



KINETICS

We Nurture The Future

IIT-JEE | Medical | Foundations

1. Nutrition in Plants

Question 1.

The plant which traps and feeds on insects is:

- (a) Cuscuta
- (b) China rosa
- (c) Pitcher plant
- (d) Rose

▼ [Answer](#)

Answer: (a)

Pitcher plant is the plant which traps and feeds on insects.

Question 2.

Plants take carbon dioxide from the atmosphere mainly through their:

- (a) Roots
- (b) Stem
- (c) Flowers
- (d) Leaves

▼ [Answer](#)

Answer: (d)

Plants take carbon dioxide from the atmosphere mainly through their leaves.

Question 3.

The internal factor affecting the process of photosynthesis is:

- (a) Temperature
- (b) Chlorophyll
- (c) Light
- (d) Water

▼ [Answer](#)

Answer: (b)

Chlorophyll is the internal factor affecting the process of photosynthesis.

Question 4.

Organisms need nutrition to:

- (a) Obtain energy
- (b) Fight against diseases
- (c) Grow
- (d) All of these

▼ [Answer](#)

Answer: (a)

Organisms need nutrition to obtain energy, fight against diseases and grow.

Question 5.

The chemical used in starch test is:

- (a) Safranin
- (b) Blue ink
- (c) Iodine
- (d) Litmus

▼ [Answer](#)

Answer: (a)

Iodine is the chemical used in starch test.

Question 6.

Pitcher plant falls in the category of:

- (a) Herbivore
- (b) Insectivore
- (c) Carnivore
- (d) None of these

▼ [Answer](#)

Answer: (a)

Pitcher plant falls in the category of insectivore.

Question 7.

Parasites:

- (a) live on dead organisms
- (b) eat animals
- (c) prepare their own food
- (d) live on other living beings

▼ [Answer](#)

Answer: (a)

Parasites live on other living beings.

Question 8.

Water reaches the leaves from the root by:

- (a) Stomata
- (b) Phloem
- (c) Xylem
- (d) None of these

▼ [Answer](#)

Answer: (a)

Water reaches the leaves from root by xylem.

Question 9.

It is not advisable to sit under the trees at night because:

- (a) Carbon dioxide ratio is higher under the trees at night
- (b) Trees sleep at night
- (c) Plants make food during the night
- (d) None of these

▼ [Answer](#)

Answer: (a)

It is not advisable to sit under the trees at night because carbon dioxide ratio is higher under the trees at night.

Question 10.

The gas used from the atmosphere during photosynthesis is:

- (a) Hydrogen
- (b) Nitrogen
- (c) Carbon dioxide
- (d) Oxygen

▼ [Answer](#)

Answer: (a)

Carbon dioxide is the gas used from the atmosphere during photosynthesis.

Question 11.

The ultimate source of energy for all living organisms is:

- (a) Plants
- (b) Sun
- (c) Oxygen
- (d) None of these

▼ [Answer](#)

Answer: (a)

Sun is the ultimate source of energy for all living organisms.

Question 12.

Product of photosynthesis are:

- (a) Carbon dioxide and oxygen
- (b) Carbohydrate and carbon dioxide
- (c) Carbohydrate and oxygen
- (d) None of these

▼ [Answer](#)

Answer: (c)

Carbohydrate and oxygen are product of photosynthesis.

Question 13.

A parasitic plant with yellow, slender and tubular stem is:

- (a) Pitcher plant
- (b) Cuscuta
- (c) Sunflower
- (d) None of these

▼ [Answer](#)

Answer: (a)

Cuscuta is a parasitic plant with yellow slender and tubular stem.

Question 14.

The mode of nutrition in which organisms take in nutrients in solution form from dead and decaying matter is:

- (a) Heterotrophic nutrition
- (b) Autotrophic nutrition
- (c) Saprotrophic nutrition
- (d) None of these

▼ [Answer](#)

Answer: (a)

Saprotrophic nutrition is the mode of nutrition in which organisms take in nutrients in solution form from dead and decaying matter.

Question 15.

Which of the following shows symbiotic relationship ?

- (a) Lichens
- (b) Rhizobium bacteria and leguminous plants
- (c) Both (a) and (b)
- (d) None of these

▼ [Answer](#)

Answer: (a)

Lichens, Rhizobium bacteria and Leguminous plants both show symbiotic relationship.

Question 16.

The process by which green plants prepare their own food is known as:

- (a) Transpiration
- (b) Photosynthesis
- (c) Respiration
- (d) None of these

▼ [Answer](#)

Answer: (a)

Photosynthesis is the process by which green plants prepare their own food.

Question 17.

Stomata are present on:

- (a) Stems
- (b) Leaves
- (c) Flowers
- (d) All of these

▼ [Answer](#)

Answer: (a)

Stomata are present on leaves.

Question 18.

Which of the following is insectivorous plant ?

- (a) Mushroom
- (b) Fungi
- (c) Pitcher
- (d) Cuscuta

▼ [Answer](#)

Answer: (a)

Pitcher is insectivorous plant.

Question 19.

Rhizobium is a:

- (a) Bacteria
- (b) Fungi
- (c) Algae
- (d) None of these

▼ [Answer](#)

Answer: (a)

Rhizobium is a bacteria.

Question 20.

Two different organisms living together and both benefitted from each other, are called as:

- (a) Saprophytic
- (b) Parasitic
- (c) Heterotrophic
- (d) Symbiotic

▼ [Answer](#)

Answer: (d)

Two different organisms living together and both benefitted from each other, are called as Symbiotic.

Question 21.

Green plants are known as:

- (a) Heterotrophs
- (b) Autotrophs
- (c) Saprotrophs
- (d) None of these

▼ [Answer](#)

Answer: (a)

Green plants are known as Autotrophs.

Question 22.

Which of the following is not required for photosynthesis:

- (a) Sunlight
- (b) Water
- (c) Oxygen
- (d) Carbon dioxide

▼ [Answer](#)

Answer: (a)

Carbon dioxide is not required for photosynthesis.

Question 23.

The components of food necessary for our body are:

- (a) Carbohydrates
- (b) Proteins
- (c) Vitamins
- (d) All of these

▼ [Answer](#)

Answer: (a)

The components of food necessary for our body are carbohydrates, proteins, vitamins.

Question 24.

The gas produced during photosynthesis is:

- (a) Oxygen
- (b) Carbon dioxide
- (c) Nitrogen
- (d) None of these

▼ [Answer](#)

Answer: (a)

The gas produced during photosynthesis is oxygen.

Question 25.

The solar energy is captured by which part of the plant ?

- (a) Stem
- (b) Leaves
- (c) Root
- (d) Flower

▼ [Answer](#)

Answer: (a)

The solar energy is captured by leaves of the plant.

Question 26.

The pores on the lower surface of leaf are:

- (a) Stomata
- (b) Chlorophyll
- (c) Xylem
- (d) Phloem

▼ [Answer](#)

Answer: (a)

The pores on the lower surface of leaf are stomata.

Question 27.

Which of the following is not an end product of photosynthesis ?

- (a) Carbon dioxide
- (b) Oxygen
- (c) Water vapour
- (d) Glucose

▼ [Answer](#)

Answer: (a)

Carbon dioxide is not an end product of photosynthesis.

Question 28.

The external factor affecting the process of photosynthesis is:

- (a) Oxygen
- (b) Temperature
- (c) Chlorophyll
- (d) None of these

▼ [Answer](#)

Answer: (b)

The external factor affecting the process of photosynthesis is temperature.

Question 29.

Which part of the plant gets carbon dioxide from the air for photosynthesis ?

- (a) Root hair
- (b) Leaf veins

- (c) Sepals
- (d) Stomata

▼ [Answer](#)

Answer: (a)

Stomata gets carbon dioxide from the air for photosynthesis.

Question 30.

Amarbel is an example of:

- (a) Autotroph
- (b) Parasite
- (c) Saprotroph
- (d) Host

▼ [Answer](#)

Answer: (a)

Amarbel is an example of Parasite.

[Match Column A with Column B:](#)

Question 1.

Column A	Column B
(a) Chlorophyll	(i) Bacteria
(b) Nitrogen	(ii) Heterotrophs
(c) Amarbel	(iii) Pitcher plant
(d) Animals	(iv) Leaf
(e) Insects	(v) Parasite

▼ [Answer](#)

Column A	Column B
(a) Chlorophyll	(iv) Leaf
(b) Nitrogen	(i) Bacteria
(c) Amarbel	(v) Parasite
(d) Animals	(ii) Heterotrophs
(e) Insects	(iii) Pitcher plant

Question 2.

Column A	Column B
(a) Two different organisms live together and both are mutually benefitted	(i) water, sunlight, oxygen
(b) Food factory of plants	(ii) symbiosis
(c) Organisms living on other organisms and deriving food from	(iii) stomata

them	
(d) Tiny pores present in leaves	(iv) leaf
(e) Required plants to prepare food	(v) parasitic

▼ Answer

Column A	Column B
(a) Two different organisms live together and both are mutually benefitted	(ii) symbiosis
(b) Food factory of plants	(iv) leaf
(c) Organisms living on other organisms and deriving food from them	(v) parasitic
(d) Tiny pores present in leaves	(iii) stomata
(e) Required plants to prepare food	(i) water, sunlight, oxygen

Question 3.

Column A	Column B
(a) Saprotrophic nutrition	(i) Algae
(b) Insectivorous plant	(ii) Fungi
(c) Autotrophic nutrition	(iii) Algae and fungus
(d) Lichens	(iv) Pitcher

▼ Answer

Column A	Column B
(a) Saprotrophic nutrition	(ii) Fungi
(b) Insectivorous plant	(iv) Pitcher
(c) Autotrophic nutrition	(i) Algae
(d) Lichens	(iii) Algae and fungus

State whether the following statements are 'True' or 'False':

Question 1.

Tiny openings present in leaf surface is called stomata.

▼ Answer

True

Question 2.

Phbtosynthesis cannot take place in dark.

▼ [Answer](#)

True

Question 3.

Bread mould is a saprophyte.

▼ [Answer](#)

True

Question 4.

Parasites grow on the bodies of hosts.

▼ [Answer](#)

True

Question 5.

Carbon dioxide is released during the process of photosynthesis.

▼ [Answer](#)

False

Question 6.

The product of photosynthesis is carbohydrate.

▼ [Answer](#)

True

Question 7.

Solar energy is converted into chemical energy during photosynthesis.

▼ [Answer](#)

True

Question 8.

Sun is not the ultimate source of energy for all living organisms.

▼ [Answer](#)

False

Question 9.

Plants which synthesise their food themselves are called saprotrophs.

▼ [Answer](#)

False

Question 10.
Green plants have autotrophic nutrition.

▼ [Answer](#)

True

Question 11.
Fungi prepare their own food by photosynthesis.

▼ [Answer](#)

False

Question 12.
Solar energy is stored in the form of food in the leaves with the help of chlorophyll.

▼ [Answer](#)

True

Question 13.
Transpiration is the process by which plants lose water in the form of water vapour.

▼ [Answer](#)

True

Question 14.
Chloroplasts contain chlorophyll.

▼ [Answer](#)

True

[Fill in the blanks:](#)

Question 1.
Starch gives a blue-black colour with a solution of

▼ [Answer](#)

iodine

Question 2.
..... is the site of photosynthesis in plants.

▼ [Answer](#)

Leaf

Question 3.

Autotrophs are all plants.

▼ [Answer](#)

green

Question 4.

During photosynthesis, the chlorophyll traps the energy from

▼ [Answer](#)

sun

Question 5.

..... is an example of symbiotic association.

▼ [Answer](#)

Lichen

Question 6.

Green plants manufacture their own food, hence they are called

▼ [Answer](#)

autotrophs

Question 7.

On testing with iodine, starch turns, in colour.

▼ [Answer](#)

blue

Question 8.

Lichen is the mutual combination of and

▼ [Answer](#)

algae and fungus

Question 9.

..... is an organelle present in the leaves that contain chlorophyll.

▼ [Answer](#)

Chloroplast

Question 10.
Saprophytic plants lack

▼ [Answer](#)

chlorophyll

Question 11.
..... is released during photosynthesis.

▼ [Answer](#)

Oxygen

Question 12.
A fungus we like to eat is

▼ [Answer](#)

mushroom

Question 13.
Mode of nutrition in algae is

▼ [Answer](#)

autotrophic

Question 14.
An example of parasite is

▼ [Answer](#)

cuscuta

Question 15.
Stomata are surrounded by cells.

▼ [Answer](#)

guard

Question 16.
Green plants are called since they synthesize their own food.

▼ [Answer](#)

autotrophs

Question 17.

The food synthesized by the plants is stored as

▼ [Answer](#)

carbohydrates

Question 18.

In photosynthesis, solar energy is captured by the pigment called

▼ [Answer](#)

chlorophyll

Question 19.

During photosynthesis, plants take in and release

▼ [Answer](#)

carbon dioxide, oxygen.