

Ans

## Exercise

1.

The kidney  
The system

in human  
for

being are a part of

A

(1) Excretion

2.

The xylem in  
(1) Transport

plants are responsible for  
of water.

3. The autotrophic mode of nutrition require  
A. (d) All of the above  $\rightarrow$   $\text{CO}_2$  &  $\text{H}_2\text{O}$  & sunlight, Chlorophyll

4. The breakdown of pyruvate to give  $\text{CO}_2$ ,  $\text{H}_2\text{O}$  & energy takes place in  
A. (b) Mitochondria

8. What are the differences between aerobic & anaerobic respiration? Name some organisms that use the anaerobic mode of respiration.  
A. Aerobic Anaerobic

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| <ul style="list-style-type: none"> <li>• Process of cellular respiration takes place in presence of <math>\text{O}_2</math> gas.</li> <li>• Involve exchange of gases between organism &amp; outside environment.</li> <li>• Takes place in cytoplasm &amp; mitochondria.</li> <li>• Glucose breakdown into <math>\text{CO}_2</math> &amp; <math>\text{H}_2\text{O}</math>.</li> <li>• Ex - Mammals.</li> </ul> | <ul style="list-style-type: none"> <li>• Cellular respiration that takes in the absence of <math>\text{O}_2</math> gas.</li> <li>• Exchange of gases is absent.</li> <li>• Found only in cytoplasm.</li> <li>• Glucose breakdown into <math>\text{C}_2\text{H}_5\text{OH}</math> (energy) &amp; ethyl alcohol.</li> <li>• Ex - Bacteria &amp; yeast.</li> </ul> |
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12. Compare the functioning of alveoli in the lungs & nephrons in the kidney with respect

## As to their structure & functioning Nephron

- Alveoli
- Present in the lung
- Located in the respiratory system
- They are sacs present in lungs that allow rapid exchange of gases
- Blood supplied to pulmonary veins
- Made of simple squamous epithelium

- Present in the kidney
- Located in the excretory system
- Composed of glomerulus & tubules through which glomerulus filtrate passes
- Blood supplied to renal vein
- Made of simple cuboidal epithelium