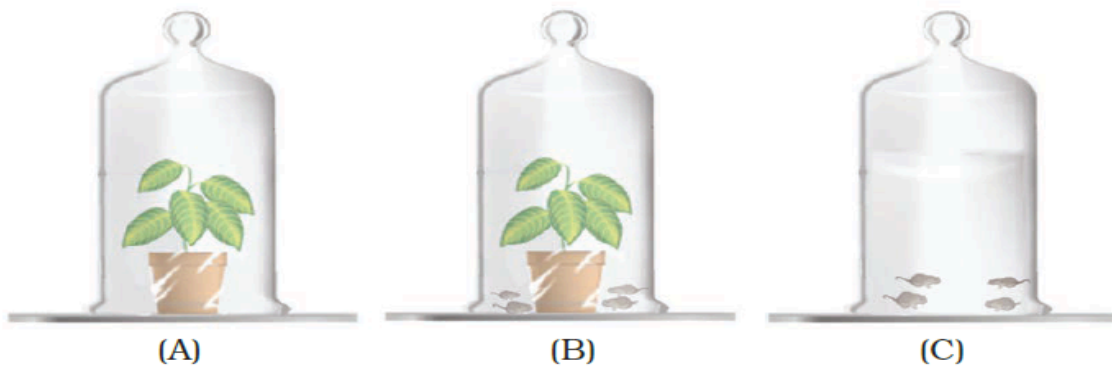


CLASS VII
BIOLOGY
ANNUAL EXAMINATION (2024-25)
SET C2

MM: 20

S.no	Questions	Marks
	<p>General Instructions:</p> <p>(i) Please note that the question paper consists of 4 printed pages. (ii) All questions are compulsory. (iii) The question paper has 10 questions. (iv) Internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.</p>	
1	<p>Arrange the following statements in the correct order in which they occur during the formation and removal of urine in human beings:</p> <p>(1) Ureters carry urine to the urinary bladder. (2) Waste dissolved in water is filtered out as urine in the kidneys. (3) Urine stored in the urinary bladder is passed out through the urinary opening at the end of the urethra. (4) Blood containing useful and harmful substances reaches the kidneys for filtration. (5) Useful substances are absorbed back into the blood.</p> <p>(a) 4,5,2,1,3 (b) 1,2,3,4,5 (c) 2,1,3,5,4 (d) 4,5,1,2,3</p>	1
2	<p>What kind of plants are called saprotrophs?</p> <p>(a) Plants that feed on dead and decaying matter. (b) Plants that prepare their own food. (c) Plants that feed on insects. (d) Plants that feed on living organisms.</p>	1
3	<p>Choose the correct order of terms that describes the process of nutrition in ruminants.</p> <p>(a) Chewing of cud → swallowing → partial digestion → complete digestion (b) Swallowing → partial digestion → chewing of cud → complete digestion (c) Chewing of cud → swallowing → mixing with digestive juices → digestion (d) Swallowing → chewing and mixing → partial digestion → complete digestion</p>	1
4	<p>Observe the figure given below. Jar A contains only plants. Jar B contains both mice and plants and Jar C contains only mice. In which jar, will the amount of carbon dioxide be the highest?</p>	1

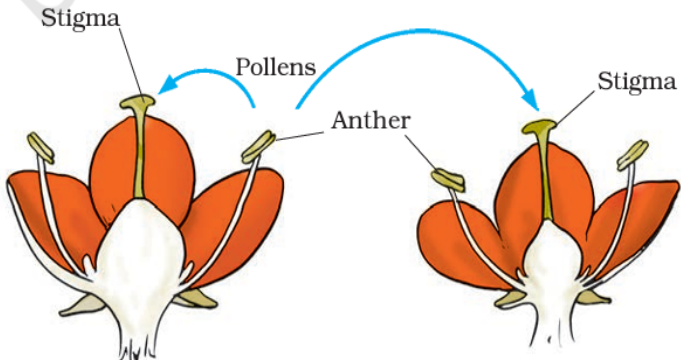


- (a) Jar B
- (b) Jar C
- (c) Jar A
- (d) Jar A and Jar C will have the same amount of carbon dioxide.

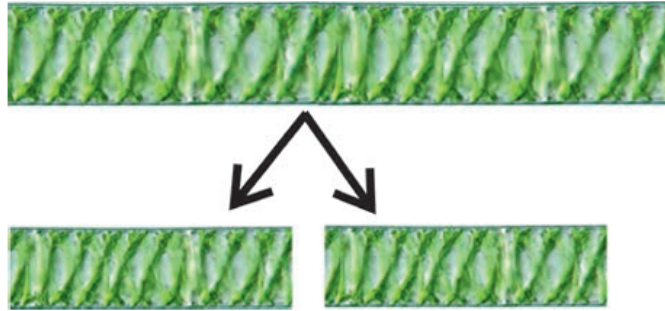
Following questions 5 and 6 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

5	<p>Assertion (A): In organisms called lichens, algae, and fungus live together. Reason (R): Alga prepares food for the fungus whereas fungus does not provide any benefit to the alga.</p>	1										
6	<p>Assertion (A): Plants make their food themselves and are called autotrophs. Reason (R): Human beings and other animals depend on plants for their food.</p>	1										
7	<p>Attempt either A or B</p> <p>(A) Fill the blanks in the table depicting the inhalation and exhalation process in human beings.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 50%; text-align: center;">INHALATION</th> <th style="width: 50%; text-align: center;">EXHALATION</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">ribs move up and outwards</td> <td style="padding: 5px;">(i) _____</td> </tr> <tr> <td style="padding: 5px;">(ii) _____</td> <td style="padding: 5px;">Diaphragm moves up</td> </tr> <tr> <td style="padding: 5px;">Space in the chest cavity increases</td> <td style="padding: 5px;">(iii) _____</td> </tr> <tr> <td style="padding: 5px;">(iv) _____</td> <td style="padding: 5px;">Air rushes out of the lungs</td> </tr> </tbody> </table> <p style="text-align: center; margin-top: 10px;">OR</p>	INHALATION	EXHALATION	ribs move up and outwards	(i) _____	(ii) _____	Diaphragm moves up	Space in the chest cavity increases	(iii) _____	(iv) _____	Air rushes out of the lungs	2
INHALATION	EXHALATION											
ribs move up and outwards	(i) _____											
(ii) _____	Diaphragm moves up											
Space in the chest cavity increases	(iii) _____											
(iv) _____	Air rushes out of the lungs											
	OR	2										

	<p>(B) Human beings undergo aerobic respiration to meet their energy requirements. However, in certain situations, like during heavy exercise, our muscle cells can also respire anaerobically for a short time.</p> <p>(i) Write the word equation depicting the process of anaerobic respiration in muscle cells during heavy exercise.</p> <p>(ii) What happens in the human body as a result of this anaerobic respiration process and how can we get relief from it?</p>	
8	<p>The small intestine receives secretions from a reddish brown gland called A. It secretes a juice called B into the small intestine. Identify A and B and mention the function of B in the digestive process.</p>	3
9	<p>Read the given passage and answer the questions related to the passage and other related concepts:</p> <p>All organisms need food, water and oxygen for survival. They need to transport all these to various parts of their body. Further, animals need to transport wastes to parts from where they can be removed. These functions are performed by the circulatory system in human beings. It has three major components: Blood, Blood vessels, and Heart. Blood is the fluid required for transportation of substances. It flows in pipe-like structures called blood vessels. Blood vessels can be majorly classified into Arteries, Veins, and Capillaries. The heart acts like a pump that continuously pumps blood throughout the body through rhythmic expansion and contraction.</p> <p>(a) What is the function of white blood cells in the body?</p> <p>(b) In case of a cut or injury, one of the blood cells clot the area to prevent excessive bleeding. Name the type of blood cell involved in this process.</p> <p>Attempt either (c) or (d)</p> <p>(c) Give two points of differences between the two types of blood vessels: Arteries and Veins. OR</p> <p>(d) How is the heart designed to prevent the mixing of blood rich in oxygen and blood rich in carbon dioxide? (Any two points)</p>	4
10	<p>Attempt either (A) or (B)</p> <p>(A) (i) Depict the process of budding in Yeast with the help of a well-labelled diagram only.</p> <p>(ii) Mention any one advantage of the process of vegetative propagation.</p> <p>(iii) Identify and define the process being depicted in the diagram given below.</p> <div style="text-align: center;">  <p>OR</p> </div>	5

(B) (i) Identify the process of asexual reproduction shown below and describe it.



(ii) Rohit observed some rose flowers and noticed that they contain both male and female parts i.e. stamen and pistil. What are these types of flowers called? State one more example of a flower where both reproductive parts are observed.

Are there any flowers that contain only one of the reproductive parts, i.e. only stamen or pistil? What are they known as? State an example of the same.

(iii) Define the term fertilisation.