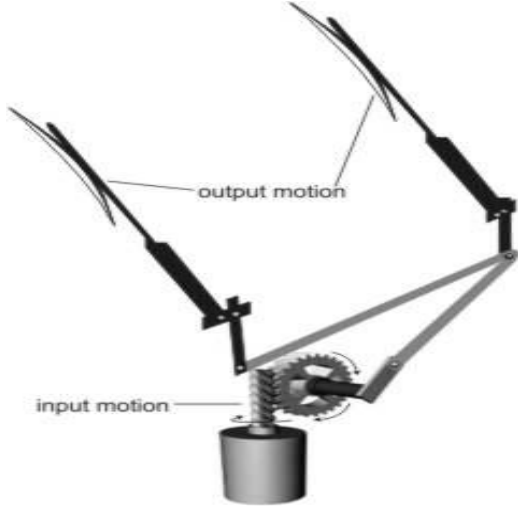



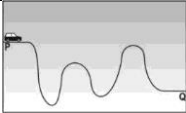
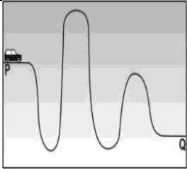
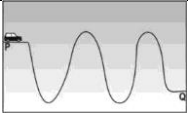
TOPIC- MOTION AND TIME (CH.-13) , ELECTRIC CURRENT AND ITS EFFECTS (CH.-14)

Q.N.	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)															
1.	4_24 Science 10291	Motion and Time (Chapter -13)	There are four basic types of motion in mechanical systems: ROTARY MOTION is turning round in a circle; LINEAR MOTION is moving in a straight line; RECIPROCATING MOTION is moving backwards and forwards in a straight line; OSCILLATING MOTION is swinging from side to side Many mechanical devices convert motion from one type to another. What is the input and output motion for the equipment given alongside? (See the arrows showing the direction and type of the input motion.)	 <table border="1" data-bbox="1312 1161 1809 1410"> <thead> <tr> <th></th> <th>Input motion type</th> <th>Output motion type</th> </tr> </thead> <tbody> <tr> <td>A.</td> <td>Reciprocating</td> <td>Linear</td> </tr> <tr> <td>B.</td> <td>Rotary</td> <td>Linear</td> </tr> <tr> <td>C.</td> <td>Oscillating</td> <td>Reciprocating</td> </tr> <tr> <td>D.</td> <td>Rotary</td> <td>Oscillating</td> </tr> </tbody> </table>		Input motion type	Output motion type	A.	Reciprocating	Linear	B.	Rotary	Linear	C.	Oscillating	Reciprocating	D.	Rotary	Oscillating	D
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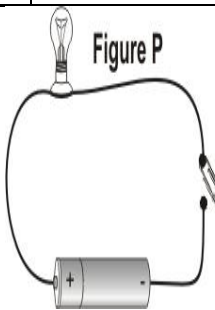
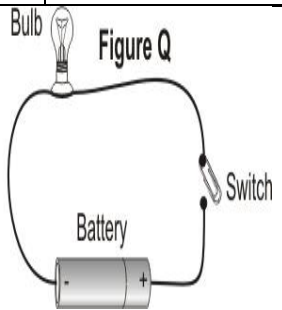
		Answer Options			
		Option A	Option B	Option C	Option D
		A	B	C	D

2.	4_24 Science 10306	Motion and Time (Chapter -13)	Assume that a cycle and a car reach speed breaker P at the same time. What can we say about the distance between the two vehicles at T, compared to if the speed breakers had NOT been there?		C
		Answer Options			
		Option A	Option B	Option C	Option D
		The vehicles will cross T at the SAME TIME whether or not there are speed breakers.	The distance between the vehicles will be MORE when there are speed breakers.	The distance between the vehicles will be LESS when there are speed breakers.	The distance between the vehicles will be LESS, but the cycle will be ahead of the car.

3.	4_24 Science 10296	Motion and Time (Chapter -13)	See this figure of an hour glass (or sand clock) which is used to measure time. One of the important factors that determines the ability of the hour glass to measure time accurately is the fineness of the sand in it. Coarse sand will wear away the glass, making the measurement inaccurate. In what way will the time measured by an hour glass having coarse sand be inaccurate (assuming no other defect in the hour glass)?		A		
Answer Options							
Option A		Option B		Option C		Option D	
The time taken for the sand to drain completely will be less than what it should be.		The time taken for the sand to drain completely will be more than what it should be.		The hour glass will not function at all due to the effect of the coarse sand.		(The hour glass will continue to be accurate and it will not be affected by coarse sand.)	

4.	4_24 Science 10294	Motion and Time (Chapter -13)	A roller coaster track has to be designed with P as the starting point - that is, the coaster has to start from rest at point P, and travel along the track up to a point Q. Which of these tracks would make that possible?		A		
Answer Options							
Option A		Option B		Option C		Option D	
						All of them are possible	

5.	3_15 Science 3540 5.2.3	Electric Current and its Effects (Chapter -14)	A torch uses three different forms of energy. Which of these shows the energy changes in the correct order?		D
Answer Options					

		Option A	Option B	Option C	Option D										
		Mechanical----> Heat--- ----> Chemical	Heat-----> Chemical----- -> Light	Electrical-----> Mechanical----> Chemical	Chemical-----> Electrical-----> Light										
6.	3_15 Science 3546 5.2.3	Electric Current and its Effects (Chapter -14)	The table given below classifies a few substances as good or bad conductors of electricity. Which substance has been put under the wrong heading?	<table border="1"> <thead> <tr> <th>Good Conductors</th> <th>Bad Conductors</th> </tr> </thead> <tbody> <tr> <td>Graphite</td> <td>Plastic</td> </tr> <tr> <td>Wax</td> <td>Air</td> </tr> <tr> <td>Copper</td> <td>Paper</td> </tr> <tr> <td>Iron</td> <td>Cloth</td> </tr> </tbody> </table>	Good Conductors	Bad Conductors	Graphite	Plastic	Wax	Air	Copper	Paper	Iron	Cloth	C
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7.	3_16 Science 2419	Electric current and Its Effect (Chapter -14)	See the circuit shown below in figure P. If the battery is connected the other way (as shown in figure Q), what will happen?			A									
Answer Options															

		Option A	Option B	Option C	Option D
		The bulb will glow in exactly the same way.	The bulb will glow but less brightly.	The bulb will blow or fuse out.	The bulb will not glow, but not get damaged.

8.	2_9 Science 5064	ELECTRIC CURRENT AND ITS EFFECT (Chapter -14)	Study this electrical circuit. It consists of a powerful battery, a bulb, an electromagnet and a movable connection. The connection is designed in such a way that it closes (that is, it allows electric current to pass) when the electromagnet is not magnetised; but opens when the electromagnet is magnetised. If the electromagnet takes 5 seconds to get magnetised, what will be status of the electric bulb?		B
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		Answer Options				
		Option A	Option B	Option C	Option D	
		It will remain OFF - it will not glow at all.	It will alternate between ON and OFF states.	It will come ON after some seconds and keep glowing.	It will stay ON for a few seconds and then go OFF.	

9.	2_10 SCIENCE 4150 17.5.9	ELECTRIC CURRENT AND ITS EFFECT (Chapter -14)	Rita wants to send a written message and a picture to her friend. Which of the following should she use?		C	
		Answer Options				
		Option A	Option B	Option C	Option D	
		A pager	A telephone	A fax machine	A television	

10.	2_9 SCIENCE 6058 17.5.9	ELECTRIC CURRENT AND ITS EFFECT (Chapter -14)	The figure shows an electric iron - it uses a wire that can be detached from the main iron. In which of these cases will electricity be consumed?	<p>1. Switched off</p> <p>2. Switched on</p> <p>3. Switched on, not connected</p> <p>4. Switched on, connected</p>	A
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Answer Options

Option A	Option B	Option C	Option D
Only 4	Only 3 and 4	Only 2, 3 and 4	All the cases.

11.	2_9 SCIENCE 4981 17.5.9	ELECTRIC CURRENT AND ITS EFFECT (Chapter -14)	The diagram shows a flashlight battery and a bulb connected by wires to various substances. Which of the bulbs will light?			B			
				Answer Options					
				Option A	Option B		Option C	Option D	

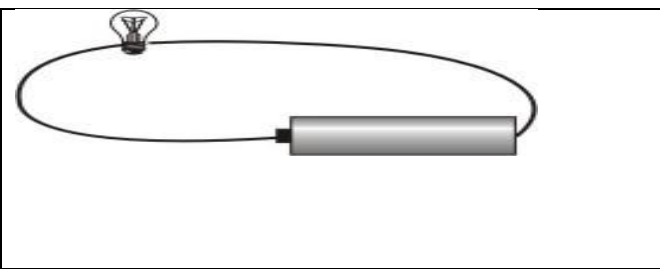
12.	2_10 SCIENCE 4169 17.5.9	ELECTRIC CURRENT AND ITS EFFECT (Chapter -14)	Many electrical devices like televisions and electric irons have plugs which have 3 pins. However, other devices sometimes work with only 2 pins. Why is the third pin necessary?		C
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Answer Options				
Option A	Option B	Option C	Option D	
It is not necessary; it is only to provide a better grip.	Since the sockets often have three holes, the third pin fits into the third hole.	It is provided for safety in case electricity leaks onto the body of the appliance.	It allows the electric device to draw more power than it could with only 2 pins.	

13.	2_9 SCIENCE 6043	ELECTRIC CURRENT AND ITS EFFECT (Chapter -14)	When a plastic spoon is rubbed on a woollen cloth and held above a mixture of salt and pepper, pepper jumps to the spoon. Choose the best reason for this:		C
Answer Options					
		Option A	Option B	Option C	Option D
		Air pushes the pepper towards the spoon.	The spoon temporarily gets magnetised.	The spoon temporarily gets charged with static electricity.	Gravitational attraction pulls the pepper to the spoon.

14.	2_10 SCIENCE 4180 17.5.9	ELECTRIC CURRENT AND ITS EFFECT (Chapter -14)	See Circuit 1. Bulbs X and Y are glowing. If a second cell is added to the circuit as shown in Circuit 2, with switch P closed and switch Q open, what would happen to bulbs X, Y and Z?.	<p>Circuit 2 Cell Switch P is closed X Y Z Switch Q is open</p> <p>Circuit 1 Cell X Y Switch P is closed</p> <table border="1" data-bbox="1144 751 1839 943"> <thead> <tr> <th>Options</th> <th>Brightness of X and Y</th> <th>Z</th> </tr> </thead> <tbody> <tr> <td>A.</td> <td>Doubles</td> <td>Not lit</td> </tr> <tr> <td>B.</td> <td>Decreases</td> <td>Not lit</td> </tr> <tr> <td>C.</td> <td>Increases</td> <td>lit</td> </tr> <tr> <td>D.</td> <td>Doubles</td> <td>lit</td> </tr> </tbody> </table>	Options	Brightness of X and Y	Z	A.	Doubles	Not lit	B.	Decreases	Not lit	C.	Increases	lit	D.	Doubles	lit	A
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Answer Options			
Option A	Option B	Option C	Option D
A	B	C	D

15.	3_17 Science 1523	Electric current and its Effects (Chapter -14)	When connected as shown, the bulb glows, but dimly. Which of these CAN be the explanation for this:		C		
Answer Options							
Option A		Option B		Option C		Option D	
The wires are not touching the battery or bulb.		The bulb is fused (that is, its filament is broken.)		The battery is weak and not producing enough electricity.		The battery is connected the wrong way around.	