

**SIDDEEQ PUBLIC SCHOOL****ENTRY TEST ... 49****SCIENCE****Max. Marks: 30****ADMISSION to CLASS: 8**

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**(Note: Erasing, cutting and over writing is not allowed in Q.1, 2 & 3)****Q.1 Choose the best option.****(1.0×6)****(i) The root system mainly helps the plant to:**

- (A) Make food (B) Absorb water and minerals  
(C) Make flowers (D) Produce seeds

**(ii) Rusting of iron objects can be prevented by:**

- (A) Heating (B) Washing (C) Galvanizing (D) Dusting

**(iii) The lower chambers of the heart are called:**

- (A) Aorta (B) Capillaries (C) Atria (D) Ventricles

**(iv) In which period of the periodic table Oxygen is located?**

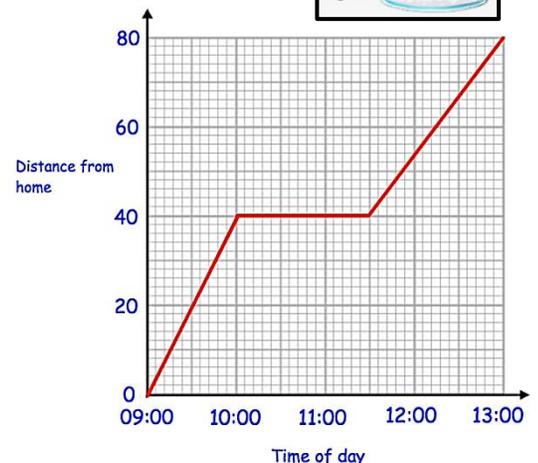
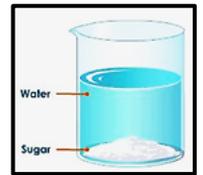
- (A) 1 (B) 2 (C) 3 (D) 4

**(v) If more sugar is added to water and it stops dissolving, the solution becomes:**

- (A) Dilute (B) Saturated  
(C) Unsaturated (D) Clear

**(vi) Ali drove 80 km from his home for picnic, for how long Ali stopped during his journey?**

- A) 1 hour  
B) 1.5 hours  
C) 2 hours  
D) 2.5 hours

**Q.2 Fill in the blanks.****(1.0×6)**

- (i)** The pale-yellow liquid part of the blood is called \_\_\_\_\_.
- (ii)** Antibodies are special \_\_\_\_\_ which flow in blood and can recognize and kill viruses and bacteria.
- (iii)** Flammability is a \_\_\_\_\_ property, whereas, boiling point is a \_\_\_\_\_ property.
- (iv)** Helium and Neon belong to \_\_\_\_\_ group.
- (v)** If a boy runs 200m in 20 seconds, his speed is \_\_\_\_\_ m/s.
- (vi)** \_\_\_\_\_ waves are electromagnetic waves.

**Q.3 Decide whether the given statements are True 'T' or False 'F'.****(1.0×6)**

- (i)** Transpiration helps in cooling the plant. **T / F**
- (ii)** Vaccination weakens the immune system. **T / F**
- (iii)** 100°C is equal to 273 K. **T / F**
- (iv)** Apple jam is preserved by the method of pasteurization. **T / F**
- (v)** If the sound source has larger surface to vibrate, it produces louder sound. **T / F**
- (vi)** Group VIA elements have valency 3 because they can gain or share 3 electrons. **T / F**

**Q.4 Answer the following questions.**

(2.0×6)

**(i) Briefly explain the transport of food in plants.**


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**(ii) Explain the distribution of electrons in Phosphorus atom by using  $2n^2$  formula. (at. no.: 15; mass no.: 31)**


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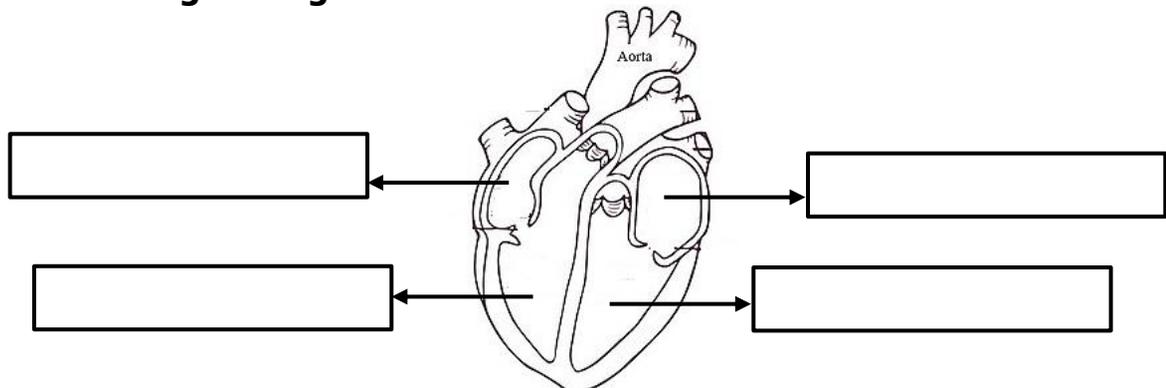
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**(iii) How increase and decrease in pressure affects the solubility of gases?***Increase in pressure:* \_\_\_\_\_*Decrease in pressure:* \_\_\_\_\_**(iv) A cyclist moves 30 km in east for 2 hours and 15 km in north for 30 minutes to reach finish line. Find his average speed in km/h.**

<i>Formula:</i>	<i>Solution:</i>

**(v) Write the functions of the components of blood.**

Components	Function
<i>Red blood cells</i>	
<i>White blood cells</i>	
<i>Platelets</i>	
<i>Plasma</i>	

**(vi) Label the given figure of human heart.**

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**SCIENCE**  
**KEY**

**Q. 1. Choose the best option.**

- (i) B      (ii) C      (iii) D      (iv) B      (v) B      (vi) B

**Q. 2 Fill in the blanks.**

- (i) Plasma                      (ii) Proteins                      (iii) Chemical; Physical  
 (iv) VIIIA/18                      (v) 10                      (vi) light/x-rays/microwaves

**Q. 3 True/False**

- (i) T      (ii) F      (iii) F      (iv) T      (v) T      (vi) F

**Q. 4 Answer the following questions.**

- (i) Leaves prepare food for plant by the process of photosynthesis. The phloem transports food in the form of sugar solution from leaves to all other parts of the plant. Sugar solution can go up and down the phloem at the same time.
- (ii)  $2n^2$  formula is used to find the number of electrons which can be accommodated in a shell. In the formula 'n' is the number of shell and according to the formula distribution of electrons in first three shells is: K=2, L=8, M=18. Phosphorus has 15 electrons which can be accommodated as: K=2, L=8 and M=5.
- (iii) Increase in pressure increases the solubility of gases.  
 Decrease in pressure decreases the solubility of gases.

(iv) Formula:

$$\text{Average Speed} = \frac{\text{Total Distance}}{\text{Total Time}}$$

Solution: Find Total Distance

$$\begin{aligned} \text{Total distance} &= 30 \text{ km} + 15 \text{ km} \\ &= 45 \text{ km} \end{aligned}$$

Find Total Time

$$\begin{aligned} \text{Total time} &= 2 \text{ hours} + 0.5 \text{ hours} \\ &= 2.5 \text{ hours} \end{aligned}$$

$$\text{Average Speed} = 45 / 2.5$$

$$= 18 \text{ km/h}$$

(v)

Components	Function
<i>Red blood cells</i>	They carry oxygen from lungs to rest of the body.
<i>White blood cells</i>	Protect the body from germs and harmful things. They make immune system.
<i>Platelets</i>	Stop bleeding by forming clots.
<i>Plasma</i>	It carries water, nutrients, gases, wastes and chemicals from one part of the body to another.

(vi)

