NAME		ROLL NO.	

	INDIAN SCHOOL MUSCAT **MIDDLE SECTION** **HALF YEARLY EXAMINATION 2019 – 20**	
	SUBJECT – SCIENCE	Code: MXSCO6
CLASS 6	**ANSWER KEY**	Time Allotted: 2 ½ hrs
15.09.2019		Max .Marks: 80

General Instructions.
1. The question paper comprises of three sections **A, B & C**. You have to **attempt all** the sections.
2. All the questions are **compulsory.**
3. All the answers should be written in the **answer sheet** provided.

	SECTION 'A' – ('1' MARK EACH) – TOTAL – 20 MARKS	Marks
Q.1.	**MULTIPLE CHOICE QUESTIONS: -**	
(a)	Out of the following which is an example of translucent object? i) A thin gold sheet ii) **butter paper** iii) mirror iv) wood	1
(b)	When water is mixed with plaster of Paris and dries it becomes i) Soft ii) Very soft iii) **hard** iv) soluble	1
(c)	Magnets can be i) Cylindrical ii) horse shoe iii) U- shaped iv) **all of these**.	1
(d)	Which is an example of a magnetic substance? i) Iron ii) Nickel iii) Cobalt iv) **all of these**	1
(e)	This type of plant has a thick, hard and woody stem? i) **Tree** ii) Shrub iii) Herb iv) all of these.	1
(f)	The object can never form a circular shadow? i) A ball ii) A flat disc iii) **A rectangular shoe box** iv) An ice cream cone.	1
(g)	Air and water are --- i) **Transparent and non-luminous** iii) opaque and non-luminous ii) Translucent and non-luminous iv) Transparent and luminous	1
(h)	Which of the following is not a part of water cycle? i) Cloud formation ii) Rain iii) **Drinking** iv) Sun	1
(i)	Mountaineers carry oxygen cylinders with them because: - i) There is no oxygen at high altitudes. **ii) There is a deficiency of oxygen on high altitudes** iii) Oxygen used for cooking. iv) Oxygen keeps them warm at low temperatures.	1

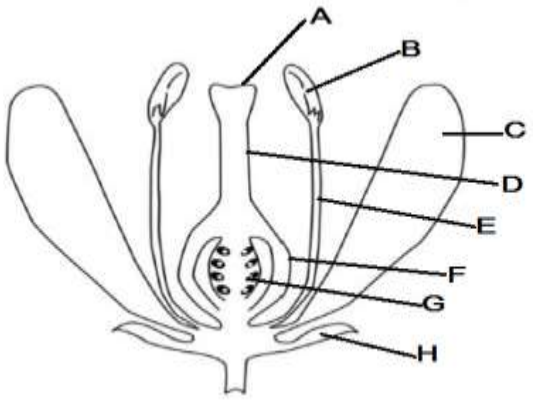
(j)	The major component of air is i) **Nitrogen** ii) Oxygen iii) Carbon dioxide iv) water vapour	1
Q.2.	**VERY SHORT ANSWER QUESTIONS: -**	
(a)	Which property of oxygen is helpful for aquatic plants and animals? **Its solubility in water -1m**	1
(b)	Some metals lose their shine when exposed to air for long time. Why? **This is because of the action of air and moisture on them -1m**	1
(c)	When we dissolve salt in water we get salt solution. How can we reverse this change? **by distillation/evaporation – 1m**	1
(d)	Mention two ways in which magnets lose their magnetism. . **By dropping very often, by heating, by hammering, improper storage - any two -1 m**	1
(e)	If a bar magnet is cut lengthwise into two parts, how many poles will form for each piece? **Two poles – 1m**	1
(f)	Write the characteristics of the image formed by a pinhole camera? **Real, inverted, coloured, small - any two -1 m**	1
(g)	What are luminous objects? **Object that emit their own light – 1m**	1
(h)	Why do earth worms come out of the soil during rainy season? **For respiration because the water fills up all the spaces occupied by the air in the soil – 1m**	1
(i)	What happens when air comes in contact with a cold surface? **It condenses to form drops of water on the cold surfaces -1m**	1
(j)	What are the two important products we get out of photosynthesis? **Food /starch/ glucose/ carbohydrate and oxygen – 1m**	1

Q.NO	**SECTION 'B' – ('3' MARKS EACH) – TOTAL – 30 MARKS**	Marks
(3)	a) State any two advantages of classifying materials into different group? **For convenience, easy to locate and to study their properties - 1m** b) Tom has a tray of eggs, a few of these eggs are rotten how can Tom separate the rotten eggs from good ones? **Rotten eggs float in water, good ones sink in water – 1m**	3

	e) Give one difference between hard and soft materials. **Soft materials - can be compressed / scratched easily - 1/2m** **Hard materials - difficult to compress / cannot be scratched easily – 1/2m**	
(4)	a) What are soluble substances? Give two examples. **Substances which completely disappear or dissolve in water – 1m** **Salt, Sugar, tang powder, glucose etc - any two correct examples – 1m** b) Give two examples of immiscible liquids. **Water and kerosene, petrol, diesel, oil etc - Any two correct examples – 1m**	3
(5)	How is a metal rim fixed on a wooden wheel of a cart? (3 points) **Metal rim slightly smaller than the wooden wheel -1/2 m** **On heating rim expands and fits onto the wheel -1m** **Cold water is then poured over rim – ½ m** **The rim contract and fits tightly onto the wheel -1m**	3
(6)	a) State any two properties of a magnet? **Like poles repel unlike poles attract / A freely suspended magnet always points** **N–S direction / A magnet attract magnetic materials / Magnetic poles exist in pairs** **- Any two correct properties of metals – 2m** b) Draw a neat diagram of magnetic compass. **Correct diagram -1m**	3
(7)	a) What is transpiration? **It is the process in which water comes out of leaves in the form of vapour through stomata -1m** b) State any two functions of stem. **Conduct water, minerals and food, store food, give support to the plants Any two -2m** **[OR]** a) State any two functions of root. **Absorb water and minerals from the soil, It helps to hold the plant firmly in the soil, store food – any two -2m** b) Give one difference between creepers and climbers. **Creepers - cannot stand upright and spread on the ground** **Climbers - take support of neighbouring structures and climb -1m**	3

<table>
<tr>
<td>(8)</td>
<td>a) Give two differences between a shadow of a flower and its reflected image.
<table>
<tr><th>Shadow</th><th>Image</th></tr>
<tr><td>It gives only a rough idea of the shape of a flower</td><td>It gives exact shape</td></tr>
<tr><td>It has no colour /black in colour</td><td>It gives colour of the flower</td></tr>
<tr><td>It is formed due to blockage by an opaque object</td><td>It is formed due to reflection of light</td></tr>
</table>
Any two – 2m
b)In a completely dark room, if you hold up a mirror in front of you, you will not be able see your reflection. Give one reason.
since there is no light , no image will be formed – 1m</td>
<td>3</td>
</tr>
<tr>
<td>(9)</td>
<td>a) Is Butter paper an example of a translucent object? Yes – 1/2m
b) Write the three conditions necessary for the formation of a shadow.
Opaque object, source of light and screen – each 1/2m
c) State the principle on which the pinhole camera works?
Light travels in a straight line - 1m</td>
<td>3</td>
</tr>
<tr>
<td>(10)</td>
<td>a) What is water cycle?
The circulation of water between ocean and land is known as water cycle
Or any other equivalent definition - 1m
b) Suggest two ways of conserving water at home.
Do not leave a tap running while brushing your teeth, avoid taking shower use a bucket and mug for taking bath, repair all leaking pipes and taps, use wet cloth to clean the car instead of using a hose - Any two points - 2m</td>
<td>3</td>
</tr>
<tr>
<td>(11)</td>
<td>a) Give one difference between drought and floods.
No rain in a region for a year or more leads to drought
Excess rainfall leads to flood – 1m
b) Write any two consequences of flood.
Extensive damage to crops, domestic animals, property and human life – any two - 2m</td>
<td>3</td>
</tr>
<tr>
<td>(12)</td>
<td>Name the component of air
a) that is required by plants to make proteins - Nitrogen
b) which is used in aerated drinks. - Carbon dioxide
c) which is used by the plants for respiration. - Oxygen - each 1m</td>
<td>3</td>
</tr>
</table>

Q.NO	**SECTION 'C'– ('5' MARKS EACH) – TOTAL – 30 MARKS**	Marks
(13)	a) Classify the following change that can be reversed / cannot be reversed i) Growth of a plant - **cannot be reversed** ii) Melting of a wax - **can be reversed** iii) Breaking of a glass rod. – **cannot be reversed** iv) Preparing curd from milk. – **cannot be reversed** **- each ½ m** b) A small gap is left between the joints of a railway track. Give reasons **To allow the expansion of rails during summer – 1m** **Otherwise the rails would bend causing derailment - 1m** c) Rajesh says that deforestation is a change that can be reversed. Is he right in saying so? Give reason to justify your answer. **No – 1/2m the same cut tree cannot be re grow or equivalent reason – 1/2m**	5
(14)	How will you store bar magnets? Explain with a neat labeled diagram. **Bar magnets should be kept in pairs with their unlike poles on the same side -1m** **They must be separated by a piece of wood – 1m** **Two pieces of soft iron should be placed across their ends -1m** **Diagram -1m any two labeling – 1m** **(OR)** a) What is a magnetic compass? **It is a device used to find direction – 1m** b) How will you find the East direction using a magnetic compass? **By using magnetic compass we find N-S direction – 1m** **When you stand facing North, your right hand points East direction -1m** c) Draw a neat diagram showing the storing of a horse shoe magnet. **Neat diagram -1m** d) State any two uses of magnets. **Used in fridge stickers, toys, pencil cases, speakers, ATM/debit cards,**	5

	doors, electric motors, magnetic cranes - Any two correct uses – 1m	
(15)	a) Draw a neat diagram of leaf and label the following parts. i) Lamina ii) Petiole iii) veins iv) midrib **Neat diagram – 1m Four labelling – 2m** b) State any two differences between taproot system and fibrous root system. **Tap root** / **Fibrous root** **Have main root and the smaller roots** / **No main root and all the roots are seem similar** **Leaves have reticulate venation** / **The leaves have parallel venation** **2marks**	5
(16)	Observe the following diagram and answer the following questions.  a) Label the parts marked **A, B, D, E ,F** and **G** **A – Stigma** **E - Filament** **B – Anther** **F - Ovary** **D – Style** **G - Ovules** **- each 1/2m** b) Write one function of the part labelled as i) **C** ii) **H** **i) C - Petals – attract the insects - 1m** **ii) H - sepals - protect during budding stage/prepare food - 1m**	5

(17)	a) What is rain water harvesting? **The process of collecting and storing rain water for the future use – 1m** b) State the two methods of rain water harvesting. **Rooftop rainwater harvesting – ½ m** **Allow the water to go to the ground directly from the roadside drains that collect rainwater - 1/2m** c) Apart from Transpiration, Write any two processes involved in the formation of clouds and define them. **Evaporation, condensation - each ½ m** **The process of conversion of liquid into gas – 1m** **The process of conversion of gas into liquid - 1m**	5
(18)	a) How do plants and animals help in maintaining balance of oxygen and carbon dioxide? Explain. **During respiration plants and animals take in oxygen and give out carbon dioxide --1m** **This carbon dioxide is used by the plants for Photosynthesis and release Oxygen -1m** b) List four activities that are possible due to the presence of air. **Movement of sailing yachts, gliders, parachutes, aero planes, dispersal of seeds, rotation of wind mill to draw water from wells, wind mills used to generate electricity, winnowing, pollination etc** **Any four – 2m** c) Why does a lump of cotton wool shrink in water? **When a lump of cotton wool is dipped in water, the air goes out and water occupies its space. – 1m**	5

End of the question paper.