



**INDIAN SCHOOL SALALAH**  
**TERM II EXAMINATION (AY 2022-2023)**  
**SCIENCE**



**Class VIII**

Max. Marks: 80

Time Allowed: 3 hours

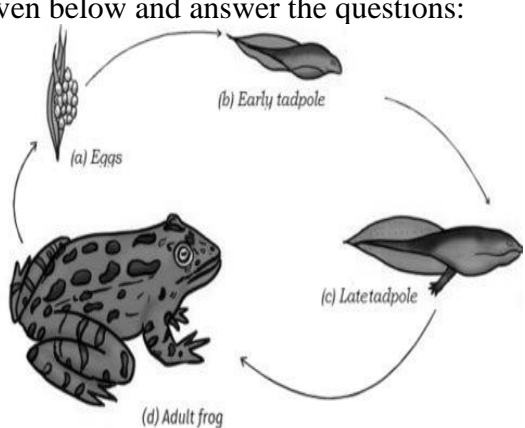
**General Instructions:**

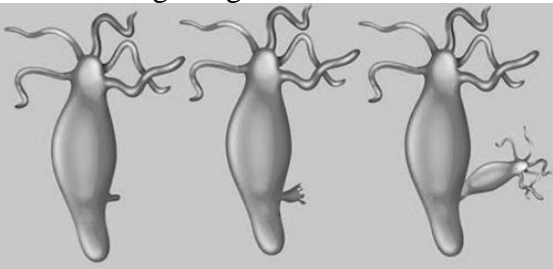

- i. This question paper consists of 39 questions in 5 sections.
- ii. All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
- iii. **Section A** consists of 20 objective type questions carrying 1 mark each.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

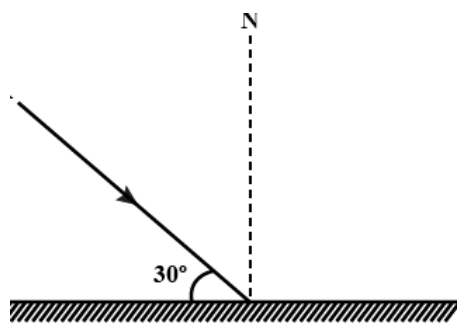
<b>SECTION - A</b>		
<b>Select and write one most appropriate option out of the four options given for each of the questions 1 – 20</b>		
Q.No.	Questions	Marks
1	Which poisonous gas is formed as a result of incomplete combustion? (a) Coal Gas (b) Carbon Monoxide (c) Carbon Dioxide (d) Nitrogen Dioxide	1
2	An ideal fuel must have (a) Moderate ignition temperature (b) Low calorific value (c) Very high ignition temperature (d) Strong odour	1
3	Pick out a substance which is not a constituent of petroleum from the following (a) Natural gas (b) Lubricating oil (c) Kerosene oil (d) Bitumen	1
4	The flow of electric current that occurs through an electrolyte (a) By movement of electrons (b) By Movement of protons (c) By movement of nucleus (d) By movement of ions	1

5	Which of the following product of coal is used for the manufacture of synthetic dyes, perfumes, naphthalene balls etc.? (a) Coke (b) Coal tar (c) Coal gas (d) None of these	1
6	Which of the following is not a suitable method to make distilled water conduct electricity? (a) By dissolving an acid (b) By dissolving a base (c) By dissolving sugar in it (d) By dissolving salt in it	1
7	Petroleum and natural gas were formed from (a) Organisms that lived in the sea (b) Dead vegetation (c) Synthetic materials (d) All the above	1
8	The decomposition of an electrolyte by passage of electric current is called (a) Galvanisation (b) Electrolysis (c) Hydrolysis (d) Electroplating	1
9	Which of the following is not correct about natural gas? (a) Natural gas is stored under high pressure as compressed natural gas (CNG). (b) It is used as a fuel for transport vehicles because it is less polluting (c) It is also used as a starting material for the manufacture of a number of chemicals and fertilizers. (d) Natural gas is an example of inexhaustible natural resource.	1
10	Cells which lack nuclear membrane are (a) eukaryotic cells (b) prokaryotic cells (c) single cells (d) multicells	1
11	The control Centre of all the activities of a cell is (a) nucleus (b) nucleoplasm (c) cytoplasm (d) organelles	1
12	Tissues combine to form (a) nucleus (b) cells (c) organism (d) organs	1
13	Which hormone is secreted by pancreas? (a) Thyroxine	1

	(b) Insulin (c) Adrenaline (d) Testosterone	
14	Identify the change that occurs in females at puberty. (a) development of large voice box (b) development of hair on face and chest (c) region below the waist becomes wider (d) Shoulder broaden	1
15	The egg of an Ostrich is a/an (a) tissue (b) organ (c) cell (d) organ system	1
16	Which of the following is not a natural phenomenon? (a) Earthquake (b) cyclone (c) lightning (d) Seismograph	1
17	The part of the eye that controls the amount of light entering the eye (a) sclera (b) retina (c) eye lens (d) iris	1
18	Which part of the eye gets affected if someone is suffering from cataract? (a) Cornea (b) retina (c) eye lens (d) iris	1
19	Suppose a new planet is discovered between Uranus and Neptune, its time period of revolution would be (a) less than that of Neptune (b) more than that of Neptune (c) equal to that of Neptune or Uranus (d) less than that of Uranus.	1
20	The streak of light caused by a heavenly body burning completely while moving through the atmosphere is called (a) a comet (b) an asteroid (c) a meteor (d) a meteorite	1
	<b>SECTION – B</b> <b>Q. no. 21 to 26 are very short answer questions</b>	
21	a) Define the term Carbonisation. b) In which industry is coke primarily used?	2

	<b>OR</b>	
	The use of fossil fuels is harmful to the environment Justify the statement.	
22	Define reproduction. Mention its significance.	2
23	Draw a neat labeled diagram showing human cheek cells.	2
24	The belief that the mother is responsible for the sex of her baby is completely wrong. Justify the statement.	2
25	a) Define light year. b) What do you understand by the statement that a star is eight light years away from the earth?	2
	<b>OR</b>	
	What are artificial satellites? Give any two applications of it.	
26	What major factors have enabled life to evolve and survive on the planet Earth? ( Any four factors)	2
	<b>SECTION - C</b>	
	<b>Q.no. 27 to 33 are short answer questions.</b>	
27	a) Draw a labelled diagram of a candle flame. b) Goldsmiths use the outermost zone of the flame for melting gold and silver. State the reason.	3
28	What are the chemical effects produced when electric current passes through a conducting solution?	3
29	Write three points of differences between plant cell and animal cell.	3
	<b>OR</b>	
	<b>Give reasons:</b>	
	a) Amoeba has an irregular shape. b) Gene is the unit of inheritance. c) Leaves of plants are green in colour.	
30	a) Find the number of images formed if the angle between the two plane mirrors is $60^\circ$ . b) Differentiate between regular and irregular reflection. Draw diagrams to support your answer.	3
31	a) How does a lightning conductor prevent damage to buildings during lightning? b) Suggest any two measures to protect ourselves from lightning.	3
32	a) What are constellations? Is constellation a part of the solar system? b) Draw a diagram to show the positions of prominent stars in the constellation 'Orion' and write a short note on it.	3
	<b>OR</b>	
	a) Explain with the help of a diagram how can you locate the pole star with the help of Ursa major. b) Why does the pole star appear stationary?	
33	Observe the diagram given below and answer the questions:	3
		

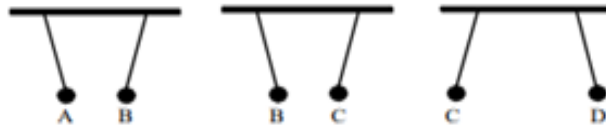
	<p>a) The change from larvae to adult observed in the above diagram is called_____</p> <p>b) Name the hormone that controls the life cycle of frog.</p> <p>c) The water in which tadpoles are growing must contain iodine. Why?</p>	
	<p><b>SECTION - D</b></p> <p><b>Q.no. 34 to 36 are Long answer questions.</b></p>	
34	<p>a) Define calorific value?</p> <p>b) If you are given cow dung, coal and LPG as fuel to be used to boil a given quantity of water, which fuel would you prefer? State the reason.</p> <p>c) In an experiment 5kg of a fuel was completely burnt. The heat produced was measured to be 180,000 kJ. Calculate the calorific value of the fuel.</p> <p style="text-align: center;"><b>OR</b></p> <p>a) Why is a fuel like LPG labelled as inflammable substance?</p> <p>b) Water is not suitable to control fire caused by oil or electrical short circuit. State the reason.</p> <p>c) How does carbon dioxide help in extinguishing fire?</p>	5
35	<p>a) Write down any two characteristic features of asexual reproduction.</p> <p>b) Observe the diagram given below and answer the questions:</p> <div style="text-align: center;">  </div> <p>i) Identify the organism shown in the above diagram.</p> <p>ii) Describe the asexual method of reproduction shown by it in the above diagram.</p> <p style="text-align: center;"><b>OR</b></p> <p>a) Explain the process of binary fission in Amoeba with neat labelled diagrams.</p> <p>b) Why are daughter amoebae identical to the parent?</p>	5
36	<p>a) The following figure shows one of the properties of the image formed by a plane mirror. Identify the property and explain it.</p> <div style="text-align: center;">  </div> <p>b) Assume, a person is standing in front of a plane mirror. The distance between the mirror and his image is 6m. If the person moves 2m towards the plane mirror, what would be the distance between the person and his image?</p> <p>c) State the two laws of reflection.</p> <p>d) Find the angle of incidence and the angle of reflection from the following figure.</p>	5



**SECTION - E**

**Q.no. 37 to 39 are case - based/data -based questions with 2 to 3 short sub - parts. Internal choice is provided in one of these sub-parts.**

37	<p>Study the table and answer the questions that follow.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">S. No</th> <th>Processes</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>The chemical decomposition of a liquid by the action of electric current passing through it, is called electrolysis.</td> </tr> <tr> <td style="text-align: center;">2</td> <td>With the help of a tester, rain water shows the conductivity of electric current, while distilled water does not</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Depositing a thin layer of a desired metal on another material by means of electricity.</td> </tr> </tbody> </table> <p>a) What are the end products of the process of electrolysis of water?            b) What could be the reason for S.No.2?            c) Name the process mentioned in S,No.3            d) Give any two advantages of the process mentioned in S.No.3</p> <p align="center"><b>OR</b></p> <p>State any one demerit of the process mentioned in S No.3</p>	S. No	Processes	1	The chemical decomposition of a liquid by the action of electric current passing through it, is called electrolysis.	2	With the help of a tester, rain water shows the conductivity of electric current, while distilled water does not	3	Depositing a thin layer of a desired metal on another material by means of electricity.	4
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38	<p>Raj read an article on AIDS –A killer disease in a leading newspaper. He also recalled that there was a poster contest in his school on the same topic. Raj wanted to explain details of AIDS disease to his friend who had no knowledge about it.</p> <p>a) List three ways in which AIDS can be transmitted from an infected person to other.            b) Name the causative organism of AIDS</p>	4								
39	<p>Electric charge is a physical property of a matter or substance which causes it to experience a force when placed near other matter or substance. Electric charges are of two types: positive charges and negative charges. A substance acquires electric charge on rubbing.</p> <p>When a comb is rubbed with dry hair, it gets electric charge. This electrically charged comb exerts a force on the tiny pieces of paper and attracts them. Similarly, a glass rod rubbed with silk cloth and an ebonite rod rubbed with woolen cloth also acquire the ability to attract small pieces of paper and are said to have electric charge. A substance having electric charge is said to be electrified or charged.</p> <p>a) A balloon rubbed with synthetic cloth sticks to the wall. What force is responsible for this? Define it.            b) We are given four spheres, A, B, C and D. Sphere A is positively charged and the charges on spheres B, C and D are unknown. Identify the charges on spheres C and D from the figure given below.</p>	4								



c)

i) Under what conditions do charges attract or repel each other?

ii) Sometimes, a crackling sound is heard while taking off sweaters during winter. Explain.

**OR**

i) Draw a labelled diagram of an electroscope and write its use.

ii) The strips of an electroscope diverge when a charged body is brought in contact with the metal disc. What will happen to the strips if we gently touch the metal disc with hands?

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