



Date: 24/03/22 ANNUAL EXAMINATION (2021-22)

GRADE: VIII

SCIENCE

Max marks: 40

Time: 2 hours

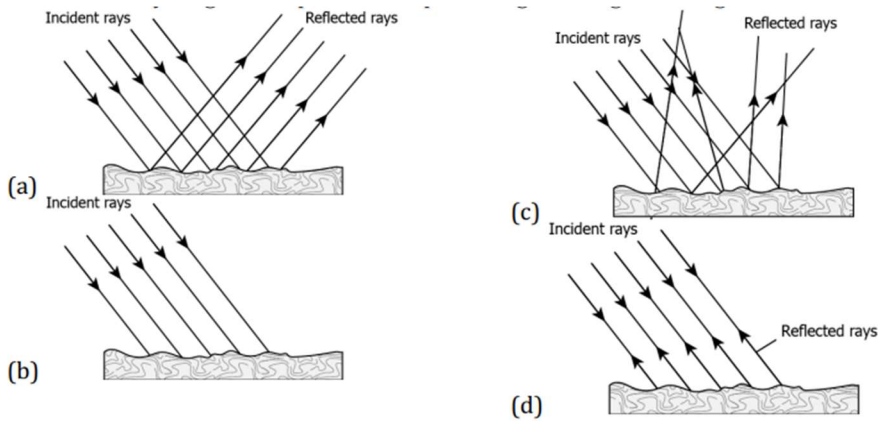
General Instructions:

1. This question paper contains FOUR sections.
2. Section A contains 20 multiple choice questions. Each carry one mark.
3. Section B contains 3 questions. Each carry 2 marks.
4. Section C contains 3 questions. Each carry 3 marks.
5. Section D contains one case based question which carry 5 marks.

Qn. No		
SECTION-A		
1	The normal length of vocal cords in man is A. 30mm B. 25mm C. 20mm D. 35mm	1
2	The part of the eye that renders colour to it is : A. Iris B. Cornea C. Retina D. eye lens	1
3	The part which resembles like a stretched rubber sheet inside the ear is A. Ear canal B. Pinna C. Ear drum D. Ear bones	1

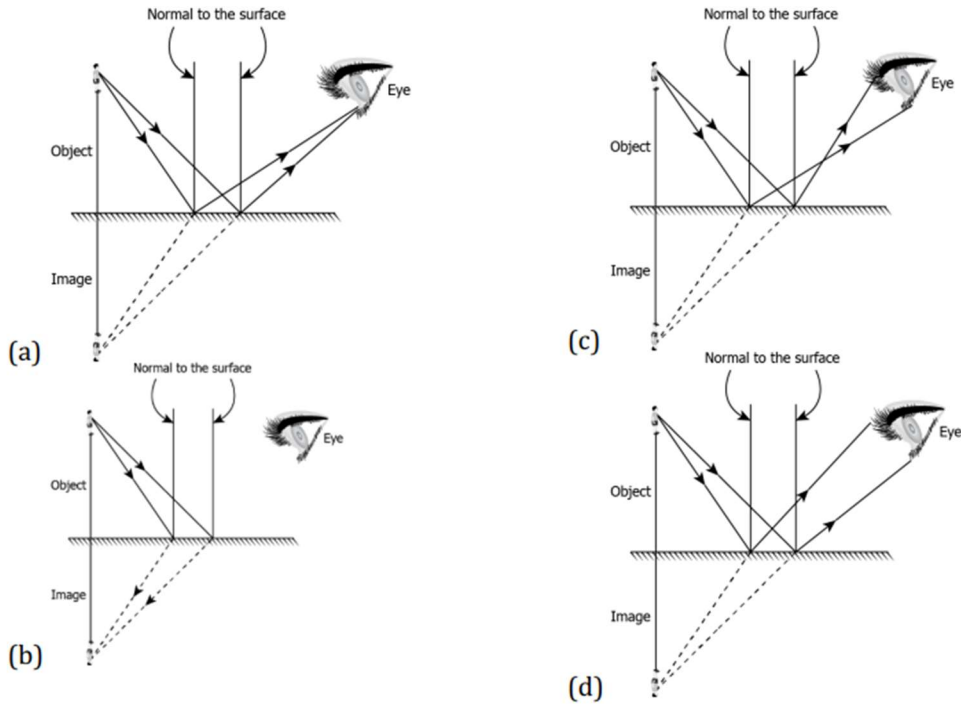
4

Which of these ray diagrams represent the path of light falling on a rough surface? 1



5

Which of these line diagrams represents the invert image formation by a plane mirror? 1



6

Two elements X and Y are reacted with oxygen to form their respective oxides. They are then dissolved in water. Element X forms a hydroxide which is basic in nature. Element Y forms an acid. What can element X and Y be classified as? 1

- A. X – metal; Y- non-metal
- B. X – non-metal; Y- metal
- C. X – metal; Y-metal
- D. X – non-metal; Y- non-metal

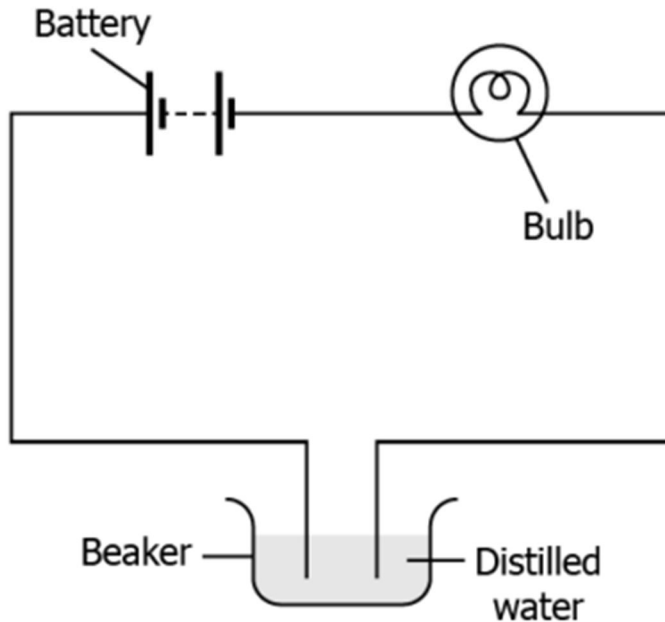
7	<p>Where would the given set of elements i.e., Sodium and phosphorous be used?</p> <p>A. Machinery</p> <p>B. Electric wires</p> <p>C. Fertilizers</p> <p>D. Fuel</p>	1															
8	<p>A student filled three beakers with solutions. Metals were added to each solution.</p> <table border="1"> <thead> <tr> <th>Beaker</th> <th>Solution</th> <th>Metal Added</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ZnSO₄</td> <td>Fe</td> </tr> <tr> <td>2</td> <td>FeSO₄</td> <td>Cu</td> </tr> <tr> <td>3</td> <td>CuSO₄</td> <td>Ag</td> </tr> <tr> <td>4</td> <td>CuSO₄</td> <td>Zn</td> </tr> </tbody> </table> <p>In which beaker would a displacement reaction take place?</p> <p>A. beaker 1</p> <p>B. beaker 2</p> <p>C. beaker 3</p> <p>D. beaker 4</p>	Beaker	Solution	Metal Added	1	ZnSO ₄	Fe	2	FeSO ₄	Cu	3	CuSO ₄	Ag	4	CuSO ₄	Zn	1
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9	<p>The table lists properties of a substance X</p> <table border="1"> <tbody> <tr> <td>1. Can be drawn into thin sheets</td> </tr> <tr> <td>2. Can bend into different shapes</td> </tr> <tr> <td>3. Can be made into thin wires</td> </tr> <tr> <td>4. Makes sound when hit with a hammer</td> </tr> <tr> <td>5. Good conductor of heat</td> </tr> <tr> <td>6. Conducts electricity but to not that well</td> </tr> </tbody> </table>	1. Can be drawn into thin sheets	2. Can bend into different shapes	3. Can be made into thin wires	4. Makes sound when hit with a hammer	5. Good conductor of heat	6. Conducts electricity but to not that well	1									
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	<p>What can substance X be classified as?</p> <p>A. metal, because metals change shape on their own</p> <p>B. non-metal, because non-metals can be made into wires</p> <p>C. non-metals, because non-metals are weak conductors of electricity</p> <p>D. metal, because metals are malleable and conductors of heat and electricity</p>	
10	<p>Sound is transmitted:</p> <p>A. Only in solid medium</p> <p>B. In liquid and solid mediums</p> <p>C. In solid and gas mediums</p> <p>D. In solid, liquid and gas mediums</p>	1
11	<p>The image shows the working principle of a kaleidoscope and images formed due to different angle of the mirrors within it.</p> <div> </div> <p>Which phenomenon results in the formation of pattern in a kaleidoscope?</p> <p>A. reflection increases the total amount of light</p>	1

- B. light can be generated by reflection of mirrors
- C. light can be reflected multiple times using sets of mirrors
- D. complete absorption of light by the mirrors results in formation of patterns.

12 A student makes a circuit as shown

1

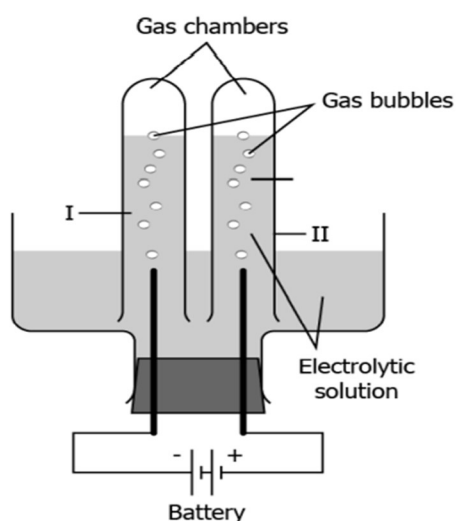


He notices that the bulb does not glow. What changes in the circuit will help to glow the bulb?

- A. add a pinch of sugar in the beaker
- B. cool the water present in the beaker
- C. heat the water present in the beaker
- D. add a pinch of common salt in the beaker.

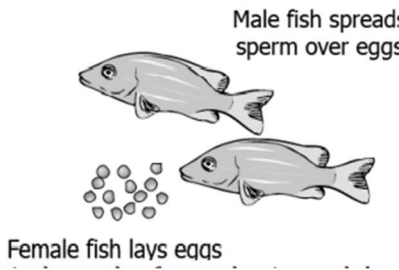
13 A student performed electrolysis of water that results in the release of hydrogen and oxygen as shown

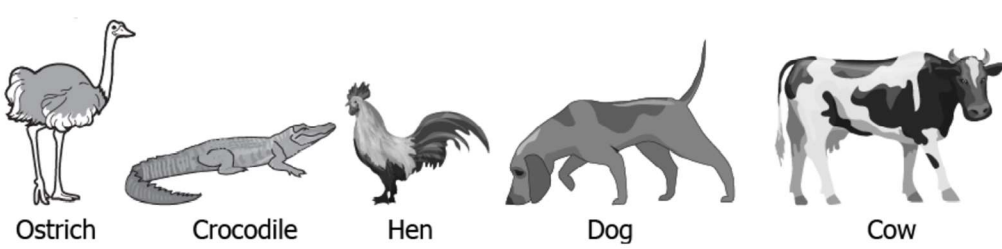
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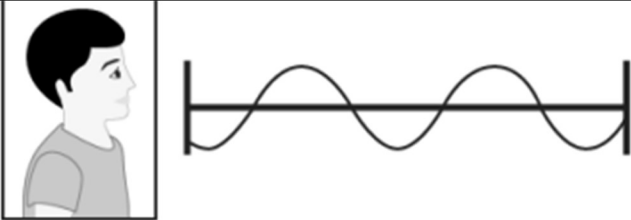


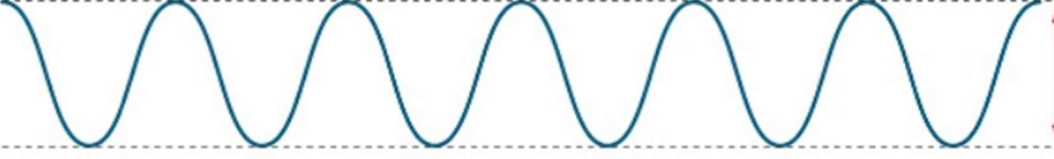

	<p>To determine the chambers with hydrogen or oxygen, the student brings a lighted candle near the two chambers. Which option states the correct observations?</p> <p>A. Both the gases will put off the candle. B. Both the gases will help the candle to burn. C. Hydrogen will put off the candle while oxygen would help the candle to burn. D. Hydrogen will help the candle to burn while oxygen would put off the candle</p>																													
14	<p>What happens when current is passed in the solution of copper sulphate having iron nail as cathode and copper rod as anode?</p> <p>A. Copper forms a layer on iron nail. B. Iron gets deposited on the copper rod. C. Iron rod completely dissolves in the solution. D. Sulphur forms a layer on the walls of the beaker.</p>	1																												
15	<p>What table shows the classification of animals into unicellular and multicellular animals?</p> <table border="1"> <tr> <td>(a)</td> <td> <table border="1"> <thead> <tr> <th>Unicellular Animals</th> <th>Multicellular Animals</th> </tr> </thead> <tbody> <tr> <td>Amoeba Paramecium</td> <td>Onion Fly</td> </tr> </tbody> </table> </td> <td></td> </tr> <tr> <td>(b)</td> <td> <table border="1"> <thead> <tr> <th>Unicellular Animals</th> <th>Multicellular Animals</th> </tr> </thead> <tbody> <tr> <td>Cheek cell RBC</td> <td>Paramecium Amoeba</td> </tr> </tbody> </table> </td> <td></td> </tr> <tr> <td>(c)</td> <td> <table border="1"> <thead> <tr> <th>Unicellular Animals</th> <th>Multicellular Animals</th> </tr> </thead> <tbody> <tr> <td>Fly RBC</td> <td>Paramecium Amoeba</td> </tr> </tbody> </table> </td> <td></td> </tr> <tr> <td>(d)</td> <td> <table border="1"> <thead> <tr> <th>Unicellular Animals</th> <th>Multicellular Animals</th> </tr> </thead> <tbody> <tr> <td>Algae Nerve cell</td> <td>Paramecium Amoeba</td> </tr> </tbody> </table> </td> <td></td> </tr> </table>	(a)	<table border="1"> <thead> <tr> <th>Unicellular Animals</th> <th>Multicellular Animals</th> </tr> </thead> <tbody> <tr> <td>Amoeba Paramecium</td> <td>Onion Fly</td> </tr> </tbody> </table>	Unicellular Animals	Multicellular Animals	Amoeba Paramecium	Onion Fly		(b)	<table border="1"> <thead> <tr> <th>Unicellular Animals</th> <th>Multicellular Animals</th> </tr> </thead> <tbody> <tr> <td>Cheek cell RBC</td> <td>Paramecium Amoeba</td> </tr> </tbody> </table>	Unicellular Animals	Multicellular Animals	Cheek cell RBC	Paramecium Amoeba		(c)	<table border="1"> <thead> <tr> <th>Unicellular Animals</th> <th>Multicellular Animals</th> </tr> </thead> <tbody> <tr> <td>Fly RBC</td> <td>Paramecium Amoeba</td> </tr> </tbody> </table>	Unicellular Animals	Multicellular Animals	Fly RBC	Paramecium Amoeba		(d)	<table border="1"> <thead> <tr> <th>Unicellular Animals</th> <th>Multicellular Animals</th> </tr> </thead> <tbody> <tr> <td>Algae Nerve cell</td> <td>Paramecium Amoeba</td> </tr> </tbody> </table>	Unicellular Animals	Multicellular Animals	Algae Nerve cell	Paramecium Amoeba		1
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16	<p>The table lists two parts of a plant cell with their function. Which parts of the plant cell are A and B?</p> <table border="1"> <tr> <td>A</td> <td>B</td> </tr> <tr> <td>Act as an outer covering in plant cell</td> <td>A small segment of genetic material</td> </tr> </table> <p>A. A is cell wall and B is DNA. B. A is cell wall and B is gene. C. A is cell membrane and B is gene. D. A is cell membrane and B is DNA.</p>	A	B	Act as an outer covering in plant cell	A small segment of genetic material	1																								
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17	<p>The cell wall is made of a non-living material known as:</p> <p>A. chromosome B. nucleic acid C. cellulose D. protoplasm</p>	1
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18	<p>The image shows a mode of reproduction in fishes.</p>  <p>Male fish spreads sperm over eggs</p> <p>Female fish lays eggs</p> <p>Based on the image, what is the mode of reproduction and the type of fertilization shown?</p> <p>A. sexual reproduction and internal fertilization B. sexual reproduction and external fertilization C. asexual reproduction and internal fertilization D. asexual reproduction and external fertilization</p>	1
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19	<p>The image shows five animals.</p>  <p>Ostrich Crocodile Hen Dog Cow</p> <p>Which table shows the classification of the animals into viviparous and oviparous animals?</p> <div style="display: flex; justify-content: space-around;"> <div> <p>(a)</p> <table border="1"> <thead> <tr> <th>Viviparous Animals</th> <th>Oviparous Animals</th> </tr> </thead> <tbody> <tr> <td>Crocodile, hen</td> <td>Ostrich, dog, cow</td> </tr> </tbody> </table> <p>(b)</p> <table border="1"> <thead> <tr> <th>Viviparous Animals</th> <th>Oviparous Animals</th> </tr> </thead> <tbody> <tr> <td>Crocodile, hen, cow</td> <td>Dog, ostrich</td> </tr> </tbody> </table> </div> <div> <p>(c)</p> <table border="1"> <thead> <tr> <th>Viviparous Animals</th> <th>Oviparous Animals</th> </tr> </thead> <tbody> <tr> <td>Dog, hen, ostrich</td> <td>Cow, crocodile</td> </tr> </tbody> </table> <p>(d)</p> <table border="1"> <thead> <tr> <th>Viviparous Animals</th> <th>Oviparous Animals</th> </tr> </thead> <tbody> <tr> <td>Hen, ostrich</td> <td>Dog, cow, crocodile</td> </tr> </tbody> </table> </div> </div>	Viviparous Animals	Oviparous Animals	Crocodile, hen	Ostrich, dog, cow	Viviparous Animals	Oviparous Animals	Crocodile, hen, cow	Dog, ostrich	Viviparous Animals	Oviparous Animals	Dog, hen, ostrich	Cow, crocodile	Viviparous Animals	Oviparous Animals	Hen, ostrich	Dog, cow, crocodile	1
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20	<p>Why does the process by which hydra reproduces is considered as an asexual mode of reproduction?</p> <p>A. The process gives rise to a young hydra similar to its parent.</p> <p>B. The process involves the separation of young hydra from its parents.</p> <p>C. The process requires opposite sexes of hydra to interact with each other.</p> <p>D. The process requires just one parent hydra to give birth to a young hydra.</p>	1
SECTION B		
21	<p>a) State the laws of reflection of light.</p> <p>b) If the incident ray strikes the mirror at 90°, what will be the angle of reflection?</p>	2
22	<p>What happens when</p> <p>a) Dilute Sulphuric acid is poured on a copper plate?</p> <p>b) Iron nails are placed in copper sulphate solution?</p> <p>Write word equations of the reactions involved.</p>	2
23	<p>Why do you think it is necessary for frogs and fish to lay so many eggs?</p>	2
SECTION C		
24	<p>Explain the process of electroplating with the help of an example. Give its any two uses.</p>	3
25	<p>Why do plant cells need a cell wall, whereas animal cells do not?</p>	3
26	<p>Describe the process of fertilization in human beings.</p>	3
SECTION D		
	<p>In our day-to-day life we come across different types of sound. A mother talking to her kid has a different voice pattern compared to that of the kid. Amplitude and frequency are the two characteristics of sound which makes one sound different from others. Observe the different sound wave pattern given below and answer the following questions.</p>	

<p>Fig 1</p>  <p>Fig 2</p>  <p>Fig 3</p>  <p>Fig 4</p>  <p>Fig 5</p> 		
<p>27</p>	<p>The voice of a lady as compared to that of a man is:</p> <p>A. Of less frequency B. Of more frequency C. Of equal frequency D. Of less amplitude</p>	<p>1</p>
<p>28</p>	<p>Which among the waves show high amplitude?</p> <p>A. fig 1 B. fig 3 C. fig 4 D. fig 5</p>	<p>1</p>
<p>29</p>	<p>The pitch of sound depends on :</p> <p>A. Amplitude B. Frequency C. Both amplitude and Frequency</p>	<p>1</p>

	D. None of these.	
30	If there are 25 waves produced in 5 seconds, what will be its time period A. 5 second B. 1 second C. 1/5 second D. 0.1 second	1
31	The range of frequency for human audible sound is A. 10Hz to 500 Hz B. 20Hz to 200Hz C. 20 Hz to 20000Hz D. None of these	1

Send the answer scripts to :
answersheets.tv@gmail.com