

ENGLISH ... Grade: 8 ... Allocated Marks:35... Time Allowed: 70 minutes

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 candidates in English, a comprehensive paper is set which carries simple and common questions according to the **age/class level** of the students.

SYLLABUS of ENGLISH for ADMISSION to Grade: 8

TITLE of the ACTIVITY Function/Requirement	No. of Attempts (Parts of the Question)	Marks Allocated to each Attempt	Total Marks of the Question
Vocabulary			
Correction of Spellings	2	0.5	1.0
Meanings of Words in English or in Urdu	3	1.0	3.0
Words – Opposites (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
Grammar			
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
Sentence Formation of Words	2	1.5	3.0
Translation of Urdu Sentences into English	2	1.5	3.0
Paragraph Writing	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 (1.0×4)
- Sums (4.0 ×4)
- Problem Solving Skills, Geometry & Shapes (5.0× 3)

SYLLABUS of MATHEMATICS for ADMISSION to GRADE:8

Sets: Identification of Set, Types of Set, Subset, perform operations on Sets (Union, Intersection, difference) and Complement of a set

Square Root: Finding Square Root of Natural numbers, Common fractions and Decimals which are perfect squares, Solving Word Problems Related to Square Roots.

Rational Numbers: Operations on Rational numbers, Verification of Commutative, Associative & Distributive Properties of Rational numbers, Additive identity and multiplicative identity, additive inverse and multiplicative inverse of Rational numbers, Comparison and ordering of Rational Numbers, Representation of Rational numbers on Real Number line, Types of Decimals, Conversion of Rational numbers to Decimals & Rounding off Decimals

Direct and Inverse Variation: Continued ratio, Direct & Inverse Proportion & related word problems, 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, Polynomials and Types of polynomial w.r.t terms and degree, ordering of Polynomials w.r.t variable. Addition, Subtraction and Multiplication of Polynomials, Expansion of algebraic expressions by using identities $(a \pm b)^2$ and $(a^2 - b^2)$, Factorization by using identities $(a \pm b)^2$, $(a^2 - b^2)$, Solution of Linear equations & related word problems .

Geometry: Concept of circle, relation between radius and diameter, circumference and area of circle, real life problems related to 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.