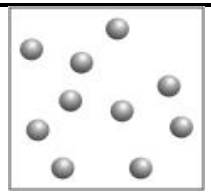
SET- 5 CLASS VII TOPIC -HEAT (CH.4) SUBJECT -SCIENCE

S.N	Folder Number & Question Code	Topic	Question With Answers Options	Image (If Any)	Correct Answer (Option – A, B, C, D)
1.	3_16 Science 2423	**Heat (CHAPTER -4)**	How do solar cells (fitted in satellites) work in space even though it is black all around?		**A**

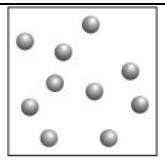
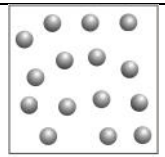
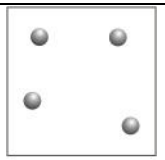
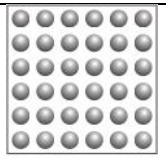
Answer Options			
Option A	Option B	Option C	Option D
Even though it is black around, sunlight is present and charges the solar cells as on earth.	There is no sunlight, but the solar cells are charged by the light from the stars.	The cells are charged on Earth for life long use and do not need to be charged in space.	They get charged during the day time in space, when it is not black all around.

S.N	Folder Number & Question Code	Topic	Question With Answers Options	Image (If Any)	Correct Answer (Option – A, B, C, D)
2.	3_16 Science 2426	**Heat**	Mayank visited a power plant and saw this board outside. What type of plant must it have been?		B

Answer Options

		Option A	Option B	Option C	Option D
		Thermal power plant	Nuclear power plant	Gas-based power plant	It could have been any type of power plant.
3.	3_15 Science 2428	**Heat**	The picture shows the molecular arrangement of a material X. If the material is subjected to increase in temperature, what will be the likely change in its molecular arrangement?		C

Answer Options

Option A	Option B	Option C	Option D
 A.	 B.	 C.	 D.

4.	4_24 Science 10269	**Heat**	Nitrogen condenses at -196 deg C and freezes at -210 deg C. At which of the following temperatures can you store nitrogen in LIQUID form?		C

Answer Options

Option A	Option B	Option C	Option D
-225 deg C	-190 deg C	-200 deg C	0 deg C

5.	4_24 Science	**Heat**	The boiling point of water at the top of Mount Everest may be which of the following?		C

	10281	Answer Options			
		Option A	Option B	Option C	Option D
		112deg C	100 deg C	69 deg C	0 deg C
6.	4_24 Science 10282	**Heat**	Which of the following could be placed in a glass tumbler before pouring hot milk into it to reduce the chances of the tumbler cracking due to the heat?		B
		Answer Options			
		Option A	Option B	Option C	Option D
				 C.	
7.	4_24 Science 10289	**Heat**	Why is it hotter in summer than in winter?		**B**
		Answer Options			
		Option A	Option B	Option C	Option D
		this is due to the Earth being closer to the Sun in summer.	this is due to the tilt in the axis of the Earth.	this is due to the rotation of the Earth on its axis.	this is due to hot winds that blow on the Earth's surface.

8.	**4_25 Science** **11948**	**Heat**	When solid candle wax is heated, it becomes liquid. The molecules		**A**

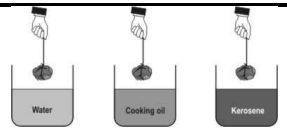
Answer Options

Option A	**Option B**	**Option C**	**Option D**
Absorb heat and move apart.	absorb heat and come together	Release heat and move apart.	Release heat and come together.

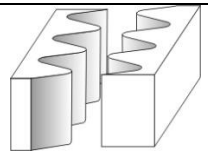
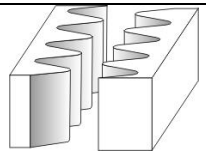
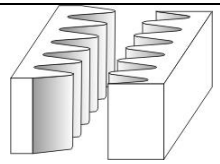
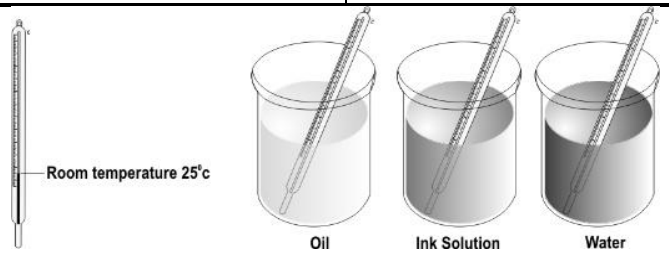
9.	**4_25 Science** **11886**	**Heat**	What is the difference between evaporation and boiling?		B

Answer Options

Option A	**Option B**	**Option C**	**Option D**
There is no difference - they are exactly the same.	Evaporation, unlike boiling, occurs at all temperatures.	In evaporation, unlike in boiling, there is no state change.	In boiling, unlike in evaporation, the liquid volume reduces.

10.	4_24 Science 10287	**Heat**	Rahul ties a string around a stone. He takes three beakers with equal volumes of water, cooking oil and kerosene. He then immerses the stone completely in each of the 3 beakers, one after the other. What is he likely to find?		C

Answer Options

			Option A	Option B	Option C	Option D
			The level of the liquid falls by different amounts in the three beakers.	There is an unequal increase in the level of the three liquids.	There is an equal increase in the level of the three liquids.	The level of the liquid does not change in any of the three beakers.
11.	4_23 Science 9064	**Heat**	The rate of cooling of a piece of metal increases with an increase in its exposed surface area. 3 identical blocks of aluminum are used to make three different pieces. Which of these will lose heat fastest?			C
			Answer Options			
			Option A	Option B	Option C	Option D
						**All three will lose heat equally fast.**
12.	4_23 Science 9068	**Heat**	Three beakers containing different liquids are placed in a room where the room temperature is about 25°C. What would be the correct set of temperatures of the three liquids?			C

	Beaker P	Beaker Q	Beaker R
A	> 25 °C	= 25 °C	= 25 °C
B	= 25 °C	< 25 °C	< 25 °C
C	= 25 °C	= 25 °C	= 25 °C
D	< 25 °C	< 25 °C	< 25 °C

Answer Options			
Option A	Option B	Option C	Option D
A	B	C	D

13.	4_23 Science 9075	**Heat**	Which of these metals remains a liquid over the widest range of temperature?	The table below gives the melting and boiling points of a few metals. Use it to answer the question.	D

Name of the metal	Melting point (°C)	Boiling point (°C)
Silver	962	2212
Tin	232	2270
Gold	1062	2807
Aluminium	660	2467
Tungsten	3410	6170
Lead	328	1740

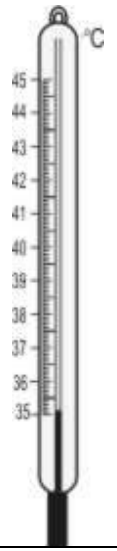
Answer Options			
Option A	Option B	Option C	Option D
Silver	Tin	Aluminum	Tungsten

14.	4_23 Science 9076	**Heat**	Soft solders are filler metals that melt and flow below 430°C. Which pair of metals would be most suitable for soft solders?	The table below gives the melting and boiling points of a few metals. Use it to answer the question. **Name of the metal** / **Melting point (°C)** / **Boiling point (°C)** Silver / 962 / 2212 Tin / 232 / 2270 Gold / 1062 / 2807 Aluminium / 660 / 2467 Tungsten / 3410 / 6170 Lead / 328 / 1740	C

Answer Options			
Option A	Option B	Option C	Option D
Silver and gold	Tin and aluminum	Tin and lead	Aluminum and Tungsten

15.	4_24 Science 10313	Heat	Four thermometers are shown below. Which of these would be the MOST appropriate to measure our body temperature?		**B**

Answer Options			
Option A	Option B	Option C	Option D

			 °C 100 90 80 70 60 50 40 30 20 10 0	 °C 45 44 43 42 41 40 39 38 37 36 35	 °C 10 8 6 4 2 0 -2 -4 -6 -8 -10	 °C 35 34 33 32 31 30 29 28 27 26 25