

CLASS: IX	INDIAN SCHOOL MUSCAT SECOND PERIODIC ASSESSMENT – 2019-20	SUBJECT: PHYSICS
	<b>SET - A</b>	
Q.NO.	VALUE POINTS	SPLIT UP MARKS
1.	Mass of planet Radius of planet	1
2.	When a body is completely or partially immersed in a fluid, it experiences an upward force which is equal to the weight of fluid displaced by it. Designing of ships, Lactometer	1 1
3.	Mass of the body on earth = $600/10 = 60\text{kg}$ . Mass of body on Moon = $60\text{Kg}$ Acceleration due to Gravity on moon $100/60 = 1.66\text{ m/s}^2$	2
4.	Gravitational force Mass of the Sun, Mass of planet, Distance between sun and planet	2
	<b>SET - B</b>	
1	Every object in the universe attracts every other object with a force which is directly proportional to the product of masses and inversely proportional to the square of distance between them.	1
2	Relative density of a substance is defined as the ratio of density of the substance to the density of water. $R.D = 860/1000 = 0.86$	1 1
3	The surface area of sheet of paper is large on comparing with that of crumpled paper. So the sheet of paper has to encounter more air resistance compared to the other one. Hence the sheet of paper comes slower. $g = GM/R^2$ M- mass of planet R – Radius of planet	1 1
4	$h = ut + \frac{1}{2}gt^2 = \frac{1}{2} \times 9.8 \times 16 = 78.4\text{ m}$	2
	<b>SET - C</b>	
1	Weight is defined as the force with which an object is attracted towards the centre of earth	1
2	Gravitational force. It depends on the mass of sun, mass of planet and the distance between them.	1+1
3	$V^2 - u^2 = 2gh$ ; $0 - 0.5 \times 0.5 = 2 \times 10 \times h$ ; $h = 0.0125\text{m}$	2
4	a)Weight of the object and the buoyant force b) Volume of the object and density of the liquid	1 1

CLASS:IX	<b>INDIAN SCHOOL MUSCAT SECOND PERIODIC ASSESSMENT MARKING SCHEME</b>	SUBJECT: SCIENCE
	<b>SET -A,B&amp;C</b>	
QP.NO.	VALUE POINTS	SPLIT UP MARKS
Chemistry	<b>SET - A</b>	
5	Fractional distillation	1
6	Physical change: reversible change, chemical composition does not change, no new substance is formed. Chemical change: irreversible change, chemical composition changes, new substance is formed. Burning of candle is an example in which both physical and chemical change take place.	1  1
7	(a) $4.6g + 3.4g \rightarrow 2.8g + 5.2g$ $8 = 8$ i.e. mass of reactant = mass of product This is in agreement with law of conservation of mass. (b) Define law	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$
8	(a) chromatography (b) based on the difference in solubilities of different solutes in the same solvent. (c) to separate colours in a dye, to separate drugs from blood	$\frac{1}{2}$ $\frac{1}{2}$  $\frac{1}{2} + \frac{1}{2}$
Chemistry	<b>SET B</b>	
5	Crystallisation	1
6	(a) physical change (b) chemical change (c) chemical change (d) physical change	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$
7	Any four postulates	$\frac{1}{2} \times 4$
8	Reservoir sedimentation tank to allow solid to settle $\rightarrow$ Loading tank to sediment the suspended impurities $\rightarrow$ Filtration tank $\rightarrow$ Chlorination tank to kill bacteria $\downarrow$ supply	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$
Chemistry	<b>SET C</b>	
5	To separate colours in a dye, pigments from natural colours, drugs from blood $\rightarrow$ any two	$\frac{1}{2} + \frac{1}{2}$
6	Air is a homogeneous mixture and can be separated into components by fractional distillation. Air   Compress and cool by increasing pressure V and decreasing temperature Liquified air   fractional distillation V	$\frac{1}{2}$  1

	Gases get separated at different heights (Nitrogen has the least boiling point gets distilled first. This is followed by argon while oxygen with max. bp distills in the end.)	½
7	State the law The relative no. and kinds of atoms are constant in a given compound	1 1
8	Simple distillation explanation	1 1

CLASS:IX	<b>INDIAN SCHOOL MUSCAT SECOND PERIODIC ASSESSMENT MARKING SCHEME</b>	SUBJECT: SCIENCE
	<b>SET - A</b>	
<b>BIOLOGY</b>		
1.	a. Nematoda b. Echinodermata	$\frac{1}{2} + \frac{1}{2} = 1\text{mark}$
2.	Long rod like support structure that runs along the back separating the nervous system from the gut.	1 mark
3.	Pisces have scales, Amphibians have mucus glands ( $\frac{1}{2} + \frac{1}{2} = 1\text{mark}$ ) Pisces have two chambered heart; Amphibians have three chambered heart. ( $\frac{1}{2} + \frac{1}{2} = 1\text{mark}$ ) OR any two differences	2 marks
4.	a. Triploblastic b. Corals c. Bilateral symmetry d. Echidna / Platypus	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2\text{ marks}$

	<b>SET - B</b>	
<b>BIOLOGY</b>		
	Symmetry in which the right and the left halves of the body have the same design	1 mark
	c. Nematoda d. Echinodermata	$\frac{1}{2} + \frac{1}{2} = 1\text{mark}$
	a. Triploblastic b. Corals c. Echinodermata d. Echidna / Platypus	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2\text{ marks}$
	Similarities: a. Bilateral symmetry b. Open circulatory system Dissimilarities: a. Arthropoda segmented body Mollusca little segmentation b. Arthropoda coelomic cavity is blood filled, Mollusca it is reduced.	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2\text{ marks}$

	<b>SET - C</b>	
QP.NO.	VALUE POINTS	SPLIT UP MARKS
<b>BIOLOGY</b>		
9.	a. Have mammary glands b. Skin with sweat glands and hairs	$\frac{1}{2} + \frac{1}{2} = 1\text{mark.}$
10.	Symmetry in which both Left and right halves of the body have the same design.	1 mark
11.	Similarities: c. Bilateral symmetry d. Open circulatory system Dissimilarities:	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2\text{ marks}$

	<ul style="list-style-type: none"> <li>a. Arthropoda segmented body Mollusca little segmentation</li> <li>b. Arthropoda coelomic cavity is blood filled, Mollusca it is reduced.</li> </ul>	
12.	<ul style="list-style-type: none"> <li>a. Sponges</li> <li>b. Echinodermata</li> <li>c. Notochord</li> <li>d. Coelom</li> </ul>	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 2$ marks