

## 9<sup>th</sup> Class Syllabus

### A. Syllabus Aim

The syllabus for the entry test has been carefully revised and designed to guide candidates in achieving a strong foundational understanding of each subject before admission to TNF. It aims to create a balance between knowledge, comprehension, and practical skills, enabling students to become confident and capable learners as they progress in their education.

### Math

Real numbers, Set (Types of sets, Forms of sets - descriptive, tabular & set builder, and their usage in problem solving, Operation and properties of sets, Union, Intersection, Difference & Complement, Laws of union, intersection, and complement, Rate, Ratio, and Proportions (Direct and inverse), Financial Arithmetic (Profit, loss, tax, and discount, etc.), Squares and Square roots, Cube and Cube Roots, Number Sequence (Arithmetic Sequence and Geometric Sequence), Expressions, Polynomials, types of Polynomials, addition, subtraction, product of the polynomials, Expansion and factorization of polynomials, solution of Simultaneous linear equations, Linear equations, and linear inequalities, Perimeter, areas, and volumes of square, rectangle, circle, sphere, cone, Frequency distribution, Calculation of probability of simple events, Mean, Median, and Mode of Ungrouped Data and Grouped Data)

### English

MCQ, fill in the Blanks, Question /Answers, Translation english to urdu and urdu to english words meaning and sentences Essay, Letter, Application, story, (8<sup>th</sup> Class Punjab Text Book)

اردو

مذکرو منہ، بنیادی قواعد کی تعریفیں مضمون نویسی متصاد الفاظ ضرب الامثال، کہانی نویسی، خط نویسی، مترادف الفاظ، واحد و جمع، فقرہوں کی درستی، درخواست نویسی

سابقہ جماعت کا کامل نصاب (پنجاب یونیورسٹی)

## Entry Test Syllabus for Admission to Class IX (Science Group)

### Biology Portion

- Cell and Cell Organelles - Digestive System - Respiratory System - Human Nervous System
- DNA (structure and role) - Cell Division (mitosis & meiosis – basic) - Vaccine (importance)
- Insulin (function)

### Chemistry Portion

- Periodic Table (basic understanding) - Metals, Non-metals, and Metalloids - Elements, Compounds, and Mixtures - Chemical Bonding and its Types - Chemical Reactions and Equations - Balancing Chemical Equations - Atomic Structure and Bohr's Model - Electronic Configuration

### Physics Portion

- Physical Quantities – prefixes – Unit Conversion – Speed – Velocity – Acceleration - Density and Pressure - Force and Newton's Laws (basic) - Reflection and Refraction of Light - Spherical Mirrors - Current, Voltage, and Resistance - Electrical Power