SHRI GULABRAO ESHWARA KHANDVE EDUCATIONAL FOUNDATION,

JAGADGURU INTERNATIONAL SCHOOL, LOHEGAON PUNE

TERM-1 EXAM (2024-25)

Class: VII **Division:** **Subject: Science**
Date: 30/09/2024 **M.M.: 80**
Roll No.: **Time: 3 HRS**

General Instructions:

(i) This question paper consists of 39 questions in 5 sections.
(ii) All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
(iii) Section A consists of 20 objective type questions carrying 1 mark each.
(iv) Section B consists of 6 Very Short questions carrying 02 marks each. Answers to these questions should in the range of 30 to 50 words.
(v) Section C consists of 7 Short Answer type questions carrying 03 marks each. Answers to these questions should in the range of 50 to 80 words.
(vi) Section D consists of 3 Long Answer type questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.
(vii) Section E consists of 3 source-based/case-based units of assessment of 04 marks each with sub parts.

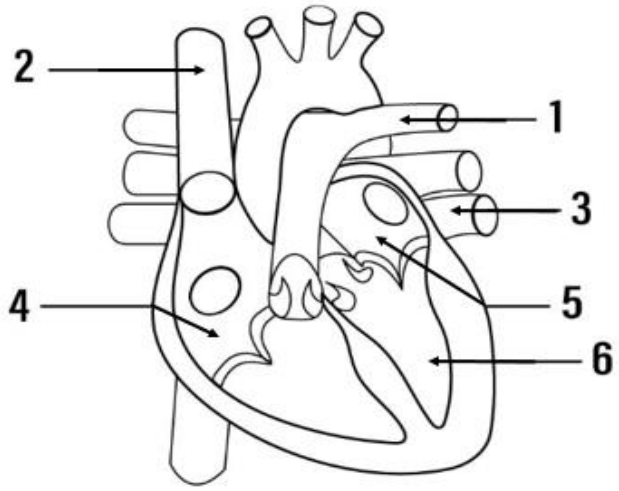
Section-A

Select and write the most appropriate option out of the four options given for each of the questions 1-20

Q.NO	ANSWER KEY	MARKS
1	Plants take carbon dioxide from the atmosphere mainly through their: (a) roots (b) stem (c) flowers (d) leaves	1
2.	Water from the undigested food is absorbed mainly in the (a) stomach (b) foodpipe (c) small intestine (d) large intestine	1
3.	In plants, water is transported through (a) xylem (b) phloem (c) stomata (d) root hair	1
4.	Paheli's mother made a concentrated sugar syrup by dissolving sugar in hot water. On cooling, crystals of sugar got separated. This indicates: (a) physical change that can be reversed. (b) chemical change that can be reversed. (c) physical change that cannot be reversed. (d) chemical change that cannot be reversed.	1
5.	Stainless steel pans are usually provided with copper bottoms. The reason for this could be that: (a) copper bottom makes the pan more durable. (b) such pans appear colourful. (c) copper is a better conductor of heat than the stainless steel. (d) copper is easier to clean than the stainless steel.	1
6.	'Litmus', a natural dye is an extract of which of the following? (a) China rose (Gudhal) b) Beetroot (c) Lichen (d)Blueberries (Jamun)	1
7.	The plant which traps and feeds on insects is: (a) Cuscuta (b) china rose (c) pitcher plant (d) rose	1

8.	Sometimes when we do heavy exercise anaerobic respiration takes place in our muscle cells. What is produced during this process? (a) alcohol and lactic acid (b) alcohol and CO_2 (c) lactic acid and CO_2 (d) lactic acid only	1
9	The muscular tube through which stored urine is passed out of the body is called _____. (a) Kidney (b) Ureter (c) Urethra (d) Urinary bladder	1
10	The term that is used for the mode of nutrition in yeast, mushroom and bread-mould is: (a) autotrophic (b) insectivorous (c) saprophytic (d) parasitic **OR** One of the most important nutrients a pitcher plant need from insects is: (a) Carbon dioxide (b) Nitrogen (c) Water (d) Oxygen	1
11	The false feet of Amoeba are used for: (a) movement only (b) capture of food only (c) capture of food and movement (d) exchange of gases only	1
12	A solution changes the colour of turmeric indicator from yellow to red. The solution is (a) basic (b) acidic (c) neutral d) either neutral or acidic	1
13	The gas we use in the kitchen is called liquified petroleum gas (LPG). In the cylinder it exist as a liquid. When it comes out from the cylinder it becomes a gas (Change – A) then it burns (Change – B). The following statements pertain to these changes. Choose the correct one (a) Process – A is a chemical change. (b) Process – B is a chemical change. (c) Both processes A and B are chemical changes. (d) None of these processes is a chemical change.	1
14	Which of the following is the main circulatory fluid in our body? (a) Plasma (b) Lymph (c) Blood (d) None of these	1
15	Normal range of breathing rate per minute in an average adult person at rest is: (a) 9–12 (b) 15–18 (c) 21–24 (d) 30–33	1
16	No medium is required in: (a) Conduction (b) Convection (c) Radiation (d) Both (a) and (b)	1
	Question No. 17 to 20 consists of two statements-Assertion(A) and Reason ® Answer these questions selecting the appropriate option given below: a) Both assertion and reason are correct and the reason is the correct explanation of assertion. b) Both assertion and reason are correct and reason is not the correct explanation of assertion. c) Assertion is true but the reason is false. d) Assertion is false but the reason is true.	
17	Assertion (A): Salt may be acidic, basic or neutral in nature. Reason (R): Lime juice is of acidic nature because it contains citric acid.	1
18	Assertion: The stomach is protected against hydrochloric acid Reason: The digestive juices protect the lining of the stomach.	1
19	Assertion (A): Photosynthesis can take place only in leaves. Reason (R): The synthesis of food occurs in the presence of sunlight.	1
20	Assertion (A): Aquatic animals like fishes, excrete waste as ammonia. Reason (R): The way in which waste chemicals are removed from the body of the animal depends on the availability of water.	1

SECTION B		
21	Fill in the blanks. Earthworm breathes through its--------- as it does not have----------. _____ . **OR** The roots of a plant take up oxygen from the -----trapped between the -------particles.	2
22	Fill in the blanks. (a) The main excretory product in human beings is_____ . (b) Sweat contains water and _____ .	2
23	Write whether the following are physical or chemical changes. a)Water to water vapour b)Burning a matchstick c)Melting of wax d)Dissolving sugar in water	2
24	Which part of the digestive canal is involved in: (a) Absorption of food _____. (b) Killing of bacteria _____.	2
25	Where is the bile produced? Which component of the food does it help to digest?	2
26	Describe the relationship between a fungus and algae in lichen.	2
	SECTION C	
27	(a)Why is it necessary to excrete waste products? (b) What is dialysis? Explain in brief.	3
28	List the similarities and differences between aerobic and anaerobic respiration	3
29	State differences between acids and bases.	3
30	Explain how the painting of an iron gate prevents it from rusting.	3
31	(a)Explain why wearing more layers of clothing during winter keeps us warmer than wearing just one thick piece of clothing. (b)What are insulators? Give two examples.	3
32	a) Name the type of carbohydrate that can be digested by ruminants but not by humans. Give the reason also. b) The inner wall of the small intestine has many finger-like outgrowths called ------- _____.	3
33	Fill in the blanks: (a) Green plants are called _____ since they synthesise their own food. (b) The food synthesised by plants is stored as_____. (c) In photosynthesis, solar energy is absorbed by the pigment called _____.	3
	SECTION D	
34	(a) State similarities and differences between the laboratory thermometer and the clinical thermometer. (b) Temperature of boiling water cannot be measured by----------thermometer.	5

35	The diagram given below represents a section of the human heart. Answer the questions that follow:  (a) Label parts 1,2,3,4,5 and 6 in the given diagram. (b) What is the exact location of the human heart? (c) Why human heart has a partition between the chambers?	5
36	(i) State two role of acid in the human stomach. (ii) Explain process of feeding and digestion in Amoeba with a help of a diagram.	5
	SECTION E	
37	The small intestine is highly coiled structure. It is about 7.5 metres long. It receives secretions from the liver and the pancreas. The liver is a reddish brown gland located in the upper part of the abdomen on the right side. The pancreas is a large cream coloured gland located just below the stomach that secretes the pancreatic juice. (i) The liver releases: (a) digestive juice (b) acid (c) bile juice (d) saliva (ii) The glands associated with the alimentary canal are: (a) salivary glands and liver (b) pancreas and liver (c) gall bladder and liver (d) salivary glands, liver and pancreas (iii) Explain in brief the function of pancreatic juice and bile.	4
38	Seema wants to bake vanilla cake. She made a batter with flour, butter, powdered sugar, milk and vanilla essence. In a separate bowl, she took ½ tsp baking soda and mixed ½ tsp vinegar to it, the pair "foamed up". She poured that into the batter and mixed well. She noticed bubbles in the batter and the batter looked fluffy. (i) Baking soda and vinegar are chemically called _____ and _____respectively. (a) Sodium carbonate and Acetic acid (b) Sodium hydrogen carbonate and acetic acid (c) sodium hydroxide and oxalic acid (d) sodium hydrogen carbonate and oxalic acid (ii) When vinegar and baking soda were mixed together, the pair 'foams up' because _____ gas was produced. (iii) When carbon dioxide is passed through lime water, _____ is formed, which makes lime water _____. **OR**	4

	Priya's father was suffering from severe stomach pain. He was showing symptoms of heartburn and indigestion. He consulted a doctor who told him that he was suffering from acidity and advised him to take an antacid tablet after each meal. Priya's father followed the advice strictly and was cured. (i)Milk of magnesia is an antacid which contains: (a) magnesium chloride (b) magnesium phosphate (c) magnesium hydroxide (d) magnesium nitrate (ii) Antacids contain: (a) acid (b) base (c) salt (d) both (a) and (b) (iii) Explain neutralization reaction with help of an example.	
39	Circulatory system ensures the exchange of substances between cells of the body and external environment and transport them from one part to another. Body fluids are the medium of transport in the body. These fluids have the ability to pick up substances and distribute them to various parts of the body. Blood has two components- fluid part and different types of cells. (i) The fluid part of the blood is called: (a) Red blood cell (b) White blood cell (c) Platelets (d) Plasma (ii) _____ form clot at site of injury to stop or prevent bleeding. (iii) What is the function of haemoglobin? What will happen in absence of haemoglobin in the blood?	4