution**

**60.** Pick the odd one out with respect to excretion in invertebrates.

Contractile vacuole, kideys, Cell membrane, excretory tubes.



**Watch Video Solution**

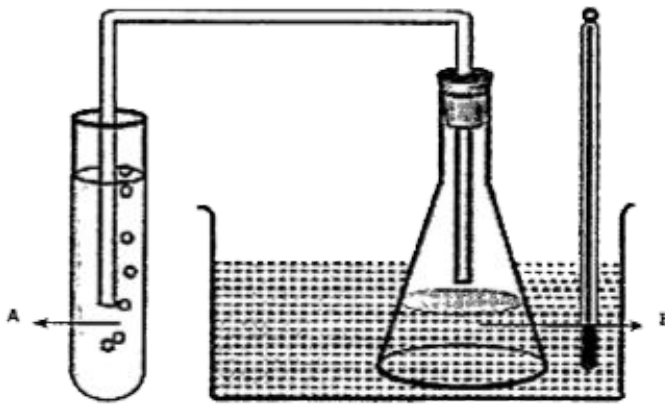


**61.** Why is digestion in human called extracellular ?



**Watch Video Solution**

**62.** Observe the following diagram. Identify A and B.



**Watch Video Solution**

**63.** Differentiate between xylem and phloem.



**Watch Video Solution**

**64.** Lymph  $\rightarrow$  X  $\rightarrow$  Y  $\rightarrow$  Veins. What are X and Y ?



**Watch Video Solution**

**65.** What is the difference between lymph and plasma? What are the functions of plasma?



**Watch Video Solution**

**66.** Muscular activities like running, involve many other forms of coordination. List them.



**Watch Video Solution**

**67.** How does the leaves in touch - me - not plant shrink?



**Watch Video Solution**

**68.** Give examples of (a) Hydrotropism (b) Chemotropism

a) What do life processes include?

b) Name some life processes in living beings.



**Watch Video Solution**

**69.** What do life processes include ?



**Watch Video Solution**

70. Name some life processes in living beings.



**Watch Video Solution**

71. Give the chemical equation for photosynthesis.



**Watch Video Solution**

72. If the fluid is blood, pump is \_\_\_\_\_, tubes are \_\_\_\_\_



**Watch Video Solution**

**73.** What are the raw materials and other necessary items required for photosynthesis.



**Watch Video Solution**

**74.** What are haustoria? Give examples.



**Watch Video Solution**

**75.** a) Explain the external structure and b) name the parts of the alimentary canal.



**Watch Video Solution**

**76.** Write any three needs of nutrient molecules that are contained in food.



**Watch Video Solution**



**77.** What is respiratory substrates? What are the kinds of respiratory substrates?



**Watch Video Solution**

**78.** What are the uses of transpiration?



**Watch Video Solution**

**79.** Osmotic pressure in the phloem tissue allows phloem to move material according to

the plant's needs. Give an example,



**Watch Video Solution**

**80.** Say true or false

- i) The rate of breathing in aquatic organisms is much faster than that in terrestrial organisms
- ii) Phloem transports amino acids
- iii) The rate of diffusion of oxygen in microscopic organisms in all directions is approximately equal to the rate at which

oxygen is consumed in respiration.

iv) The cells and tissues and organs in the body of an animals work independently of each other

v) The endocrine system consists of ductless glands.



**Watch Video Solution**

**81.** What is the function of uriniferous tubules?



**Watch Video Solution**

**82.** What are the two different types of movements that plants show? Give examples for each.



**Watch Video Solution**