

BIJENDRA PUBLIC SCHOOL, PURNEA

Class - 7

Subject - SCIENCE

Chapter - 2 Nutrition in Animals and Humans

D. Tick (✓) the odd-one out giving reason.

1. Cow, Horse, Human beings, Amoeba

Ans. Amoeba :- It is the only unicellular organism that uses its false feet called pseudopodia to engulf the food particles.

2. Canines, Premolars, Chewing, Grinding

Ans. Canines :- Premolars help in chewing and grinding the food.

3. Pulp cavity, Crown, Buccal cavity, Plaque

Ans. Buccal cavity :- Others are related with teeth.

4. Large intestine, Small intestine, Stomach, Kidney

Ans. Kidney :- Others are concerned with digestion of food.

5. Pseudopodia, Caecum, Rumen, Cud

Ans. Pseudopodia :- Others are connected with digestion in grass - eating animals.

HOTS (HIGH ORDER THINKING SKILLS)

1. Digestion needs the help of two more systems in the body to provide energy from food.

a. Name these systems.

b. How do they help for providing energy from food?

Ans. a. (i) Respiratory system and
(ii) Circulatory system

b. Respiratory system releases energy by the oxidation of glucose obtained during the digestion.

Circulatory system transports nutrients from small intestine to the liver and other organs through the blood.

2. Which food will take longer to get digested - glucose or beans?

Ans. Beans will take longer to digest because they will have to be first broken down into their constituents components and then the process of digestion will start. Whereas glucose directly enters the blood -stream and provides instant energy through respiration.

3. Which component of grass is indigestible?

Don't you think if grass is made digestible in human systems, the food scarcity will be over?

Ans. Cellulose is the component in grass which is indigestible by humans. Grass - eating animals have large sac - like structure called caecum between the small intestine and large intestine. The cellulose of grass is digested here by the action of certain bacteria which are not present in humans.

Yes, if grass is made digestible to the human then food scarcity may be reduced.