

DPP MCQ TERM I CBSE Class X

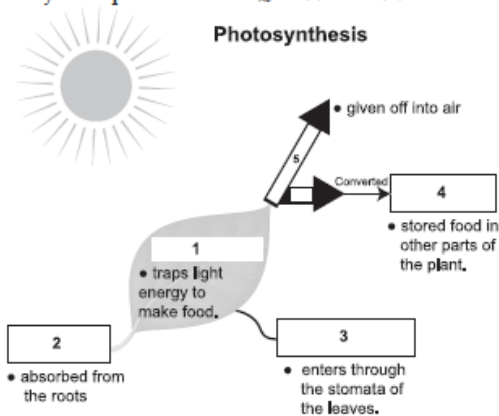
Biology – Life Processes

- In which of the following group of organisms, food material is broken down outside the body and absorbed ? [NCERT Exemplar]
 - Mushroom, green plants, amoeba
 - Yeast, mushroom, bread mould
 - Paramecium, amoeba, cuscuta
 - Cuscuta, lice, tapeworm
- A student covered a leaf from a destarched plant with a black paper strip and kept it in the garden outside his house in fresh air. In the evening, he tested the covered portion of the leaf for the presence of starch. By doing so the student was trying to show that: [CBSE, 2016]
 - CO₂ is given out during respiration
 - CO₂ is necessary for photosynthesis
 - Chlorophyll is necessary for photosynthesis
 - Light is necessary for photosynthesis
- A few drops of iodine solution were added to rice water. The solution turned blue-black in colour. This indicates that rice water contains : [NCERT Exemplar]
 - Complex proteins
 - Simple proteins
 - Starch
 - Fats
- If salivary amylase is lacking in the saliva, which of the following events in the mouth cavity will not take place properly?
 - Proteins breaking down into amino acids
 - Starch breaking down into sugars
 - Fats breaking down into fatty acids and glycerol
 - Absorption of vitamins
- Bile from the liver is received in which part of the alimentary canal?
 - Stomach
 - Small intestine
 - Large intestine
 - Oesophagus
- In which part of alimentary canal food is finally digested ? [NCERT Exemplar]
 - Stomach
 - Mouth cavity
 - Large intestine
 - Small intestine
- Choose the function of pancreatic juice from the following :
 - Trypsin digests proteins and lipase digests carbohydrates
 - Trypsin digests emulsified fats and lipase digests proteins
 - Trypsin and lipase digests fats
 - Trypsin digests proteins and lipase digests emulsified fats
- The pancreatic juice does not contain one of the following enzymes.
 - Trypsin
 - Amylase
 - Lipase
 - Ptyalin
- The kidneys in human beings are a part of the system for : [NCERT]
 - Nutrition
 - Respiration
 - Excretion
 - Transportation
- The opening and closing of stomatal pores depends upon : [NCERT Exemplar]
 - Oxygen
 - Water in guard cells
 - Concentration of carbon dioxide in stomata
 - Temperature
- In human digestive system the enzymes pepsin and trypsin are secreted respectively by :
 - Pancreas and liver
 - Pancreas and gall bladder
 - Stomach and pancreas
 - Stomach and salivary glands
- Which of the following is the correct statement regarding bile ?
 - Secreted by bile duct and stored in liver
 - Secreted by liver and stored in bile duct
 - Secreted by liver and stored in gall bladder
 - Secreted by gall bladder and stored in liver
- Which of the following component of our food is digested by an enzyme which is present in saliva as well as in pancreatic juice ?
 - Proteins
 - Fats
 - Minerals
 - Carbohydrates
- Where are proteins first digested in the alimentary canal ?
 - Small intestine
 - Oesophagus
 - Stomach
 - Mouth
- Which is the first enzyme to mix with food in the digestive tract ? [NCERT Exemplar]
 - Amylase
 - Pepsin
 - Trypsin
 - Cellulase
- Which of the following statements are correct ?
 - Pyruvate can be broken down into ethanol and carbon dioxide by yeast
 - Fermentation takes place in aerobic bacteria
 - Fermentation takes place in mitochondria
 - Fermentation is a form of anaerobic respiration
 - (i) and (iii)
 - (ii) and (iv)
 - (i) and (iv)
 - (ii) and (iii)

17. Choose the correct statements that describe arteries. [NCERT Exemplar]
- They have thick elastic walls, blood flows under high pressure, collect blood from different organs and bring back to heart.
 - They have thin walls with valves inside, blood flows under low pressure, carry blood away from the heart to various organs of the body.
 - They have thick elastic walls, blood flows under low pressure, carry blood from the heart to various organs of the body.
 - They have thick elastic walls without valves inside, blood flows under high pressure and carry blood away from the heart to different parts of the body.
18. The autotrophic mode of nutrition requires : [NCERT]
- Carbon dioxide and water
 - Chlorophyll
 - Sunlight
 - All of the above
19. The breakdown of pyruvate to give carbon dioxide, water and energy takes place in : [NCERT]
- Cytoplasm
 - Mitochondria
 - Chloroplast
 - Nucleus
20. When air is blown from mouth into a test tube containing lime water, the lime water turned milky due to the presence of : [NCERT Exemplar]
- Oxygen
 - Nitrogen
 - Carbon dioxide
 - Water vapour
21. During deficiency of oxygen in tissues of human beings pyruvic acid is converted into lactic acid in : [NCERT Exemplar]
- Cytoplasm
 - Chloroplast
 - Mitochondria
 - Golgi body
22. The correct path of urine flow in our body is : [NCERT Exemplar]
- Kidney → Ureter → Urethra → Urinary bladder
 - Kidney → Urinary bladder → Urethra → Ureter
 - Kidney → Ureter → Urinary bladder → Urethra
 - Urinary bladder → Kidney → Ureter → Urethra
23. During respiration exchange of gases takes place in : [NCERT Exemplar]
- Trachea and larynx
 - Alveoli of lungs
 - Alveoli and throat
 - Throat and larynx
24. The xylem in plants are responsible for : [NCERT]
- Transport of water
 - Transport of food
 - Transport of amino acids
 - Transport of oxygen
25. In the experiment to show that 'CO₂ is released during respiration', the solution in the test tube is chemically: [CBSE, 2015]
- NaOH
 - KOH
 - NaCl
 - KCl
26. Give the chemical equation for photosynthesis ?
27. In which form excess glucose molecules are stored as reserve food in :
- Plants
 - Animals
28. In which region of chloroplasts does light reactions and dark reactions of photosynthesis occurs ?
29. The leaves of a plant first prepare food A by photosynthesis. Food A then converts into food B. What are A and B ?
30. What is the source of oxygen produced during photosynthesis ?
31. Why are dark reaction called so ?
32. Why do we perform the iodine test ?
33. Why do cricketers complain of cramps in their muscles during playing ?
34. Why do the walls of trachea not collapse when there is less air in it ?
35. Why is glottis guarded by epiglottis ?
- Directions: In the following questions, a statement of assertion is followed by a statement of reason. Mark the correct choice as:

 - If both assertion and reason are true and reason is the correct explanation of assertion.
 - If both assertion and reason are true, but reason is not the correct explanation of assertion.
 - If assertion is true, but reason is false.
 - If assertion is false, but reason is true.
36. Assertion: Presence of HCl in stomach is necessary for the process of digestion.
Reason: HCl kills and inhibits the growth of bacteria in the stomach.
37. Assertion: Left atrium possesses the thickest muscles.
Reason: Left atrium receives oxygenated blood from the lungs.
38. Assertion: The rate of photosynthesis will be lowered if the leaves are coated with oil.
Reason: Stomata gets blocked and thus gaseous exchange is affected.
39. Assertion: Doctors can tell by counting the pulse rate and listening to heart beats whether a person is well or not.
Reason: Pulse rate and heart beats change according to the condition of our heart.
40. Assertion: Urinary bladder and ureters are lined by transitional epithelium.
Reason: Ureters carry the urine to urinary bladder where it is stored temporarily.
41. Assertion: Aerobic animals are not truly aerobic.
Reason: They produce lactic acid anaerobically.
42. Assertion: The effect of root pressure in transport of water is more important at night.
Reason: During day, stomata is open, transpiration takes place which helps in transport of water.
43. Assertion: Dark phase is independent of light, hence called light independent phase.
Reason: Dark phase takes place at night.
44. Assertion: Blood pressure of a normal adult is 120/80.
Reason: Blood pressure is measured by sphygmomanometer.
45. Assertion: Pancreatic amylase digests starch to maltose.
Reason: Pancreatic amylase breaks the peptide bond of protein.

46. Look at the picture given below carefully and answer any four questions from Q 46 (i) to 46 (v).



- What is the name of the pigment that should be filled in the box 1?
 - chloroplast
 - chromophyll
 - chlorophyll
 - chromoplast
- What is the thing that plants absorb through their roots and should be filled in box 2 to complete the picture?
 - water
 - mineral nutrients
 - air
 - chemicals
- An appropriate entry for the box 3 shown in the figure is:
 - oxygen
 - air
 - carbon dioxide
 - nitrogen
- Final outputs from the photosynthesis, to be filled in boxes 4 and 5, are:
 - glucose and oxygen
 - oxygen and glucose
 - glucose and carbon dioxide
 - energy and oxygen
- Overall, what is the energy conversion summary in the process of photosynthesis?
 - Heat energy is converted into mechanical energy
 - Heat energy is converted into chemical energy
 - Light energy is converted into chemical energy
 - Light energy is converted into mechanical energy

47. Refer the figure given below carefully and answer any four questions from Q 47 (i) to 47 (v).



- The given picture shows a part of :
 - human digestive system
 - mouse digestive system

- human respiratory system
- mouse alimentary canal

- Food taken in is processed to generate particles, which are small and of the same texture through:
 - biting
 - crushing the food with our teeth
 - mixing with saliva in the mouth
 - licking
- Biological catalysts which help in food disintegration are also known as:
 - enzymes
 - proteins
 - fats
 - nucleic acids
- Digestion functions are taken care of by the gastric glands present in the wall of the stomach by releasing the following :
 - hydrochloric acid, pepsin, and mucus
 - hydrochloric acid, pepsin, and malic acid
 - sulphuric acid, pepsin, and mucus
 - hydrochloric acid, pepsin and mucus
- Protein, carbohydrate, and fat components of food are completely digested in the:
 - stomach
 - small intestine
 - large intestine
 - esophagus

48. Read the passage carefully and answer any four questions from Q 48 (i) to 48 (v).

Traditionally the process of respiration is divided into three phases: (1) ventilation of the gas exchange organs better known as breathing, (2) transport of respiratory gases and (3) cellular respiration. We assimilate chemical energy from the environment and transfer it from molecule to molecule in a stepwise fashion within our cells. Although studied separately, these phases represent a continuum and processes of cellular respiration in all life forms is mostly common.

- The energy released during cellular respiration is immediately used to synthesise a molecule called ----- which is used to fuel all other activities in the cell.
 - ATP
 - GTP
 - AGP
 - APP
- The ultimate breakdown products of glucose in our body are:
 - carbon dioxide and water
 - carbon dioxide, water, and energy
 - energy and water
 - oxygen, water, and energy

(iii) Which one of the following statements is not true?

- the release of energy in this aerobic process is a lot greater than in the anaerobic process
- build-up of lactic acid in our muscles during sudden activity causes cramps
- fermentation is a type of aerobic respiration
- breakdown of pyruvate using oxygen takes place in the mitochondria

(iv) Air passages within the lungs terminate in structures called:

- bronchiole
- bronchi
- alveoli
- ribs

(v) What is the function of rings of cartilage present in our throat?

- (a) they ensure smooth flow of food
- (b) they avoid collapse of air passage
- (c) function is unknown in humans
- (d) they join our lungs with ribs

49. Read the passage carefully and answer any four questions from Q 49 (i) to 49 (v).

A normal human heart is a strong, hard-working pump made of muscle tissues. It is about the size of a person's fist. The heart comprises four chambers. The upper two chambers are known as atria, and the lower two are known as ventricles. These chambers are separated by a wall of tissue known as the septum. Blood is pumped through the chambers, assisted by four heart valves. The valves open and close to allow blood flow in only one direction.

(i) Blood that is brought back to the heart is rich in :

- (a) oxygen (b) carbon dioxide
- (c) both (a) and (b) (d) carbon monoxide

(ii) Which one of the two, atria or ventricles, has thicker muscular walls?

- (a) atria
- (b) septum
- (c) ventricles
- (d) both atria or ventricles have similar thickness of walls

(iii) Blood is pumped out to the body when:

- (a) left ventricle expands
- (b) left atrium relaxes
- (c) left atrium contracts
- (d) left ventricle contracts

(iv) Which one of the statements given below is not true?

- (a) Valves ensure that blood does not flow backwards when the atria or ventricles contract
- (b) amphibians or many reptiles have three chambered hearts, but they do not tolerate mixing of the oxygenated and de-oxygenated blood streams
- (c) vertebrates have double circulation procedure
- (d) De-oxygenated blood comes from the body to the upper chamber on the right
- (v) The force that blood exerts against the wall of a vessel is called
 - (a) ventricular pressure
 - (b) blood pressure
 - (c) atrial pressure
 - (d) septal pressure

50. Observe the picture given below carefully and answer any four questions from Q 50 (i) to 50 (v).



(i) Plant transport systems move raw materials from roots:

- (a) raw materials from roots
- (b) synthesized glucose to leaves
- (c) raw materials to roots
- (d) water from leaves

(ii) The loss of water in the form of vapour from the aerial parts of the plant is known as :

- (a) respiration
- (b) transportation
- (c) transpiration
- (d) translocation

(iii) Tissues responsible for movement of water and minerals from roots to the other parts of plant are known as :

- (a) xylem (b) chloroplast
- (c) phloem (d) stomata

(iv) Phloem tissues transport

- (a) products of photosynthesis, amino acids, and other substances
- (b) glucose and amino acids
- (c) products of photosynthesis only
- (d) water and amino acids

(v) Which of the processes does not involve the use of energy?

- (a) transport through xylem
- (b) translocation through phloem
- (c) transport of soluble products of photosynthesis
- (d) photosynthesis