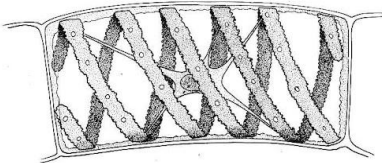
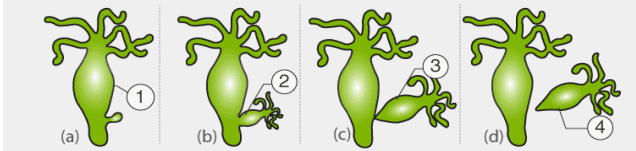


**DELHI PUBLIC SCHOOL JAMMU**  
**SESSION (2024-25)**  
**HALF-YEARLY EXAMINATION**  
**SAMPLE PAPER**

**Class: VIII**  
**Subject: SCIENCE**  
**General Instructions:**

**Time: 3hours**  
**Max. Marks: 80**

- All the questions are compulsory.
- The question paper has 5 sections A, B, C, D and E.
- Section A has 20 Multiple Choice Questions (MCQs) carrying 1 mark each.
- Section B has 7 Short Answer-I (SA-I) type questions carrying 2 marks each.
- Section C has 5 Short Answer-II (SA-II) type questions carrying 3 marks each (50-80 words).
- Section D has 3 Long Answer (LA) type questions carrying 5 marks each (80-120 words).
- Section E has 4 Case-Study based questions (4 marks each) with subparts.
- An internal choice in 1Q of 3 marks and 1Q of 5 marks has been provided.

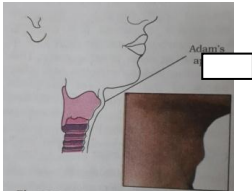
SN	Section – A Multiple Choice Questions	Mar ks
1	Excessive irrigation leads to _____, which stops the growth of the crop plants. (a) Flood                      (b) Drought                      (c) Water logging                      (d) Fertilizers	1
2	After fertilization the fertilized egg forms _____. (a) Zygote                      (b) Child                      (c) Embryo                      (d) Foetus	1
3	Identify the microorganism depicted in the picture below.  (a) Amoeba                      (b) Paramecium                      (c) Spirogyra                      (d) Yeast	1
4	Which one of the following gland secretes insulin? (a) Adrenal gland                      (b) Pancreas                      (c) Pituitary gland                      (d) Testes	1
5	Complete the given analogy Newton : Force ; Pascal : _____. (a) Pressure                      (b) Speed                      (c) Volume                      (d) Mass	1
6	Identify the object used as a solid lubricant. (a) Iron fillings                      (b) Mercury                      (c) Sandpaper                      (d) Graphite	1
7	Which of the following system of irrigation is most suitable for uneven land? (a) Dhekli                      (b) Sprinkler                      (c) Drip irrigation                      (d) Rahat	1
8	Which of the following diseases is caused by a fungi? (a) Cholera                      (b) Ringworm                      (c) Dengue                      (d) Polio	1
9	Identify the type of asexual reproduction being depicted in the picture below:  (a) binary fission                      (b) budding                      (c) spore formation                      (d) fragmentation	1
10	Which of the following metals is used in electroplating to make objects appear shining? (a) iron                      (b) copper                      (c) chromium                      (d) aluminium	1
11	The coating on electrician's instrument is made up of _____. (a) Graphite                      (b) Conuctors                      (c) Insulators                      (d) Metals	1
12	Which of the following gases is filled in the tetra packs of food to preserve it for a long time? (a) Argon                      (b) Neon                      (c) Nitrogen                      (d) Oxygen	1
13	Neck of the sperm is rich in: (a) Mitochondria                      (b) Nucleus                      (c) Ribosomes                      (d) None of these	1

14	<p>What is being depicted in the given experiment:</p> <p>(a) atmospheric pressure      (b) liquid pressure      (c) pressure      (d) none of these</p>	1
15	<p>Hazel is trying to move a piece of wood on different surfaces. On which of the following surfaces would it move the fastest?</p> <p>(a) Cement surface      (b) Icy surface      (c) Carpet      (d) Wooden surface</p>	1
16	<p>Identify the liquid that conduct electricity_____.</p> <p>(a) Honey      (b) Sugar solution      (c) Salt solution      (d) Oil</p>	1
	<p><b>(Q17-Q20) Assertion and Reason Based Questions</b>          In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as:</p> <p>a. Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).          b. Both assertion (A) and reason (R) are true and reason (R) is not the correct explanation of assertion (A).          c. Assertion (A) is true but reason (R) is false.          d. Assertion (A) is false but reason (R) is true.</p>	
17	<p>Assertion (A): Protozoa are unicellular microorganisms.          Reason (R): They are found in ponds lakes rivers the sea and dam soil.</p>	1
18	<p>Assertion (A): The presence of chemicals and impurities makes rainwater a good conductor of electricity.          Reason (R): When water falls as rain drops, many impurities dissolve in it which makes it a good conductor.</p>	1
19	<p>Assertion (A) : Seeds should be sown at the right depth.          Reason(R) : Only clean, healthy and disease free seeds should be selected.</p>	1
20	<p>Assertion (A): Boys have a low pitched voice.          Reason (R) : Boys develop a larger voice box.</p>	1
	<b>Section-B</b>	
21	Why are antibiotics ineffective in flu?	2
22	Differentiate between oviparous and viviparous animals with examples.	2
23	Raju wants to buy a fully grown mango tree from a nursery is it possible for him to buy a fully grown tree in a nursery? Why or why not?	2
24	Why do adolescents often find themselves confused?	2
25	Why do astronauts wear special 'spacesuits'?	2
26	Define the terms: (a) Sliding friction.      (b) Rolling friction	2
27	What are the benefits of an iron object electroplated with chromium?	2
	<b>Section-C</b>	
28	<p>What would happen if seminal fluids do not mix with sperms?          (OR)          Why is it necessary for the fishes and frogs to lay so many eggs?</p>	3
29	As a part of eco club activity you have to plan how to use the kitchen waste to add some nutrients to your garden soil. So prepare a chart showing the steps of your plan in a proper sequence.	3
30	<p>Give reasons for the following:</p> <p>(a) A heavy truck is fitted with six to fourteen tyres.          (b) Foundations of high rise buildings are kept wide          (c) Skiers use long flat skis to slide over snow</p>	3
31	What happens to the ova if (a) Fertilize (b) not fertilized in the fallopian tube?	3
32	Gymnast apply a coarse substance on their hands before performing. Give a reason why they do so.	3
	<b>Section-D</b>	
33	<p>(a) How does soil fertility depend on nitrogen cycle?          (b) Microbes help in making jute bags. Justify this statement.          (OR)          (a) Make a comparative list of manure and fertilizers.(Any three differences)          (b) Write a short note on green revolution.</p>	5
34	Describe the method of sexual reproduction with definition and example of human beings.	5

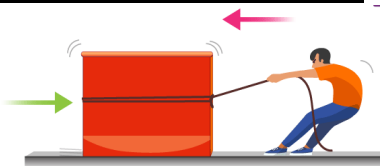
35	<p>Explain the following:</p> <p>(a) Define Chemical effect of electric current. State any two chemical effects of electric current.</p> <p>(b) Describe two uses of electroplating.</p>	5
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<b>Section-E</b> <b>Case Study based Questions</b>		
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36	<p><b>Read the following paragraph and answer the following questions:</b></p> <p>A boy named Yash from Gwalior who studies in 8th standard is very fond of plants. He has a small garden in the backyard. Where he has planted many small plants and takes good care of them. He regularly waters all the plants and uses fertilizers on them to keep them healthy. One day, a small announcement was made in school. In summer vacations, every student needs to do a project according to his/her own interest. Yash decided to grow a plant during summers and present it in front of the whole class as his project. Yash decided to grow peas. So he went to the market and bought the best quality seeds, sand and fertilizers. He came back home, went to the backyard and planted the seed. Started taking good care of it. But as day passed he began to realise that the seeds he planted are getting worse. The plant was unhealthy and very poor in quality. He tried everything but was unable to figure out the solution.</p> <p>(i) Rabi crops are grown in which period? (1)</p> <p>(a) February to June (b) October to March (c) June to November (d) December to January</p> <p>(ii) Which system is used for irrigation? (1)</p> <p>(a) Water (b) Sprinkler System (c) Drip System (d) Both b and c</p> <p>(iii) What can be the reasons of Yash's Failure to grow pea plant? How are Rabi crop different from Kharif crop? (2)</p>	4
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37	<p><b>Observe the diagram given below and answer the questions that follows:</b></p>  <p>(i) The protruding part of the throat in males is called_____. (1)</p> <p>(a) Goitre (b) Adam's apple (c) Thyroid (d) anaemia</p> <p>(ii) Boys develops _____ voice boxes. (1)</p> <p>(a) Smaller (b) Larger (c) Hard (d) no change</p> <p>(iii) Why the voice of some boys become rough at the time of puberty? (2)</p>	4
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38	<p><b>Read the following paragraph and answer the following questions:</b></p> <p>The atmospheric pressure on the earth's surface at sea level is one hundred thousand pascals i.e., 100 KPa. The atmospheric pressure at a place decrease with an increase in altitude. As we go up the length of the air column above us decreases. This means that its weight and the atmospheric pressure are smaller at higher places than at sea level. If the pressure of the atmosphere is removed suddenly, our blood vessels and tissues will rupture due to the pressure of the blood and other fluids inside. Thus, the spacemen also wear special pressurised suits as in space there is no air and hence, no air pressure. At the top of a mountain, some people can feel their ears "popping" due to a decrease in air pressure. The ears pop to balance the difference in pressure inside and outside the body.</p> <p>(i) The pressure exerted by the air around us is known as_____. (1)</p> <p>(a) Pressue (b) Force (c) Atmospheric pressure (d) Water pressure</p> <p>(ii) When we go to high altitude then the atmospheric pressure_____. (1)</p> <p>(a) Decreases (b) Constant (c) Increases (d) None of these</p> <p>(iii) Explain why astronauts wear specially designed spacesuits. (2)</p>	4
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39	<p><b>Observe the diagram given below and answer the questions that follows:</b></p>  <p>(i) Identify the type of friction depicted in the picture _____. (1)</p> <p>(a) Kinetic (b) Rolling (c) Static (d) Sliding</p> <p>(ii) It is _____ to walk on a rough surface than on a smooth surface. (1)</p> <p>(a) Easy (b) Challenging (c) Difficult (d) not possible</p> <p>(iii) Rolling friction is better than sliding friction. Why? (2)</p>	
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**Reflection Box**

1. How confident do you feel about your understanding of the topics covered in this assessment?	A) Very Confident	B) Somewhat Confident	C) Not Confident	
2. How well do you think you prepared for this assessment?	A) Very Well	B) Somewhat Well	C) Not Well	
3. What do you think you could have done differently to improve your performance on this assessment?	A) Studied thoroughly	B) Practiced more	C) Asked for help from the teachers or peers.	