

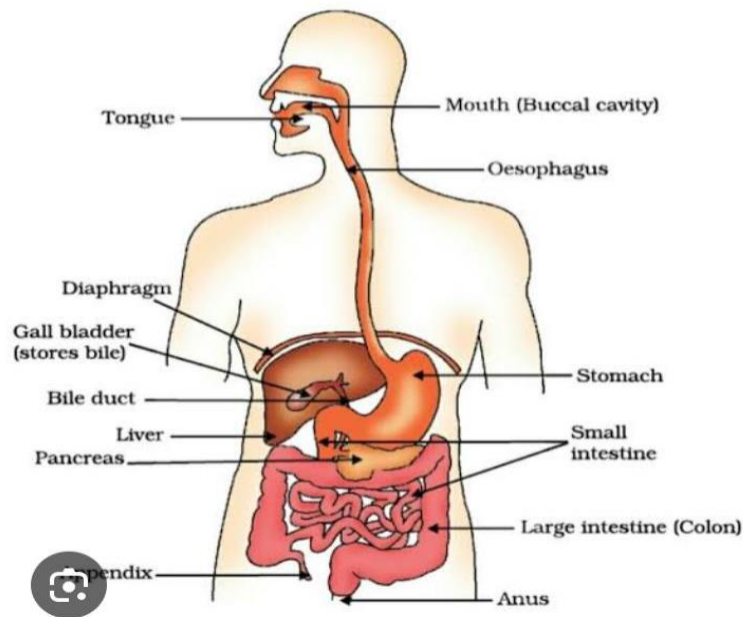
DELHI PUBLIC SCHOOL, JAMMU
Session (2024-25)

Class:
Subject: Science

X

Answer Key of Set-2

SECTION A		Marks										
1	(b) virtual and erect	1										
2	(d) all reflecting surfaces.	1										
3	(c) CaO	1										
4	(c) Yellow precipitates of lead iodide and potassium nitrate will be produced	1										
5	a) The process of taking in oxygen and giving out carbon dioxide.	1										
6	6 b) The process of using sunlight to make food.	1										
7	a) The process of taking in food and using it for growth, repair and energy.	1										
8	(a) Both Assertion and Reason are correct and Reason is the correct explanation for Assertion.	1										
9	A . Both Assertion and reason is true . Reason is the correct explanation of assertion.	1										
10	A . Both Assertion and reason is true . Reason is the correct explanation of assertion.	1										
SECTION B												
11	Silver or aluminium Aluminium > Copper > Marble	1 1										
12	. During respiration in cells, glucose combines with oxygen and gets converted into carbon dioxide and water. This reaction releases lot of energy in the form of ATP. $C_6H_{12}O_6 (aq) + 6 O_2 (g) \rightarrow 6 CO_2 (g) + 6 H_2O (l) + \text{Energy}$ OR Ans4. $2 FeSO_4 (s) \rightarrow Fe_2 O_3 (s) + SO_2 (g) + SO_3 (g)$	2										
13	1 mark for each points. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Aerobic Respiration</th> <th style="width: 50%; text-align: center;">Anaerobic Respiration</th> </tr> </thead> <tbody> <tr> <td>Oxygen is required for this type of respiration to take place.</td> <td>No requirement of oxygen in this process.</td> </tr> <tr> <td>It involves the exchange of gases between the organism and the outside environment.</td> <td>Exchange of gases is there but oxygen gas does not take part.</td> </tr> <tr> <td>Process of respiration takes place in the cytoplasm and the mitochondria.</td> <td>Takes place in the cytoplasm only.</td> </tr> <tr> <td>Glucose breaks down or complete oxidation into carbon dioxide and water.</td> <td>Glucose breaks down into ethyl alcohol, carbon dioxide, and energy.</td> </tr> </tbody> </table>	Aerobic Respiration	Anaerobic Respiration	Oxygen is required for this type of respiration to take place.	No requirement of oxygen in this process.	It involves the exchange of gases between the organism and the outside environment.	Exchange of gases is there but oxygen gas does not take part.	Process of respiration takes place in the cytoplasm and the mitochondria.	Takes place in the cytoplasm only.	Glucose breaks down or complete oxidation into carbon dioxide and water.	Glucose breaks down into ethyl alcohol, carbon dioxide, and energy.	2
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SECTION C												
14	i. The major reason behind this is that it provides a wider field of view. This permits the driver to view most of the traffic that is behind his vehicle. A convex mirror always creates a virtual image. ii. The type of image formed on the cinema screen is a real image.	2 1										
15	During decomposition reaction, a single substance decomposes to form two or more simpler products whereas in combination reaction, two or more reactants combine and form a single product. Decomposition reaction: $CaCO_3 (s) \rightarrow CaO (s) + CO_2 (g)$ Combination reaction: $CaO (s) + H_2O (l) \rightarrow Ca (OH)_2 (aq)$	3										



1/2 marks for each labelling.

OR

Autotroph Nutrition

The organisms are capable of preparing their own food using simple substances that are available in their surroundings.

The conditions necessary for autotrophic nutrition are carbon dioxide, water, chlorophyll and sunlight.

Phototrophic and Chemotrophic are the two types of autotrophic nutrition

Plants are an example of autotrophic nutrition

Heterotrophic Nutrition

The organisms completely depend on others for their nutrition. They depend on surrounding plants and animals for food.

They cannot make the food from available inorganic substances like carbon dioxide, water and sunlight.

Holozoic, parasitic, symbiotic association, and saprophytic are the four types of heterotrophic nutrition

Animals and some plants are an example of heterotrophic nutrition