

<b>ENGLISH ... Grade: 8 ... Allocated Marks:35... Time Allowed: 70 minutes</b>			
Educational institutions, established in private sector, introduce different series of books particularly on this subject, which vary from school to school. Keeping in view this problem, no text book is recommended for the Entry Test. However, in order to evaluate the proficiency of the candidate in English, a comprehensive paper is set which carries simple and common questions according to the <b>age/class level</b> of the students.			
TITLE of the ACTIVITY Function/Requirement	No. of Attempts (Parts of the Question)	Marks Allocated to each Attempt	Total Marks of the Question
<b>Vocabulary</b>			
Correction of Spellings	2	0.5	1.0
Meanings of Words in English or in Urdu /Synonym	3	1.0	3.0
Words – Opposite (Antonyms)	2	1.0	2.0
Word Families (Verbs, Nouns, Adjectives, Adverbs)	2	1.0	2.0
Commonly Confused Words / Pair of Words	4	0.5	2.0
<b>Grammar</b>			
Articles (a, an, the)	2	0.5	1.0
Prepositions	2	0.5	1.0
Conjunctions	2	0.5	1.0
Choosing the Correct Main Verb	2	1.0	2.0
Choosing the Correct Auxiliary Verb	2	1.0	2.0
Changing Tenses of the Sentences (Present/Past/Future)	1	1.5	1.5
Changing Sentence Type (Affirmative, Negative, Interrogative)	1	1.5	1.5
Voices (Active Voice/Passive Voice)	1	1.5	1.5
Narration (Direct/Indirect Speech)	1	1.5	1.5
<b>Sentence Formation of Words</b>	2	1.5	3.0
<b>Translation of Urdu Sentences into English</b>	2	1.5	3.0
<b>Paragraph Writing</b>	1	6.0	6.0

**MATHEMATICS ... Grade: 8 ... Allocated Marks: 35 ... Time Allowed: 70 minutes**

The ability of the students regarding general concepts of Mathematics, practiced in the respective classes at every school, is evaluated through the Entry Test paper of Mathematics. The paper comprises of three sections. The very first question of the paper, is in objective form, however, the second portion of paper is calculation based sums, and the last portion is of problem solving skills, geometry & shapes. (Note: Calculator is not allowed)

- Fill in the Blanks (1.0 x 4)
- Sums (4.0 x 4)
- Problem Solving Skills, Geometry & Shapes (5.0 x 3)

**SYLLABUS of MATHEMATICS for ADMISSION to GRADE: 8**

**Sets:** (Types of set, Subset, **Power set**, **Union**, **Intersection**, **difference** of two sets, **Compliment** of a Set, **Commutative & Associative** Properties of Sets)

**Rational Numbers/Decimals:** (Operations on **Rational** Numbers, Verification of **Commutative**, **Associative** & **Distributive** Properties of Rational Numbers, **Order** of Rational Numbers, Representation of Rational Numbers on **Real Number Line**, **Types** of Decimals, **Conversion** of Rational Numbers to Decimals, **Rounding** off Decimals)

**Square Root:**(Finding **Square Roots** of Natural Numbers, **Common Fractions**, and **Decimals** which are Perfect Squares, Solving Word Problems Related to Square Root)

**Direct & Inverse Variation:** (**Continued Ratio**, **Direct & Inverse** Proportion, Solving Real Life Problems by **Unitary Method** and by **Proportion Method**, Real Life Problems Related to **Time & Work** and **Time & Distance**, **Conversion** of Units of Speed i.e. **Km/h to m/s** and vice versa)

**Algebra:** (Algebraic Expressions and Sentences, Types and Order of Polynomials, Addition/Subtraction and Multiplication of Polynomials, Expansion of algebraic expressions by using identities  $(a+b)^2$ ,  $(a^2-b^2)$ , Factorization by using identities  $(a+b)^2$ ,  $(a^2-b^2)$ , **Solution** of Linear equations & related word problems)

**Geometry:** Concept of **circle**, relation between **radius and diameter**, **area & circumference** of circle, Real life application of area and circumference of circle

## **SYLLABUS of SCIENCE for ADMISSION to GRADE: 8**

**Plant Systems:** Root and Shoot Systems, Leaves, Transport in Plants, Transpiration, Photosynthesis, Respiration

**Human Respiratory and Circulatory Systems;**

**Immunity and Diseases:** Innate, Adaptive and Passive Immunity, Infectious Diseases

**Physical and Chemical Changes:** Explanation and Examples, Rusting, Tarnishing and Combustion

**Structure of an Atom:** Atomic Number, Mass Number, Modern Periodic Table, Distribution of Electrons in Shells

**Ionic and Covalent Bond**

**Formation of a Solution:** Dilute and Concentrated Solutions, Solubility, Factors Affecting Solubility

**Water Conservation**

**Preservation of Food**

**Force and Motion:** Speed, Distance, Force (Contact and Non-Contact)

**Mechanical and Electromagnetic Waves:** Transverse and Longitudinal Waves, Properties of Waves, Sound Waves and Its Properties

**Temperature Scales (Kelvin, Celsius and Fahrenheit)**

**Heat:** Thermal Expansion, Conduction, Convection and Radiation.