

# Cadet College Palandri AJ&K

## G Science for Entrance Test Class VIII.

### a. Paper Pattern

Total Marks 75

Time 1:30hrs

|     |                    |    |          |
|-----|--------------------|----|----------|
| Q:1 | MCQs               | 15 | 15 Marks |
| Q2: | Fill in the Blanks | 15 | 15Marks  |
| Q:3 | Short questions    | 15 | 45 Marks |

### b. Syllabus

#### 1. Structure of atom

Atomic Number, Mass Number, Electronic Configuration, Symbols of normal elements.

#### 2. Physical and chemical changes

Reversible and irreversible changes, rusting, combustion, physical and chemical properties of matter

#### 3. Chemical Bonds

Valencies of normal elements, Ions and its types, Writing a chemical formula, Formulas of common acids and bases, Chemical bonds (Covalent and Ionic Bonds )

#### 4. Plants System

Tissues in plants, Plant organs and their structure, transportation system in plants, Translocation, photosynthesis and respiration, minerals required by plants

#### 5. Respiratory System

Human respiratory system, Mechanism of breathing, Cellular respiration, diseases of respiratory system

#### 6. Circulatory system

Components of circulatory system and their functions, blood circulation in human body, composition of blood

#### 7. Immunity and diseases

Pathogens and their types, Vaccines, Parts of immune system, immunity and its parts, infectious diseases

#### 8. Force and Motion

Force, S. I Unit of Force, Effects of force, Types of force, Action-reaction pair of forces, Motion (Speed, distance, time), Distance time graph

#### 9. Waves and energy

Waves and energy, Types of waves, Properties of waves and their interrelation, properties of sound waves, Factors that effect sound properties

#### 10. Heat and Temperature

Thermal expansion and contraction of solids, Effects of thermal expansion and contraction on solids, Applications of thermal expansion and contraction of solids, Thermal expansion and contraction of liquids, Effects of thermal expansion and contraction of liquids, Applications of thermal expansion of liquids, Thermal expansion and contraction of gases, common scales of temperature, Modes of heat flow, Methods of thermal insulation

#### 11. Earth and space

What keeps planets revolving, Gravity ,mass and weight, gravitational force of moon, earth movements and its effects, The effect of earth's rotation on the length of days and nights, Formation of seasons.

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## Modal Paper for Entrance Test Class VIII

**Subject: G. Science**

**Total Marks 75**

**Time 1 hr**

**Q.1 Choose the correct option.**

**15**

| S No | Statement  | A               | B              | C                   | D                  |
|------|--|-----------------|----------------|---------------------|--------------------|
| 1    | The number of ATP molecules are produced during glycolysis are                 | 1               | 2              | 4                   | 8                  |
| 2    | Which one is the viral disease?  | Cholera         | Tetanus        | Typhoid             | Polio              |
| 3    | Which structure of plant transport sugar                                       | Mesophyll cells | Lower xylem    | Phloem              | Xylem              |
| 4    | Antibodies are   | Phagocytic cell | Dendritic cell | Proteins            | Lipids             |
| 5    | Which gas would increase in the atmosphere if there would be no photosynthesis | Oxygen          | Nitrogen       | Hydrogen            | Carbon oxide       |
| 6    | SI unit of force is  | Newton          | Meter          | Kilogram            | Kilometre          |
| 7    | The gravitational force on a body of mass 1 kg is                              | 10N             | 5N             | 8.8N                | 16N                |
| 8.   | Pitch of sound waves depends on  | Loudness        | Frequency      | Wavelength          | Amplitude          |
| 9.   | Speed of sound at 0°C is   | 332m/s          | 3320 m/s       | 33200m/s            | 320 m/s            |
| 10   | 0°C is equals to   | 212°F           | 0°F            | 32°F                | 272°F              |
| 11   | Pressure cooking of food _____ its boiling point                               | Increase        | Decrease       | Keep constant       | Permanent decrease |
| 12   | The electronic configuration is 2, 8, 7 write the symbol of this element       | H               | O              | Cl                  | Ne                 |
| 13   | Which type of bonding is present in carbon dioxide                             | Ionic           | Covlant        | Coordinate covalent | All of these       |
| 14   | Which atom s non metal   | Be              | C              | Mg                  | Rb                 |
| 15   | Freezing of water is _____ change.   | Sublimation     | Chemical       | Physical            | Both B & C         |

**Q2. Fill in the blanks with suitable words.**

**15**

- The plants tissues which conduct water and minerals is called \_\_\_\_\_
- The \_\_\_\_\_ is essential to make chlorophyll which give green colour to leaves.
- The structure in the lungs where exchange of gases takes place is called \_\_\_\_\_.
- The outer covering of heart is known as \_\_\_\_\_
- Salmonella typhi causes \_\_\_\_\_
- SI unit of speed is \_\_\_\_\_
- Sound and water waves are \_\_\_\_\_ waves.
- Particles of longitudinal waves move \_\_\_\_\_.
- Mass is amount of \_\_\_\_\_ in an object.
- The process of flow of heat without the flow of the particles of the medium is called \_\_\_\_\_
- Non metals are \_\_\_\_\_ electronegative than metals.
- The Molecular formula of acetic acid is \_\_\_\_\_
- Name of specie OH<sup>-</sup> is \_\_\_\_\_
- A molecule made of different atoms is called \_\_\_\_\_
- The elements comprised of different atoms having same atomic number but different atomic mass are called \_\_\_\_\_

P.T.O

|    |   |    |  |
|----|---|----|--|
| 1  | Name three types of ground tissues and their functions.                     | 2  | What is importance of transpiration?   |
| 3  | Write down causes and symptoms of emphysema?                                | 4  | What do you know about systemic, pulmonary and coronary circulation?                             |
| 5  | Write down the symptoms of corona virus disease?                            | 6  | Define SI unit of Force.   |
| 7  | Differentiate between mass and weight.                                      | 8  | Define gravity.  |
| 9  | Why are metals good thermal conductors?                                     | 10 | Time period of a wave is 10 seconds. What is its frequency?                                      |
| 11 | Why atoms are considered as neutral particles before reaction?              | 12 | Why elements in periodic table are arranged in increasing order of atomic no? Write its purpose. |
| 13 | Which type of atoms always form covalent bond when combine with each other? | 14 | How can you explain that rusting is a chemical change?   |
| 15 | Why different metals have different thermal conductivity?                   |    |  |

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**Cadet College Palandri AJ&K**  
**English for Entrance Test Class VIII,**

**Marks: 75**

- A. Composition: paragraph/latter/Story Writing etc.
  
- B. Comprehension: Question based on a given passage or passages.
  
- C. Translation: from Urdu to English and English to Urdu.
  
- D. Applied Grammar: Any type of suitable question objective or subjective, covering different aspects of grammar, for example: singular and plural, masculine and feminine, Comparative and superlative, correction of spelling, tenses, the use of tenses and the sequence of tenses, filling in blanks with articles, prepositions, adjectives, adverbs, parts of speech, simple punctuation, direct and indirect, active and passive voice etc.

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# CADET COLLEGE PALANDRI AZAD KASHMIR

Class: VIII  
Marks: 75

Subject: English  
Time : 1hr

Read the following passage carefully and answer the questions given at the end in your own words. 10

In early 1900, two Wright brothers flew their first man made Aeroplane in the air. Wright family lived in Ohio, America. They ran a family business of bicycles. These two little kids at the age of 7 and 11 used that shop to build their first plane. Both brothers did not attend any school, but they learned a lot about aviation. So, they used that knowledge to construct Aeroplane. When the first time in the history of mankind, they tried to fly their first plan in the air, people did not believe in them. The newspapers and media did not notice their efforts, but some newspapers had made headlines like, "They are either flyers or liars". Their first Aeroplane stayed in air only 20 second and flew 200 feet only. People in America did not believe in them. So, they moved to Europe and flew their Aeroplane to show and entertain people. All sudden they became famous. In 1910 they came back to America as heroes.

Questions

- What was the business of Wright brothers?
- How much time did the plane stay in the air?
- In which school did Wright brothers study?
- Give a suitable title to this passage.
- When did they return to their homeland?
- How old were the kids when they did first experience?

Q: 2 Change the following sentences into indirect speech. 10

- Mother said to the daughter, "Go and change your dress."
- Asif said, "I had read this book before I gave it to you."
- Amjad said, "I will bring my piano."
- The officer told the clerk, "Bring me that file."
- Maria asked, "Where is your watch?"

Q:3 Choose which part of speech the highlighted word is. 10

- She was wearing really beautiful earrings.
- Wow, you have got a great score.
- The baby crawled under the bed.
- She quickly packed her bag and left.
- This is a depressing time to be living in London as people are arguing over the election.

Q: 4 Rewrite the following sentences by correcting them. 10

- Amir is brave than his friends.
- The mans purse was lost in the bus.
- The boy studied when his father came home from work.
- Do he have any idea where he is going?
- Have you ever being to Lahore?

Q:5 Write a paragraph on one of the following topics. 10

- (i). Friendship (ii). Islamic Festivals (iii). My Ambition

Q:6 Write a story on the moral "Do good and have good". 10

Q:7 Correct the following spellings and rewrite them. 05

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Q:8 Translate the following sentences into English. 10

- 1- موسم سرما شروع ہو چکا ہے۔ -2 اس نے کہا کہ وہ میری مدد کرے گا۔
- 3- ہمیں بڑوں کی نصیحت پر عمل کرنا چاہیے۔ -4 یہ شاہراہ عام نہیں ہے۔
- 5- دو اور دو چار ہوتے ہیں۔

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**Cadet College Palandri AJ&K**  
**Maths for Entrance Test Class VIII**

**Mathematics**

**A. Arithmetic**

Marks: 75

1. Fraction and Decimal & Recurring.
2. Percentage Zakat
3. Average
4. Ratio and proportion
5. Profit and Loss
6. Square Root.

**B. Sets**

1. Definition and representation of sets
2. Kinds of sets. Intersection and Union of sets

**C. Algebra**

1. Substitution
2. Operation with Algebraic Expressions, Addition, Multiplication, Division-their properties and uses of Brackets.
3. Algebraic Sentences
4. Equation and Solution

**D. Geometry**

1. Definition of simple geometrical terms.
2. Construction and bisection of angles (with compass)
3. Division of line segment into given number of parts.
4. To draw perpendicular to a line from a point outside or on it.
5. To draw parallel lines.
6. Construction of triangle, square, parallelogram etc.
7. Area of rectangle, square, circle etc
8. Surface area of cylinder, surface area of cone.
9. Volume of cube, cuboids, cylinder and cone etc.

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# Cadet College Palandri AJ&K

## Modal Paper for Entrance Test Class VIII

Subject: Maths                      Total Marks 75                      Time 1 hr

Q.1 Attempt the following questions. 9 x 5 = 45

1. Area of circular field is  $7453\text{m}^2$  find its radius.
2. 12 men can do a job in 20days. How long will 10 men take to complete the same job?
3. Verify commutative property of intersection for the following sets.  
 $X = \{x/x \text{ is a letter in the Word Gujarat}\}$   
 $Y = \{y/y \text{ is a letter in the Word Gujranwala}\}$
4. Sum of two numbers is 30 and their difference is 4 find the numbers.
5. Construct a scalene triangle DEF such that  $\overline{EF} = 4.8\text{cm}$ ,  $\overline{DF} = 4.5\text{cm}$  and  $\overline{DE} = 5.1\text{cm}$
6. Find surface area of a sphere having  $r = 14\text{cm}$ .
7. Factorize  $4x^2 + 8xy + 4y^2 - 36z^2$
8. Solve  $-x + \frac{1}{2}y = -9$ ,  $x - y = 12$
9. Divide  $12x^3 + 12x^2 - x - 2$  by  $2x + 1$

Note: Attempt the following questions. 3 x 10 = 30

1. If  $U = \{x/x \in W \wedge x \leq 15\}$ ,  $A = \{x/x \in N \wedge x < 15\}$   
 $B = \{x/x \in W \wedge x \leq 14\}$  then verify that  $(A \cap B)' = A' \cup B'$
2. a. The length of rectangular field is two and half of its width if area of rectangular field is  $50625\text{cm}^2$  find its perimeter.  
b. Expand and simplify  $(a - b)^2 + (2a + 2b)^2$
3. (a). Construct a rectangle when two sides are 5cm and 3cm.  
(b). Construct a square whose measure of side is 5.5cm.

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## نصاب اردو برائے داخلہ جماعت ہشتم

### انشاء

1. بیانیہ مضمون (کتابیات، شخصیات، سائنس، سماجیات، سیاسیات، معاشیات، اقتصادیات اور تعلیم پر مبنی مضامین ہو سکتے ہیں)۔

### تفہیم عبارت

2. تفہیم عبارت ، کوئی بھی پیرا گراف پڑھ کر اس کے سوالات کے جوابات لکھنے ہوں گے۔

### تشکیل عبارت

3. تشکیل عبارت ، کوئی سے دو مصرعوں کی تفہیمی عبارت بنائیں ۔ شعراء کے زبان زد عام اشعار، مثلاً محو حیرت ہوں کہ دنیا کیا سے کیا ہو جائے گی۔ عملی قواعد

4. کہانی یا مکالمہ (ذاتی کاوش سے ہر قسم کی کہانی یا مکالمہ ہو سکتا ہے)۔  
5. بناوٹ اور معانی کے لحاظ سے اسم کی اقسام اور مثالیں ، فعل کی اقسام، فعل ماضی کی اقسام، اسم ظرف کی اقسام، فعل معروف ، فعل مجہول

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## نصاب اسلامیات برائے داخلہ جماعت ہشتم

کل نمبر 15

الف: مندرجہ ذیل قرآنی سورتیں کا بامحاورہ ترجمہ تحریر کریں۔ (ہر سورت سے پہلے) بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ لکھنا ضروری ہے۔

1. سورة الفاتحة 2. سورة النصر 3. سورة العصر 4. سورة اخلاص 5. سورة الفلق 6. سورة الناس 7. سورة الكوثر

- ب . عقائد اسلام
2. ارکان اسلام
3. حضرت محمدؐ کی حیات طیبہ
4. حجۃ الوداع
5. نماز کے ارکان
6. میثاق مدینہ
7. غزوہ بدر، غزوہ احد، غزوہ خندق، صلح حدیبیہ ، فتح مکہ
8. فتح مکہ

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## ماڈل پیپر اردو برائے داخلہ جماعت ہشتم

وقت : 1:30 گھنٹہ

کل نمبر 75

(15)

### مضمون نویسی

سوال نمبر 1: درج ذیل عنوانات میں سے کسی ایک پر سیر حاصل مضمون لکھیں۔  
میں بڑا ہو کر کیا بنوں گا؟ معاشرتی رسوم و رواج، دیہی و شہری زندگی، عجائب گھر، کسان کے شب و روز، شجر کاری کے فوائد اور کٹاؤ کے نقصانات، تاریخی عمارات کی سیر، آثار قدیمہ اور قدیم تہذیبیں، سماجی سرگرمیاں، غربت کے مسائل، تعلیمی ماحول میں عمارت کا کردار، ماحولیاتی آلودگی کی اقسام، باغبانی کے فوائد، کفایت شعاری

### تفہیم عبارت

سوال نمبر 2: دی گئی عبارت کرو غور سے پڑھیں اور دنیے گئے سوالات کے جوابات اپنے الفاظ میں لکھیں۔

15

مثلاً: زندگی کے ہر شعبے میں نظم و ضبط کی پابندی ضروری ہے۔ وہ لوگ جو نظم و ضبط کو اپنا شعار بناتے ہیں۔ ان کی زندگی سکون سے گزرتی ہے جبکہ نظم و ضبط کی پروا نہ کرنے والوں کی زندگی بے سکونی اور انتشار کا نمونہ پیش کرتی ہے۔ زندگی میں وہی لوگ کامیاب ہوتے ہیں جو اپنے کام کی منصوبہ بندی کرتے ہیں اور وقت کو بہترین انداز میں صرف کرتے ہیں۔ نظم و ضبط کے بغیر زندگی میں کوئی کامیابی حاصل نہیں کی جا سکتی۔ نظم و ضبط کی پابندی کامیابی کی دلیل ہے۔ وہ لوگ جو نظم و ضبط کے عادی ہوتے ہیں کامیابی اُن کے قدم چومتی ہے۔

- سوالات - 1- کن لوگوں کی زندگی سکون سے گزرتی ہے؟  
2- نظم و ضبط کی پروا نہ کرنے کا کیا نتیجہ نکلتا ہے؟  
3- عبارت کے مطابق زندگی میں کون سے لوگ کامیاب ہوتے ہیں؟  
4- نظم و ضبط کی پابندی کسی چیز کی دلیل ہے؟  
5- درج بالا عبارت کا خلاصہ اور عنوان لکھیں۔

### تشکیل عبارت

سوال نمبر 3- درج ذیل مصرعوں میں سے کسی ایک پر مختصر تفہیمی عبارت بنائیں۔

5

\*کچھ کر لو نوجوانو اُتھتی جوانیاں ہیں \*محوحیرت ہوں کہ دنیا کیا سے کیا ہو جانے گی۔ \*بچے ہمارے عہد کے چالاک ہو گئے۔  
سوال نمبر 4- نااتفاقی کا انجام کے زیر عنوان کہانی لکھیں۔ یا دو دوستوں کے درمیان امتحان کی تیاری کے موضوع پر مکالمہ لکھیں۔ 10

### قواعد اردو / گرائمر

سوال نمبر 5 الف: درج ذیل پانچ الفاظ و محاورات کو بامعنی جملوں میں استعمال کریں۔

10 = 5 + 5

نقل مکانی کرنا ، ہاتھ دھو بیٹھنا ، کمر کسنا ، موت کے منہ میں جانا ، عمل درآمد، سبقت، سرخرو (ب) درج ذیل فقرات کی درستی کریں۔

- 1- ہر شہری اپنے ملک سے محبت کرتی ہے (2) بچے کا ناک بہ رہا ہے 3- پیٹ میں شدید درد ہو رہی ہے۔  
4- سائرن بجتے ہی ساری کلاس چونکی ہو گئی۔ 5- یہ بچی اچھی گاتی ہے۔ 6- کلیات غالب چھپ گیا۔  
7- سرخ سیلابی سے لکھنا درست ہے۔ 8- چغلی کرنا بری بات ہے  
سوال نمبر 6- اسم علم کی اقسام کی تعریف لکھیں اور مثالیں دیں۔  
5

### حصہ اسلامیات 15

سوال: سورۃ الفلق یا سورۃ الفاتحہ کا بامحاورہ ترجمہ کریں۔

7

سوال: خطبہ حجۃ الوداع کے اہم نکات تحریر کریں۔ یا حقوق العباد کی اہمیت پر مفصل نوٹ لکھیں۔

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