

Question Paper

Subject: Science


Grade: 9th

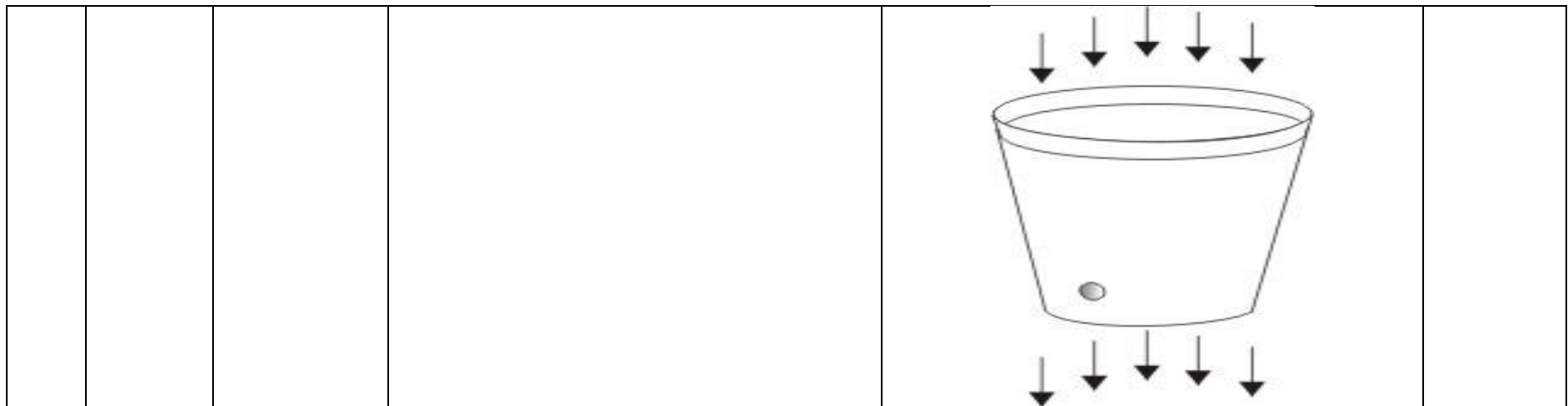
Set-14(MIXED SET)

Q.N	Folder name & Question Code	Topic	Question with Answer Option	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	1_3 Science 7325	7.DIVERSITY IN LIVING ORGANISM	Among these species, which one appeared most recently on the earth?		C
Answer Options					
	Option A Fish	Option B Reptiles	Option C Man	Option D Birds	
2	4_23 Science 9045	9.FORCE AND LAWS OF MOTION	The momentum of a moving object is a measure of its motion, and is defined as the product of its mass and velocity. That is why, in common experience, the impact of hitting a moving object depends both on its size (mass) and its speed (velocity). What would be the unit of momentum?		C
Answer Options					

	Option A Kg x s	Option B Kg x m x s	Option C Kg x m/s	Option D Kg x m/s													
3.	3_16 Science 2422	10.GRAVITATION	The density of water is 1 g/cm^3 . If each of these liquids X, Y and Z is immiscible in water, which of them will float on water?	<table border="1"> <thead> <tr> <th>Liquid</th> <th>Mass (g)</th> <th>Volume (cm^3)</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>5.4</td> <td>5</td> </tr> <tr> <td>Y</td> <td>46</td> <td>50</td> </tr> <tr> <td>Z</td> <td>130</td> <td>100</td> </tr> </tbody> </table>	Liquid	Mass (g)	Volume (cm^3)	X	5.4	5	Y	46	50	Z	130	100	C
Liquid	Mass (g)	Volume (cm^3)															
X	5.4	5															
Y	46	50															
Z	130	100															

Answer Options

	Option A All the three liquids will float	Option B Liquids X and Z will float	Option C Liquid Y will float	Option D The information given is not enough to decide	
4	4_23 Science 9062	11.WORK AND ENERGY	Take a paper or Styrofoam cup, and make a small hole with a sharpened pencil on the side of the cup near its bottom. Hold your thumb over the hole as you fill the cup with water. Remove your thumb. Water will flow out as shown here. Take the same cup. Again, seal the hole with your thumb and fill the cup. Drop the filled cup from a height as shown here and observe it carefully while it falls. What will happen to the water flow WHILE THE CUP IS FALLING?		C



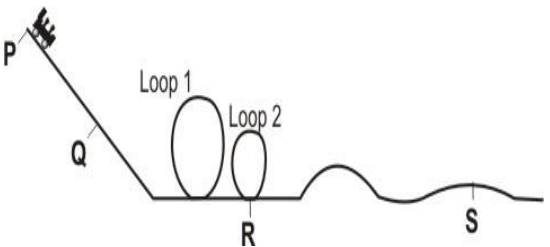
Answer Options

	Option A The flow of water will increase	Option B The flow of water will almost stop	Option C The flow of water will remain unchanged	Option D The water will overflow from the top of the cup	
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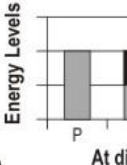
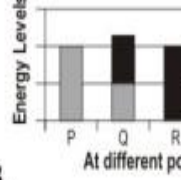
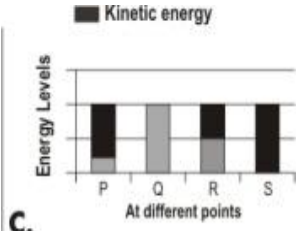
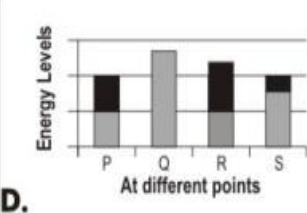
5	4_23 Science 9045	9.FORCE AND LAWS OF MOTION	The momentum of a moving object is a measure of its motion, and is defined as the product of its mass and velocity. That is why, in common experience, the impact of hitting a moving object depends both on its size (mass) and its speed (velocity). What would be the unit of momentum?		C
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Answer Options

	Option A Kg x s	Option B Kg x m x s	Option C Kg x m/s	Option D Kg x m/s	
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6	3_17 Science 1507	11.WORK AND ENERGY	Potential energy is dependent upon an object's mass and its position (height), while kinetic energy is dependent upon its mass and speed. A roller coaster starts from P and reaches S, passing through loops on the way. Which graph BEST describes how the potential and kinetic energy of the roller coaster change during motion? (Potential Energy - grey; Kinetic energy - black)		A
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Answer Options

	<p align="center">Option A</p> 	<p align="center">Option B</p> 	<p align="center">Option C</p> 	<p align="center">Option D</p> 	
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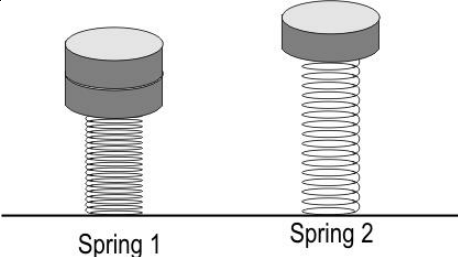
7	3_16 Science 2407	11.WORK AND ENERGY	In Physics, work is said to be done if an unbalanced force moves its point of application through a distance measured in the direction of force. Which of these pictures BEST illustrates work being done?		A
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Answer Options

	<p align="center">Option A</p>	<p align="center">Option B</p>	<p align="center">Option C</p>	<p align="center">Option D</p> 	
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8	4_23 Science 9040	11.WORK AND ENERGY	In which of these simple machines is the output force (exerted by the machine) GREATER than the input force (exerted by the user)?	B

Answer Options

	Option A Beam balance	Option B Wheel barrow	Option C Fishing rod	Option D Scissors	
9	4_23 Science 9060	11.WORK AND ENERGY	Springs 1 and 2 as shown in the figure are identical springs. In the positions shown, which spring has more stored energy?		A

Answer Options

	Option A Spring 1 has more stored energy.	Option B Spring 2 has more stored energy.	Option C Both have the same stored energy.	Option D It depends on the spring's material.	
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10	4_23 Science 9059	12.SOUND	The table below shows the speed of sound in different substances. The names of the substances are given in alphabetical order. Which of these substances does NOT follow the pattern of the speed of sound in materials of different states of matter?	Medium	Speed of sound (m/s)	State	B
				Air (0°C)	331	gas	
				Copper	4760	solid	
				Cork	500	solid	
				Helium (0°C)	965	gas	
				Hydrogen	1284	gas	
				Kerosene (25°C)	1324	liquid	
				Lead	1960	solid	
				Mercury	1452	liquid	
				Rubber	1830	solid	
Water (20°C)	1482	liquid					

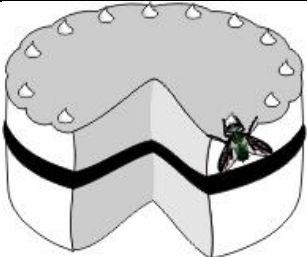
Answer Options

	Option A Air	Option B Cork	Option C Mercury	Option D Water	
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11	4_23 Science 9058	12.SOUND	The question is related to the speed of sound. If the formula, $v = K + 0.6T$ gives the speed of sound in air (v) in metres per second, where T is the temperature of the air in degrees Celsius, what should K be equal to?		B
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Answer Options

	Option A speed of sound in vacuum in metres per second	Option B speed of sound in air at 0° C in metres per second	Option C a constant representing the temperature of the air	Option D (the value of K cannot be determined from the information given)	
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12	4_23 Science 9034 20.5.10	13.(Why do we fall ill)	Which of the following diseases can be caused by eating the pastry infected by germs from this fly?		
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Answer Options

	Option A Diarrhoea	Option B Malaria	Option C Measles	Option D Cold	
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13	4_25 Science 11959 12.3.6	13.(Why do we fall ill)	Smallpox, a deadly disease which is believed to have been eradicated, was initially thought to spread through the air. Today, we know that it actually spread through		C
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Answer Options

	Option A Contaminated water.	Option B Carrier mosquitoes.	Option C Contact with an infected person.	Option D Contaminated food.	
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14	3_16 Science 2410 24.6.12	13.(Why do we fall ill)	Ketki is unwell. Her mother adds 1 teaspoon of table salt and 8 teaspoons of sugar in a litre of water and gives it to Ketki to drink at regular		B
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			intervals. What is Ketki most probably suffering from?		
Answer Options					
	Option A Jaundice	Option B Diarrhea	Option C Typhoid	Option D Pneumonia	