



**SINDHI HIGH SCHOOL, BENGALURU**  
**ANNUAL EXAMINATION [2022-23]**  
**SUBJECT: SCIENCE**

**Class: VII**  
**Date: 20.03.2023**  
**No of Sides: 06**

**Max Marks: 80**  
**Reading Time: 8:00 to 8:15 am**  
**Writing Time: 8:15 to 10:45 am**

**General Instructions:**

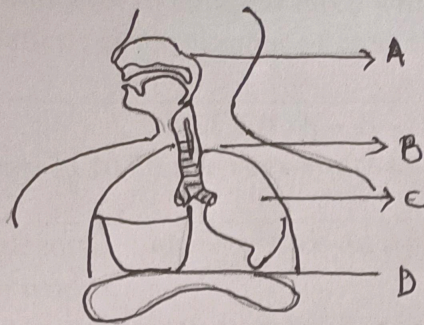
- i. This question paper consists of 39 questions in 5 sections.
- ii. All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
- iii. **Section A** consists of 20 objective type questions carrying 1 mark each.
- iv. **Section B** consists of 6 Very Short questions carrying 02 marks each. Answers to these questions should be 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 be 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.
- viii. **Section E** consists of 3 case-based units of assessment of 04 marks each with sub-parts.

**SECTION - A**

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

Q. NO	QUESTIONS	MAR KS
1.	<p>Which of the following sequences show the correct arrangement of different layers of the soil ?</p> <p>a) Top soil ↓ Bed rock ↓ Sub soil</p> <p>b) Sub soil ↓ Bed rock ↓ Sub soil</p> <p>c) Sub soil ↓ Bed rock ↓ Top soil</p> <p>d) Top soil ↓ Sub soil ↓ Bed rock</p>	(1)
2.	<p>Read the following statements carefully and choose the incorrect one –</p> <p>(a) Weathering of rocks is a fast process.</p> <p>(b) Humus contains nutrients like nitrogen phosphorus etc. which are needed by the plants for their growth.</p> <p>(c) Vertical section through the soil showing the different layers of soil is called soil profile.</p> <p>d) Soil is the home for many living organisms.</p>	(1)

3.	Which of the following solutions will cause the blue litmus to turn red? (a) Vinegar (b) Soap (c) Milk of magnesia (d) Calamine	(1)
4.	Which of the following is the correct pair of atom and its atomic symbol? (a) Sulphur – Su (b) Potassium – P (c) Phosphorus -P (d) Sodium- S	(1)
5.	% of water absorption of different types of soil is 10%, 25% and 40%. Choose the correct option from below which corresponds the given data. (a) loamy soil, sandy soil and clayey soil (b) Sandy soil, clayey soil and loamy soil (c) clayey soil, loamy soil and sandy soil (d) Sandy soil, loamy soil and clayey soil	(1)
6.	Farmers neutralise the effect of Acidity on the soil by adding – (a) Slaked lime (b) Gypsum (c) Caustic soda (d) Baking soda	(1)
7.	What valency do Aluminium ions have? (a) +2 (b) +3 (c) -2 (d) -3	(1)
8.	When a man with stomach pain went to the doctor, the physician identified acidity. Which of the following would be the suitable remedy for him? (a) Lemonade drink (b) Baking soda (c) Aerated drink (d) Vinegar	(1)
9.	During the process of exhalation, the ribs move- (a) down and inward (b) up and inward (c) down and outward (d) up and outward	(1)
10.	Which among the following is generally not predicted in a daily weather report? (a) Temperature (b) Pressure (c) Humidity (d) Rainfall	(1)
11.	Finger like outgrowths of Amoeba helps to ingest food. However, the finger-like outgrowths of human intestine helps to- (a) digest the fatty food substances (b) make the food soluble (c) absorb the digested food (d) absorb the undigested food	(1)
12.	In the following figure of respiratory system organs labelled by A, B, C and D are respectively: (a) A – Diaphragm, B- Trachea C- Lungs D- Nasal cavity (b) A – Nasal cavity B- Trachea C- Lungs D- Diaphragm (c) A – Lungs, B- Trachea C- Nasal cavity D- Diaphragm (d) A – Trachea, B- Nasal cavity C- Lungs D- Diaphragm	(1)



13.	The clocks and watches which are used for measuring time are based on- (a) rectilinear motion (b) circular motion (c) periodic motion (d) rotational motion	(1)
14.	The general assembly of the United Nations proclaimed _____ period as the International decade for action on “Water for life”. a) 2005 to 2015 b) 2015 to 2025 c) 2004 to 2014 d) None of the above	(1)
15.	Which of the following is based on the study of the shadow cast by the sun? (a) Simple pendulum (b) Atomic clock (c) Sun dial (d) Quartz clock	(1)
16.	Which of the following is not a water-borne disease? (a) Cholera (b) Tuberculosis (c) Typhoid (d) Dysentery	(1)
<p><b>Q. No 17 to 20 are Assertion - Reasoning based questions.</b>  <b>These consist of two statements – Assertion (A) and Reason (R).</b>  <b>Answer these questions selecting the appropriate option given below:</b>  <b>(a) Both A and R are true and R is the correct explanation of A.</b>  <b>(b) Both A and R are true and R is not the correct explanation of A.</b>  <b>(c) A is true but R is false.</b>  <b>(d) A is False but R is true.</b></p>		
17.	<b>Assertion (A):</b> Coil of wire behaves like a magnet when electricity is passed. <b>Reason (R):</b> Magnetic effect of wire can be made very strong to lift heavy loads.	(1)
18.	<b>Assertion(A):</b> Waste water is treated in a sewage treatment plant. <b>Reason (R):</b> Sewage contains solid and liquid pollutants.	(1)
19.	<b>Assertion:</b> The breakdown of glucose occurs in the cell of an organism. <b>Reason:</b> The inhaled oxygen is not used to breakdown glucose into carbon dioxide and water.	(1)

20.	<p><b>Assertion (A):</b> Atomicity of ozone is three while that of oxygen is two.</p> <p><b>Reason(R):</b> Atomicity is the number of atoms constituting a molecule.</p>	(1)
<p><b>SECTION – B</b></p> <p><b>Q. no. 21 to 26 are very short answer questions.</b></p>		
21.	<p>During a field trip, some students visited an agricultural farm and saw a few birds eating some worms.</p> <p>(a) Name the worms and mention one of its significance for agriculture.</p> <p>(b) Which layer of the soil support these worms and write any one property of this layer.</p> <p style="text-align: center;"><b>OR</b></p> <p>With the help of an activity show the presence of moisture in the soil.</p>	(2)
22.	Write the word equations for aerobic and anaerobic respiration.	(2)
23.	Mention any two adaptive features of the penguin that helps to survive in cold regions.	(2)
24.	Write the functions of incisors and canines.	(2)
25.	Insects and leaves of a plant have pores through which they exchange gases with the atmosphere. Write any two differences between these two pores.	(2)
26.	Define the following: (a) Sludge (b) Clarified water	(2)
<p><b>SECTION - C</b></p> <p><b>Q.no. 27 to 33 are short answer questions.</b></p>		
27.	<p>(a) Draw the atomic structure of Neon.</p> <p>(b) Write the number of protons, electrons, neutrons and electronic Configuration of Neon.</p>	(3)
28.	<p>Give reasons for the following:</p> <p>(a) Baking soda is rubbed on the skin when ant bites.</p> <p>(b) Waste water from the factory should be treated before disposing it in the nearby water bodies.</p> <p>(c) Great care should be taken while handling laboratory chemicals.</p>	(3)
29.	<p>Enlist the type of juices produced in human stomach with their functions.</p> <p style="text-align: center;"><b>OR</b></p> <p>How does cellulose digestion occurs in grass eating animals?</p>	(3)
30.	Krishna go to his school by bicycle which is at a distance of 3 km from his home in 30 min. On reaching he finds that the school is closed and comes back home by taking another route which is 4 km in 40 min. What is the average speed in km/min.	(3)
31.	Poor sanitation is directly related to diseases. Explain by giving examples of two diseases.	(3)



**SECTION - E**

**Q.No's. 37 to 39 are Case - Based questions with 2 to 3 short sub - parts.  
Internal choice is provided in one of these sub-parts.**

37.	<p>Continuous weathering of rocks produce fine grain particles that make the soil. Soil particles are of varying size. The main constituents of soil are sand and clay. Different proportion of these makes different kinds of soil. Soil vary from place to place and region to region.</p> <p>i) The various types of vegetation and crops that grow in any region is determined by –</p> <p>a) climatic factors alone b) components of soil alone c) both climatic factors and components of soil d) None of these</p> <p>ii) A soil sample takes 120 min for 960 ml of water to percolate into the soil. Calculate the rate of percolation of water.</p> <p>iii) Cotton grows well in a) Sandy soil      b) sandy loam      c) clayey soil      d) red soil</p> <p align="center"><b>OR</b></p> <p>The dead and decaying materials produced by plants in the soil is called-</p> <p>(a) Humus      (b) microorganisms      (c) fungi      (c) minerals</p>	(1)  (2)  (1)
38.	<p>In nature same kind of plants grow at different places. This happens because seeds are dispersed to different places. This allows wide distribution of seeds. For this purpose seeds develops special devices for their wide distribution.</p> <p>(i) How are plants benefited by seed dispersal? (ii) Mention any two seeds dispersed by animals. (iii) list the special adaptations shown by the seeds dispersed by water.</p> <p align="center"><b>OR</b></p> <p>Name any two seeds dispersed by explosive methods</p>	(2) (1) (1)  (1)
39.	<p>The advantage of electricity is the ease with which it can be converted into heat energy, light energy, magnetic energy and chemical energy depending upon the way we use it in a particular device.</p> <p>(i) The tungsten is used almost exclusively for filament of electric lamp. Comment.</p> <p>(ii) Fuses are inserted in all electrical circuits, why? (iii) What is the property of the wire used in making electric fuse.</p> <p align="center"><b>OR</b></p> <p>Why are CFLs preferred over electric bulbs</p>	(1)  (2) (1)  (1)

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