# CLASS -7

# (AssignmentPA1)(2021-2)

## ❖ Multiple Choice Questions

1. Which part of plant takes in carbon dioxide from the air for photosynthesis?

(i) Root hair (ii) Stomata. (iii) Leaf veins. (iv) Sepals

Ans. (ii) Stomata

2.Plants take carbon dioxide from the atmosphere mainly through their:
(i) Roots. (ii) Stem. (iii) Flowers. (iv) Leaves

Ans.(iv) leaves

3. Amarbel is an example of :
(i) Autotroph. (ii) Parasite. (iii) Saprophyte. (iv) Host

Ans.(ii) parasite

4. The plant which traps and feeds on insects is:
(i) Cuscuta. (ii) China rose. (iii) Pitcher plant. (iv) Rose

Ans. (iii) Pitcher plant

5. Fat is completely digested in the
(i) Stomach. (ii) mouth. (iii) Small intestine. (iv) large intestine.

Ans. (iii) small intestine.

6. Water from the undigested food is absorbed mainly in the
(i) stomach. (ii) food pipe. (iii) small intestine. (iv) large intestine

Ans (iv) large intestine.

7. silkworm is (a) a caterpillar, (b) a larva.Choose the correct option.

(i) a. (ii) b. (iii) both a and b. (iv) neither a nor b.

Ans. (iii) both a and b

8. Which of the following does not yield wool?

(i) Yak. (ii) Camel. (iii) Goat. (iv) Woolly dog

Ans. (iv) Woolly dog.

9. One litre of water at 30oC is mixed with one litres of water at 50o50oC . The temperature of the mixture will be

(i) 80oC. (ii) More than 50oC. (iii) 20oC. (iv) Between 30oC and 50oC

Ans. (iv) Between 30oC and 50oC

10Whichofthefollowingisthemostappropriateliquidforthermometricdevice?

(i)Water(ii)Colouredwater(iii)Alcohol(iv)Mercury

Ans.(iv) Mercury

- **Fill in the blanks:**

1. Green plants are called **autotrophs** since they synthesise their own food.
2. The food synthesised by the plants is stored as **starch**.
3.In photosynthesis solar energy is captured by the pigment called **chlorophyll**.
4.During photosynthesis plants take in **carbon dioxide** and release **oxygen**.

5.The main steps of digestion in humans are **ingestion**, **digestion**, **absorption**, **assimilation** and **egestion**.
6. The largest gland in the human body is **liver**.
7. The stomach releases hydrochloric acid and **digestive** juices which act on food.
8.The inner wall of the small intestine has many finger-like outgrowths called **villi**.
9. Amoeba digests its food in the **food vacuole**.

10. The hotness of an object is determined by its **temperature**.
11. Temperature of boiling water cannot be measured by a **clinical** thermometer.
12. Temperature is measured in degree **Celsius**.
13. No medium is required for transfer of heat by the process of **radiation**.
14. A cold steel spoon is dipped in a cup of hot milk. It transfers heat to its other end by the process of **conduction**.
15. Clothes of **dark** colours absorb heat better than clothes of light colours.

- Mark 'T' if the statement is true and "F" if it is false.

1. Digestion of starch starts in the stomach. (T/**F**)
2.The tongue helps in mixing food with saliva. (**T**/F)
3. The gall bladder temporarily stores bile. (**T**/F)
4. The ruminants bring back swallowed grass into their mouth and chew it for some time. (**T**/F)

5. Carbon dioxide is released during photosynthesis. (T/**F**)
6. Plants which synthesis their food themselves are called saprotrophs. (T/**F**)
7. The product of photosynthesis is not a protein. (**T**/F)
8. Solar energy is converted into chemical energy during photosynthesis. (**T**/F)

9. The rearing of silkworms for obtaining silk is called shearing. (**T**/F)

10. Sea breeze blows during day time.(T/F)

## ❖ SHORT ANSWER QUESTIONS

1. In the arrangements, A and B shown in Figure 4.7, pins P and Q are fixed to a metal loop and an iron rod with the help of wax. In which case are both the pins likely to fall at different times? Explain.

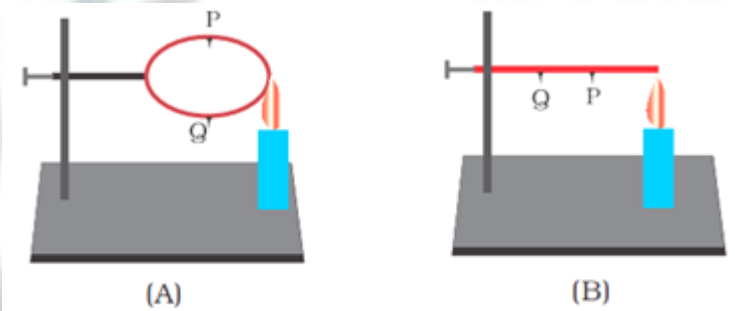



***Fig. 4.7***

Ans. In case 'B' the pin P will fall before the pin Q because the heat will reach pin P first. Whereas in case 'A', heat will flow in both the directions and both of the pins P and Q will fall simultaneously as both of them are equidistant from the point of heat supply.

2. You may have noticed that a few sharp jerks are given to clinical thermometer before using it. Why is it done so?

Ans. The jerk to the thermometer will allow the mercury in or above the kink to flow into the bulb so that the mercury level falls below 35°C.

3. Why is it advised not to hold the thermometer by its bulb while reading it?

Ans. If we hold a thermometer by its bulb, the mercury level will change to show the temperature of our hand and the desired reading will not be observed.

5. While constructing a house in a coastal area, in which direction should the windows preferably face and why?

Ans. The windows of houses in coastal areas should preferably face towards the sea as the blowing sea breeze will keep the house cool during the day time.

6. How do the hair of certain animals help in keeping their bodies warm?

Ans. The thick coat of hair traps a lot of air, which is a poor conductor of heat and hence don't allow the exchange of heat from animal's body to the environment, keeping it warm.

7. Write a caption for each of the figures given as Figure 3.2 (a–d).

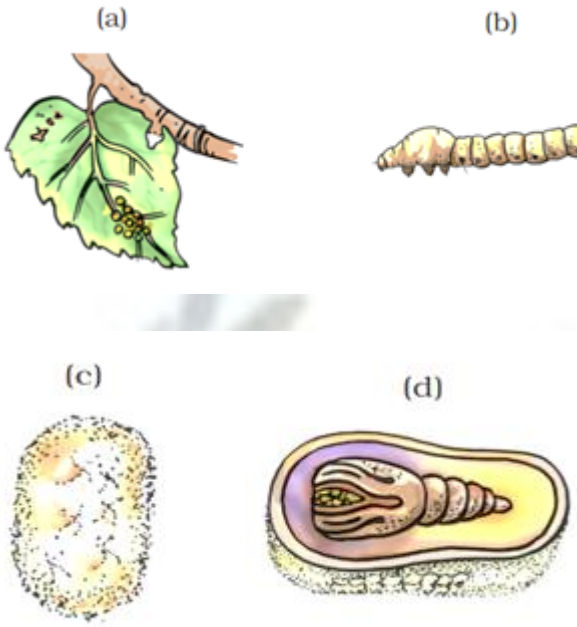



*Fig. 3.2*

Ans. (a) Eggs of silk moth on mulberry leaves

(b) Silkworm

(c) Cocoon

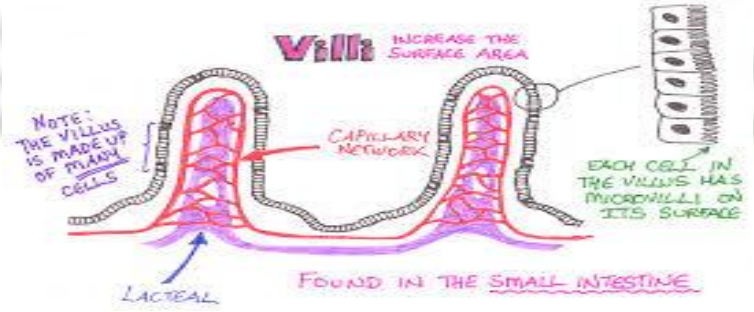
(d) Cocoon with developing moth

8.Discuss why wearing more layers of clothing during winter keeps us warmer than wearing just one thick piece of clothing?

Answer: We wear more layers of clothing during winter to keeps us warmer than wearing just one thick piece of clothing because because air gets trapped in between the two layers of blankets. This air prevents the flow of heat from our body to the cold surroundings as air is bad conductor of heat.

9. What are villi? What is their location and function?

Answer: The inner wall of the small intestine have thousands of finger-like outgrowths. These are called villi. Villi are located in the small intestine. The villi increase the surface area for absorption of the digested food. Each villus has a network of thin and small blood vessels close to its surface. The surface of the villi absorbs the digested food materials.




10. Where is the bile produced? Which component of the food does it digest?

Answer: Bile is produced in liver and stored in gall bladder. Bile juice digests fat.

11. Name the type of carbohydrate that can be digested by ruminants but not by humans. Give the reason also.

Answer: Cellulose is a type of carbohydrate that can be digested by ruminants and not by humans. Ruminants have a large saclike structure called rumen between the oesophagus and the small intestine. The cellulose of the food is digested here by the action of certain bacteria which are not present in humans.

12. Why do we get instant energy from glucose?

Answer: Glucose is the simplest form of carbohydrate which can be broken easily to give energy. So we get instant energy from glucose.

13. Which part of the digestive canal is involved in :

(i) Absorption of food ----------.
(ii) Chewing of food ----------.
(iii) Killing of Bacteria ----------.
(iv) Complete digestion of food ----------.
(v) Formation of faeces ----------.

Answer: (i) small intestine (ii) mouth (iii) stomach (iv) small intestine
(v) large intestine

14. Wheat dough if left in the open, after a few days, starts to emit a foul smell and becomes unfit for use. Give reason.

Ans. Carbohydrates in wheat dough encourage growth of yeast and other saprophytic fungi which break down carbohydrates, and emit a foul smell.

15. Sunlight, chlorophyll, carbon dioxide, water and minerals are raw materials essential for photosynthesis. Do you know where they are available? Fill in the blanks with the appropriate raw materials.

(a) Available in the plant: _____

(b) Available in the soil: _____, _____

(c) Available in the air: _____

(d) Available during day: _____

Ans. (a) chlorophyll (b) Water, minerals (c) Carbon dioxide (d) Sunlight

## ❖ LONG ANSWER QUESTIONS

1. Wild animals like tiger, wolf, lion and leopard do not eat plants. Does this mean that they can survive without plants? Can you provide a suitable explanation?

Ans. It is true that these animals do not eat plants. They hunt and eat herbivorous animals like deer, gaur, bison, zebra, giraffe, etc. which are dependent on plants for food. If there are no plants, herbivorous animals will not survive in which case animals like tiger, wolf, lion and leopard will have nothing to eat. So, indirectly carnivorous animals are also dependent on plants for their survival.

2. Label the below given Figure 2.1 as directed below in (i) to (iv) and give the name of each type of teeth.

*Fig. 2.1*

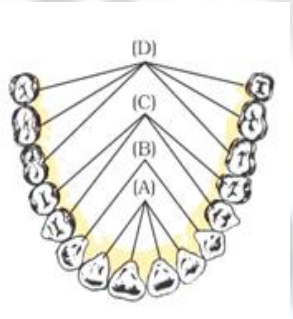
(i) The cutting and biting teeth as ‘A’

(ii) The piercing and tearing teeth as ‘B’

(iii) The grinding and chewing teeth as ‘C’

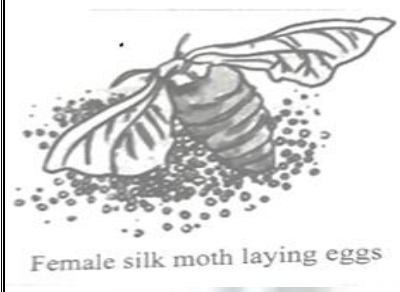
(iv) The grinding teeth present only in adult as ‘D’

Ans. A. Incisors  B. Canines  C. Premolars  D. Molars




3. Describe the life history of silk moth with the help of figures of various stages.

Ans. The female silk moth lays eggs. Larvae hatches out from it and are known as silkworms. As they grow the silkworm gets ready to enter the next stage of life known as pupa. Conversion of caterpillar to pupa involves a weaving of net around itself. It swings from side to side in the form of the figure of eight (8) and secretes fibre made of a protein during these movement of the head which gets hardened on exposure to air and becomes silk fibre that completely covers the caterpillar. This covering in known as cocoon. Silk fibre is obtained from this cocoon. The further growth of the silk moth continues inside the cocoon.



Female silk moth laying eggs

Silkworm

Cocoon

Cocoon with developing moth

4. State similarities and differences between the laboratory thermometer and the clinical thermometer.

Answer: Similarities:
(i) both made up of uniform glass tube.
(ii) both contain mercury.
(iii) both have bulb at one end.
(iv) both generally have Celsius scale.

Differences:
(i) Range of laboratory thermometer is from 10°C to 110°C while range of clinical thermometer is from 35°C to 42°C.
(ii) Laboratory thermometer is used to take the reading of temperature in laboratory while clinical thermometer is used to measure the temperature f human body.
(iii) Mercury level falls when removed from the source in case of laboratory thermometer while in case of clinical thermometer