

## SCIENCE : Life Processes

**42. In which of the following groups of organisms are food materials broken down outside the body and absorbed?**

- (a) Mushroom, Green plants, Amoeba
- (b) Yeast, Mushroom, Bread mould
- (c) Paramecium, Amoeba, Cuscuta
- (d) Cuscuta, Lice, Tapeworm

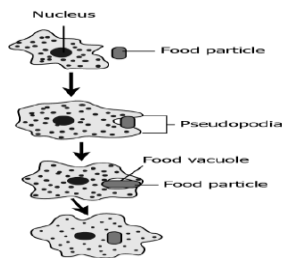
Ans: (b) Yeast, Mushroom, Bread mould

**43. The respiratory pigment in human beings is:**

- (a) Carotene
- (b) Chlorophyll
- (c) Haemoglobin
- (d) Mitochondria

Ans: (c) Haemoglobin

**44. The given image shows how Amoeba obtains nutrition.**



**How is this process advantageous for amoeba?**

- (a) Capturing food takes less time
- (b) Complex food can be digested easily
- (c) More amount of food can be consumed
- (d) Fast distribution of nutrition within the body

Ans: (d) Fast distribution of nutrition within the body

**45. A plant gets rid of excess water through transpiration. What is the method used by plants to get rid of solid waste products?**

- (a) Shortening of stem
- (b) Dropping down fruits
- (c) Shedding of yellow leaves
- (d) Expansion of roots into the soil

Ans: (c) Shedding of yellow leaves

**46. How is the wall of small intestine adapted for performing the function of absorption of food?**

Ans. The inner lining of the small intestine has numerous finger-like projections called villi, which increases the surface area for absorption.

**47. Out of a goat and a tiger, which one will have a longer small intestine? Justify your answer.**

Ans. Goat, because herbivores eating grass need a longer small intestine to allow the cellulose to be digested

**48. What is the role of saliva in the digestion of food?**

Ans. Saliva moistens the ingested food with mucus, sterilises it with lysozyme and serves to initiate the

precess of starch digestion into simple sugars with the help of salivary amylase or ptyalin.

**49. Patients whose gall bladder is removed are recom- mended to eat less oily food. Why?**

Ans. Gall bladder stores bile which helps in emulsification of lipids. In the absence of stored bile, emulsification of fats will be negligible/ affected/less and thus fat digestion will be slow. blence, there are such diet restrictions.

**50. What is photosynthesis? Explain its mechanism.**

Ans. A process in which green plants take carbon dioxide and water and convert it into carbohydrates/food in the presence of sunlight and chlorophyll.

**Mechanism:**

- (i) Absorption of light energy by chlorophyll
- (ii) Conversion of light energy to chemical energy
- (iii) Splitting of water molecules into hydrogen and oxygen.
- (iv) Reduction of carbon dioxide to carbohydrate.

**51. Name the respiratory pigment in human beings. Where is this pigment found?**

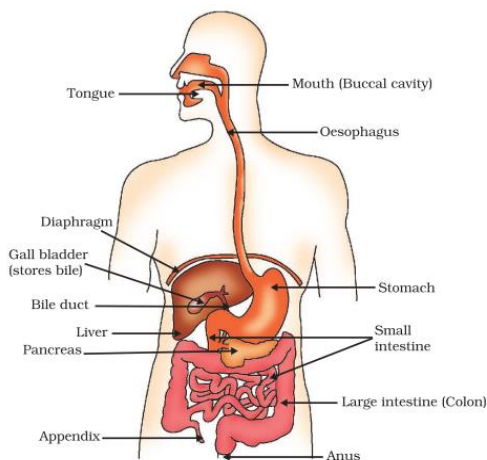
Ans. The respiratory pigment in human being is haemoglobin. Haemoglobin is present in RBC's of blood in humans.

**52. Name the energy currency in the living organisms. When and where is it produced?**

Ans. Adenosine triphosphate (ATP). It is produced during respiration in living organisms in mitochondria.

**53. Draw the Human alimentary canal**

Ans:



**54. What processes are considered essential for maintaining life?**

Ans: The processes essential for maintaining life are nutrition, respiration, transportation, excretion and sensitivity.