

SIDDEEQ PUBLIC SCHOOL

ENTRY TEST ... 48

ENGLISH

ADMISSION to GRADE: 8

Checked by (Service # & Initials)	Rechecked by (Service # & Initials)	Max. Marks	Marks Secured
		35	

Vocabulary

Q.1 (A) Encircle the Correct Spellings. (0.5x2)

- equivalent / equivalant / equivelent / equevalent
- aproprate / apporprate / appropraite / appropriate

(B) Provide Meanings of the following Words either in English or in Urdu. (1.0x3)

unexpectedly		fortunate		display	
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(C) Complete the Columns. (1.0x4)

Words	Opposites	Nouns	Verbs	Adjectives
reveal			follow	following
approval		explanation		explanatory

(D) Choose the Correct Word given in brackets to Complete each Sentence. (0.5×4)

- After holding her _____ for a few seconds, she finally began to _____ again. (breathe, breath)
- The _____ of the institute approved the design of the building based on the _____ of energy efficiency. (principal, principle)

Grammar

Q.2 (A) Fill in the Blanks by Choosing the Correct Options from the brackets. (1.0×7)

- Fast food _____ harmful for our health. (are/ were / is)
- Rice _____ not grow in cold climates. (do / does / has)
- We _____ in the park on weekends. (plays/ playing, play)
- Tears _____ down her cheeks when she saw an injured baby. (roll / rolled, rolls)
- The kids jumped _____ the fence and ran _____ the playground. (over/ after / into / on)
- _____ it was raining, I went outside _____ played soccer. (although / and / so / because)
- _____ unique policy was introduced by _____ M.N.A of the parliament. (a / an / the)

Roll No. _____

- Did Cheetahs run very fast? (Change into affirmative)

- The carpenter was building the desk. (Change into Passive Voice)

Sentence Construction

- obviously _____

- educate _____

■ غریب آدمی سڑک کے کنارے سبزی بیچ رہا تھا۔

اس بار میں تقریری مقابلے میں حصہ نہیں لوں گا۔

[illegible]

SIDDEEQ PUBLIC SCHOOL

ENTRY TEST ... 48

MATHEMATICS

Max. Marks:35

ADMISSION to GRADE: 8

Checked by	Srv #	Sign:	Rechecked by	Srv #	Sign:	Marks:
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1. Complete the following mathematical statements.

(1.0 × 4)

- (i) Irrational numbers are non-terminating and _____ decimals.
- (ii) If $(A + \frac{3}{4}) = (B + \frac{1}{3})$ shows commutative law then A= _____ and B= _____
- (iii) _____ should be added in x^2+3x+1 to get $3x+1$.
- (iv) If $P=\{ \}$ & $Q= \{ 1 \}$ then $P \cap Q =$ _____

2. Verify the associative property: $\frac{5}{12} \times (\frac{-2}{5} \times 1\frac{3}{10}) = (\frac{5}{12} \times \frac{-2}{5}) \times 1\frac{3}{10}$

(4.0)

3. If L= Set of first three multiples of 2 & M= Set of all possible factors of 4 then find L–M.

(4.0)

4. Evaluate: $\sqrt{\frac{529}{3025}}$

(4.0)

5. Factorize: $16a^2 + \frac{8}{3}ab + \frac{1}{9}b^2$

(4.0)

Roll No. _____

- [illegible]

- [illegible]

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-
-
-
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SIDDEEQ PUBLIC SCHOOL

Answer key

Admission to Grade: 8

Mathematics

1. (i) non-recurring / non repeating (ii) $A = \frac{1}{3}$ & $B = \frac{3}{4}$ (iii) $-x^2$ (iv) $P \cap Q = \{ \}$ or \emptyset

$$\begin{array}{l} \text{2. L.H.S: } \frac{5}{12} \times \left(\frac{-2}{5} \times 1\frac{3}{10} \right) \\ = \frac{5}{12} \times \left(\frac{-2}{5} \times \frac{13}{10} \right) \\ = \frac{5}{12} \times \left(\frac{-1}{5} \times \frac{13}{5} \right) \\ = \frac{1}{12} \times \frac{-13}{25} = \frac{-13}{60} \end{array} \quad \begin{array}{l} \text{R.H.S: } \left(\frac{5}{12} \times \frac{-2}{5} \right) \times 1\frac{3}{10} \\ = \left(\frac{1}{6} \times \frac{-1}{1} \right) \times \frac{13}{10} \\ = \frac{-1}{6} \times \frac{13}{10} = \frac{-13}{60} \end{array}$$

As L.H.S = R.H.S so $\frac{5}{12} \times \left(\frac{-2}{5} \times 1\frac{3}{10} \right) = \left(\frac{5}{12} \times \frac{-2}{5} \right) \times 1\frac{3}{10}$

3. $L = \{ 2, 4, 6 \}$, $M = \{ 1, 2, 4 \}$, $L - M = \{ 6 \}$

$$4. \sqrt{\frac{529}{3025}} = \frac{\sqrt{529}}{\sqrt{3025}} = \frac{\sqrt{23 \times 23}}{\sqrt{5 \times 5 \times 11 \times 11}} = \frac{\sqrt{23^2}}{\sqrt{5^2 \times 11^2}} = \frac{23}{\sqrt{(5 \times 11)^2}} = \frac{23}{55}$$

5. $16a^2 + \frac{8}{3}ab + \frac{1}{9}b^2 = (4a)^2 + 2(4a)\left(\frac{1}{3}b\right) + \left(\frac{1}{3}b\right)^2 = (4a + \frac{1}{3}b)^2$ As $(a+b)^2 = (a^2 + 2ab + b^2)$

6. Let Saad's present age = x , Ali's present age = $x - 10$

Ages after 2 years : Saad's age = $x+2$, Ali's age = $x-10+2 = x-8$

According to given condition : $x+2 = 3(x-8)$

$$x+2 = 3x-24$$

$$2+24 = 3x-x$$

$$26 = 2x$$

$$\frac{26}{2} = 2x \quad \text{so } 13 = x$$

So Saad's present age is 13 years.

7. Let required time to read 45 pages is x .

pages	Time (minutes)
8	24
45	x

Direct proportion

$$45:8::x:24$$

$$45 \times 24 = 8x \quad (\text{Product of extremes} = \text{product of means})$$

$$1080 = 8x$$

$$\frac{1080}{8} = x$$

$$135 = x$$

So he will take 135 minutes to read 45 pages.

8. $d = 28\text{m}$, $r = \frac{d}{2} = \frac{28}{2} = 14\text{m}$

$$\text{Area of floor of pool} = \pi r^2 = \frac{22}{7} \times (14\text{m})^2 = \frac{22}{7} \times 196\text{m}^2 = 22 \times 28\text{m}^2 = 616\text{m}^2$$

$$\text{Cost of tiling } 1\text{m}^2 = \text{Rs } 200$$

$$\text{Cost of tiling } 616\text{m}^2 = \text{Rs } 200 \times 616 = \text{Rs } 123200$$

So cost of tiling the floor is Rs 123200.

SIDDEEQ PUBLIC SCHOOL

ENTRY TEST ... 48

SCIENCE

Max. Marks: 30

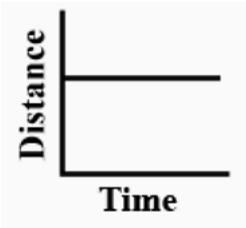
ADMISSION to CLASS: 8

Checked by	Srv #	Sign:	Rechecked by	Srv #	Sign:	Marks:
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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) Which cell organelle is involved in respiration?
(A) Mitochondria (B) Chloroplast (C) Vacuole (D) Nucleus
- (ii) Heart is divided into two parts. The part which is larger, thick-walled and more powerful is called:
(A) Aorta (B) Vena cava (C) Atrium (D) Ventricle
- (iii) Combustion is a chemical process in which carbon dioxide is released which is responsible for:
(A) Acid rain (B) Global warming
(C) Soil erosion (D) Land pollution
- (iv) An atom which has atomic number 12 has ____ electrons in its valence shell.
(A) 10 (B) 4 (C) 12 (D) 2
- (v) A distance-time graph is shown in the given figure. What information you get from it?
(A) The object is at rest
(B) The object is moving with uniform speed.
(C) The object is moving with increasing speed.
(D) The object is moving with decreasing speed.
- (vi) Which is the frequency of the given wave?
(A) 6 Hz (B) 3 Hz
(C) 12 Hz (D) 4 Hz



Q.2 Fill in the blanks. (1.0×6)

- (i) _____ immunity includes first and second line of defense, whereas, adaptive immunity is the third line of defense.
- (ii) Mode of heat transfer which do not require a material medium is called _____.
- (iii) The solution which has the ability to dissolve more solute is called _____ solution.
- (iv) Beryllium chloride is formed from Beryllium ion (Be^{2+}) and Chloride ion (Cl^-). The formula of Beryllium chloride is _____.
- (v) Bending of wire is a _____ change.
- (vi) The _____ transports food in the form of sugar solution from leaves to all other parts of the plant.

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

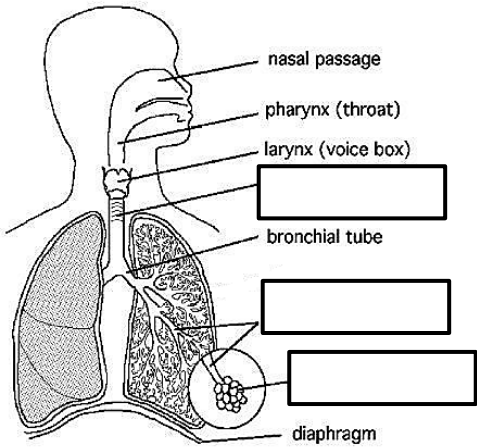
- (i) Red blood cells make the immune system. **T / F**
- (ii) Tarnishing of silver takes place due to the formation of coating of Silver oxide. **T / F**
- (iii) Atomic number is the number of neutrons. **T / F**
- (iv) Air resistance is an example of contact force. **T / F**
- (v) The particles at the hot end of the iron rod vibrate faster than its colder end. **T / F**
- (vi) In pickling, good bacteria is encouraged to grow against the bad bacteria in order to preserve the food. **T / F**

Q.4 Answer the following questions. (2.0×6)

(i) Briefly explain how the following factors affect the rate of transpiration.

Factors	Effect on rate of transpiration
<i>Increase in temperature</i>	
<i>Decrease in temperature</i>	
<i>Increase in humidity</i>	
<i>Decrease in humidity</i>	

(ii) Label alveoli, bronchiole and trachea in the given figure. Explain what is the function of trachea.



(iii) Photosynthesis is an example of a physical or a chemical change? Justify your answer.

_____ change

Justification: _____

(iv) Briefly explain the ionic bond formation in Sodium chloride. (Sodium at. no.: 11; mass no.: 23, Chlorine at. no.: 17; mass no.: 35)

(v) Why air is considered a solution? Mention solute and solvent in it.

Solute: _____ Solvent: _____

(vi) Convert 80°C into Fahrenheit scale.

ENTRY TEST ... 48
ADMISSION TEST TO GRADE: 8
SCIENCE
KEY

Q. 1. Choose the best option.

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

Q. 2 Fill in the blanks.

- (i) Innate (ii) radiation (iii) unsaturated
 (iv) BeCl_2 (v) physical (vi) phloem

Q. 3 True/False

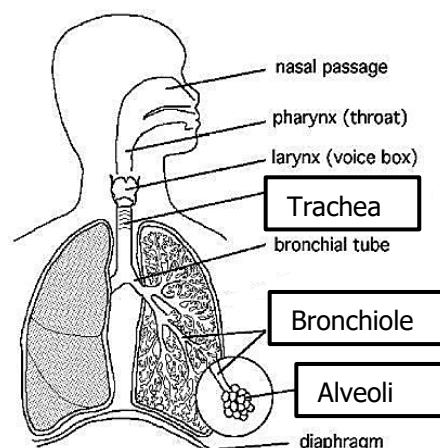
- (i) F (ii) F (iii) F (iv) T (v) T (vi) F

Q. 4 Answer the following questions.

(i)

Factors	Effect on rate of transpiration
<i>Increase in temperature</i>	Increase
<i>Decrease in temperature</i>	Decrease
<i>Increase in humidity</i>	Decrease
<i>Decrease in humidity</i>	Increase

- (ii) Trachea: Passage for inhaled air; filters and moisten the air.



- (iii) Chemical
 Water reacts chemically with carbon dioxide to form sugar and oxygen new substances are formed with different composition.
- (iv) Distribution of electrons in sodium is 2, 8, 1, it will lose 1e to attain noble gas configuration and form sodium ion (Na^+). Chlorine has 2, 8, 7 electrons in K, L and M shells respectively. It requires 1e to attain noble gas configuration. Sodium will donate its one electron to chlorine to form chloride ion (Cl^-). Due to the strong electrostatic force Na^+ and Cl^- ions comes closer to form ionic bond. As a result, Sodium chloride (NaCl) is formed.
- (v) Air is considered a solution because it is a homogeneous mixture of different gases, like nitrogen, oxygen, carbon dioxide, which are uniformly distributed throughout.
 Solute: Oxygen, carbon dioxide and other gases.
 Solvent: Nitrogen

$$\begin{aligned} \text{(vi)} \quad T(^{\circ}\text{F}) &= 1.8 T(^{\circ}\text{C}) + 32 \\ &= 1.8 \times 80 + 32 \\ &= 144 + 32 \\ &= 176^{\circ}\text{F} \end{aligned}$$