



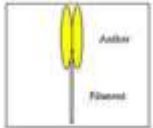
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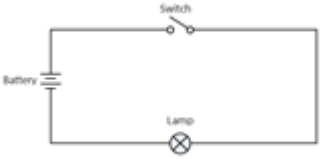
	INDIAN SCHOOL MUSCAT MIDDLE SECTION ANNUAL EXAMINATION 2019 – 20	
	<u>SUBJECT – SCIENCE</u>	Code:MYSCO9
CLASS 7	SET A (ANSWER KEY)	Time Allotted: 2 ½ hrs
02.03.2020		Max .Marks: 80
<p>General Instructions.</p> <p>1.The question paper comprises of three sections A ,B& C. You have to attempt all the sections.</p> <p>2.All the questions are compulsory.</p> <p>3.All the answers should be written in the answer sheet provided.</p>		

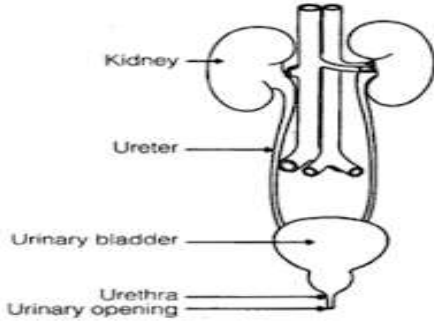
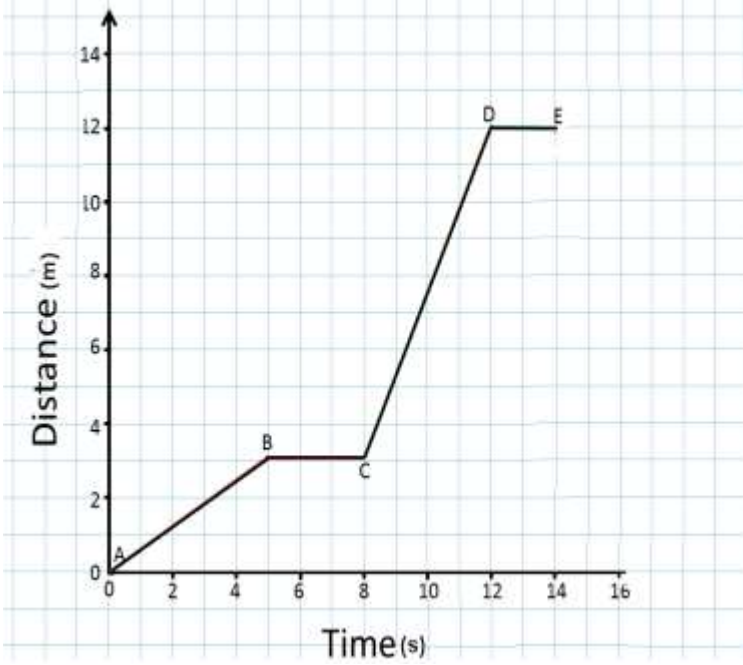
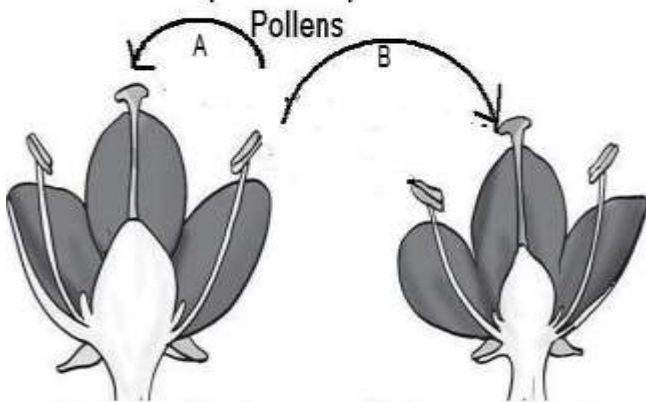
Q.NO1	<u>SECTION ‘A’ – (‘1’ MARK EACH) – TOTAL – 20 MARKS</u>	Marks
(a)	Organisms that can respire in the presence of oxygen are called a. aerobes b. anaerobes c. pathogens d. microbes	1
(b)	An electric bell works on the _____ effect of electricity a. lighting b. magnetic c. heating d. electric	1
(c)	_____ wool is most common in Tibet and Ladakh. a. camel b. sheep c. alpaca d. yak	1
(d)	The digestion of which nutrient starts in the mouth a. vitamin b. protein c. carbohydrate d. fat	1
(e)	An image that can be obtained on a screen is called a. virtual b. real c. enlarged d. shadow	1
(f)	_____ is the process by which rain water seeps into the ground, a. evaporation b. infiltration c. collection d. precipitation	1
(g)	A network of big and small pipes that carry sewage forms a _____. a. manhole b. sewer c. sewerage d. drain	1
(h)	The fluid part of the blood is called a. W.B.C b. R.B.C c. plasma d. platelet	1
(i)	_____ is an instrument that measures the distance moved by a vehicle. a. speedometer b. anemometer c. odometer d. thermometer	1
(j)	This seed has hooks on it to attach itself to the body of animals a. balsam b. maple c. coconut d. xanthium	1
(k)	How are muscle cramps caused? Muscle cramps are caused by the accumulation of lactic acid in the muscles.	1
(l)	Which organ helps in the exchange of gases within the body of a grasshopper? tracheae	1
(m)	Why do we use a coil of wire instead of a straight wire as an element in an electric heater? A coil of wire will produce more heat than a straight wire because the heat produced depends on the length of wire.	1
(n)	Name two natural fibres made of protein. Ans. Wool, silk	1
(o)	a. Which property of the convex lens is used in the magnifying glass? When an object is placed very close to a convex lens, it produces enlarged, erect images.	1

(p)	What is an aquifer? The water which is collected below the ground between rocks is called an aquifer.	1
(q)	Why shouldn't cooking oil and fats be thrown down the drain? Because it will clog the drains.	1
(r)	What causes monsoon winds to blow in the south western part of India during summer? Uneven heating of land and water.	1
(s)	Why do veins have valves? Veins have valves to prevent the backflow of blood.	1
(t)	Convert 36 Km/hr to m/s. $36 \times \frac{5}{18} = 10\text{m/s}$	1

Q.NO	<u>SECTION 'B' – ('3' MARKS EACH) – TOTAL – 30 MARKS</u>	Marks
(2)	<p>a. Which organism is added to grape juice to change it into wine? yeast b. Why is this organism added? They respire anaerobically and convert sugar into ethyl alcohol and carbon dioxide.</p> <p style="text-align: center;">Or</p> <p>a. Where do the processes of breathing and respiration occur? Breathing – lungs respiration - cells b. Describe briefly the process of inhalation? During inhalation ribs move up and diaphragm moves down.</p>	3
(3)	<p>a. Which is the most common silk moth? Mulberry silk moth b. Write two reasons why this silk is preferred. Lustrous, soft, elastic and can be dyed into different colours. c. What is reeling of silk? The process of separating fibres from cocoon is called reeling.</p>	3
(4)	<p>a. What is the difference between a convex mirror and concave mirror?(one difference) Convex mirror the reflecting surface is bulged outwards. Concave mirror the reflecting surface is curved inwards. Convex mirror is diverging mirror. Concave mirror is converging mirror. b. Which mirror is used as rear view mirrors in cars. State the reason. Convex mirror because it forms virtual, erect images spread over a large area. c. Give two uses of concave mirror. Dentists mirror, torches</p>	3
(5)	<p>a. State any two ways by which you can prevent wastage of water at home. Repair leaking taps, shorter showers, wiping cars with cloth (any acceptable answers) b. Briefly explain how farmers can conserve water in their farms? Drip irrigation is a method through which maximum number of plants can be irrigated with minimum use of water. Pipelines are laid throughout the rows of plants.pipes are pierced at strategic points to release water in droplets.</p>	3
(6)	<p>a. How is sludge decomposed? Sludge is decomposed with the help of anaerobic bacteria. b. What is aeration? How does it help? It is the process by which air is pumped into water to allow the growth of aerobic</p>	3

	<p>bacteria. It helps to remove organic wastes from water.</p>		
(7)	<p>a. What is a cyclone? A very low pressure system with very high speed winds revolving around it is called cyclone.</p> <p>b. Why are there more chances of roofs of houses getting blown off whenever there is a storm? It is caused because of pressure difference. When wind moves above the roof it causes low pressure to build up while its still high pressure inside the house. This pressure difference causes the roof to be blown off.</p> <p>c. Give two safety measures that can be taken in case of a cyclone. Move belongings and people to a safer area, store enough water and food.</p>	3	
(8)	<p>a. Why does wind make leaves flutter? The kinetic energy of wind makes leaves flutter.</p> <p>b. What is direction in which wind will move? Wind moves from a region of high pressure to low pressure.</p> <p>c. A flag mounted on a flag post on sea coast flutters in the direction of the sea. At what time does this happen, in the afternoon or at midnight? Why? At midnight because of land breeze which blows from land to sea</p>	3	
(9)	<p>a. Why is the colour of blood red? Because of the presence a red pigment called haemoglobin.</p> <p>b. Which cell is the carrier of this red pigment? R.B.C</p> <p>c. What is its function? It binds with oxygen and transports to all parts of the body.</p> <p style="text-align: center;">Or</p> <p>a. Which tissue makes up the transporting vessels in a plant? Vascular tissue</p> <p>b. Name the two types of vessels. A) xylem, phloem</p> <p>c. Write the difference in their functions? Xylem conducts water and minerals. Phloem conducts prepared food to all parts of the body.</p>	3	
(10)	<p>a. What are the two types of motion associated with a simple pendulum? Oscillatory motion, periodic motion</p> <p>b. What will happen to the time period if we increase the length of the pendulum? The time period increases with the length of the pendulum.</p> <p>c. A simple pendulum takes 38s to complete 20 oscillations. Calculate the time period of the pendulum? Time period=time taken/no. of oscillations $= 38/20=1.9s$</p>	3	
(11)	<p>a. Name the male and female reproductive part of a flower. Stamen, pistil</p> <p>b. Draw and label the male reproductive part of a flower.</p> <p>c. What type of flower is mustard in terms of sexual character? Justify your answer. It is a bisexual flower because it has both the male and female reproductive organs.</p>	<div style="text-align: right;">  </div>	3

Q.NO	<u>SECTION 'C' – ('5' MARKS EACH) – TOTAL – 30 MARKS</u>	Marks
(12)	<p>a. Draw a circuit diagram of an open circuit using electric bulb, battery, conducting wire and switch.</p> <div style="text-align: center;">  </div> <p>b. Which safety device can protect electrical circuits from possible fires? fuse c. Can we use a thick wire for the above safety device. State the reason why. We cannot use a thick wire as it will not melt easily. d. How can you make a magnet out of a current carrying coil of wire in a circuit? We can make a magnet by inserting an iron core in the coil of wire.</p>	5
(13)	<p>a. Identify the organs labelled A and B in fig1 A- liver B- stomach b. How does the organ A help in digestion? It secretes bile which help in the digestion of fats. c. Which is the acid secreted by Organ B? What are its two functions? It secretes hydrochloric acid. It kills the germs in the food,It changes the medium to acidic. d. How is the lining of organ B protected from this acid? The lining secretes mucus.</p> <p style="text-align: center;">Or</p> <p>a. Which organism is shown in fig 2. A) Amoeba b. Name the structures A and B. A) pseudopodia B) food vacuole c. What are the functions of A. captures food, movement d. How does the structure B help in the digestion process ? Digestive juices are secreted into the food vacuole They act on the food and break it into simpler substances. Gradually Digested food is absorbed.</p>	5
(14)	<p>a. Which property of light forms images on smooth, shiny surfaces? Reflection of light. b. State two properties of image formed by a plane mirror? Images are erect, virtual, same size as the object, laterally inverted, distance between the image and the mirror is same as the distance between the mirror and object. c. Write out the image of the word 'WOW' as seen in a plane mirror. What is this property called? A) WOW, lateral inversion d. A girl is standing at a distance of 30cm away from a plane mirror, what will be the</p>	5

	distance her image from the mirror? 30cm		
(15)	<p>a. Draw the human excretory system and label the kidneys, ureter, urinary bladder and urethra.</p>  <p>b. Why do we see white patches on our clothes when we sweat? Salts are present in sweat.</p> <p style="text-align: center;">Human excretory system</p>	5	
(16)	<p>Observe the distance-time graph of an object travelling along a straight line and answer the questions given below.</p> <p>a. Calculate the speed of the object from C to D? speed = $\frac{12-3}{12-8} = \frac{9}{4} = 2.25\text{m/s}$</p> <p>b. What does B to C and D to E indicate? The object is stationary</p> <p>c. What is the distance travelled by the object in 13 sec. 12m</p> <p>d. Where is the body travelling with more speed, A to B or C to D. C to D</p> <p>e. What type of motion does this graph indicate? Non uniform motion</p>		5
(17)	<p>a. What does processes A and B indicate. A- self pollination B-cross pollination</p> <p>b. Differentiate between A and B. self pollination-transfer of pollen grains from anther to stigma of same flower or another flower of the same plant. Cross pollination- transfer of pollen grains from anther of one flower to</p>		5

stigma of another flower of another plant of the same kind..

c. Name and define the process after a pollen grain germinates?

The male gamete and the female gamete fuse to form the zygote. Fertilization

c. What does the ovary and ovule develop into? Ovary-fruit, ovule-seed

Ovary develops into fruit, ovule develops into seeds.

Or

a. How do the following reproduce 1) spirogyra-fragmentation 2) yeast -budding 3) potato-buds 4) rose plant-stem cutting

b. What kind of reproduction is this? Asexual reproduction Why is it called so? They don't reproduce through flower or do not produce gametes.

c. What is the advantage of this kind of reproduction?

Produce many copies of the parent plant. Only one parent is necessary.

d. How do spores survive unfavourable conditions?

Spores have a hard covering which can withstand unfavourable conditions.

End of the question paper.