

# MAGIS 2026/2

## Syllabus for Grade 9

Designed as an objective and fair method of assessing academic achievement of students through computerized scoring, MAGIS serves as a standardized and transparent admission test for Pak-Turk Maarif International Schools and Colleges.

### English:

- Tenses
- Correct usage of parts of speech (noun, pronoun, verb, adjective, adverb, preposition, determiners, and conjunction) in a sentence
- Vocabulary (synonyms, antonyms, one word replacement)
- Punctuation
- Correct usage of figures of speech (similes, metaphors, personification, alliteration, and oxymoron and hyperbole) in a sentence
- Idioms and identifying the correct meaning of an idiom
- Change in voice and change in direct-indirect narration
- Usage of 1<sup>st</sup> and 2<sup>nd</sup> conditionals
- Homophones and homonyms
- Formal and informal letter
- Paragraph writing
- Unseen comprehensions and MCQs relevant to comprehensions

### Mathematics:

- Sets, union and intersection, subset and superset
- Basic of algebra, factorisation of algebraic expressions by applying mid-term break, completing squares, difference of two squares
- Addition, subtraction, division and multiplication of algebraic expressions
- Solving linear simultaneous equations
- DMAS and solving word problems using DMAS
- HCF and LCM and application in word problems
- Finding out profit or loss percentage using data and word problems
- Ratio and proportion, and application in finding the solution of given problem
- Angles and types of angles
- Basic geometry, perimeter and area and volume of triangles, squares and rectangle, parallel and perpendicular lines
- Surface area of cube, cuboid, sphere and rhombus
- Basic statistical approach like frequency, means, median and mode

### Science

- Biological level of organization
- Cell and cellular organelles (Cell wall, Cell membrane, Nucleus, Mitochondria, Cytoplasm, Chloroplast, Golgi bodies and Ribosomes, identification and role of epithelia cells, nerve cells, vascular tissues in plants and red blood cells and root hair cells)
- Photosynthesis
- Respiration
- Chromosomes, DNA, role and composition of DNA
- Cell division and types of cell division (role/importance, site of occurrence and importance)
- Structure of an atom and basics of atomic particles
- Matter, types of matter, movements of particles of matter, effect of temperature on the particles of matter
- Physical vs chemical changes with examples from daily life
- Chemical reactions and types of chemical reactions, exothermic and endothermic reactions and comparison of heat contents of reactants and products of both types of reactions, balancing of chemical equations
- Basics of acids, bases and alkalis, physical properties, neutralization reaction, effect of acids on metals and effect of alkalis on ammonium salts
- Basics of periodic Table, atomic number, atomic mass and placement of elements in periodic table
- Ionic and covalent bonds with the identification of bonds in the given examples
- SI Units and interconversion of units
- Force and its effects, comparison of force and weight, comparison of mass and weight, effect of force on
- Speed, time, distance and displacement, relation of speed, time and distance
- Pressure, water pressure, air pressure and effect of force on pressure
- Heat energy (sources and effects), temperature and interconversion of units of temperature, methods of heat transfer, effect of temperature on energy of particles
- Reflection, regular and diffused reflection, speed of light, laws of reflections, image formation by plane mirror, spherical mirrors image formation and uses, lenses
- Basics of electricity and magnetism, voltage and resistance
- Global warming and acid rain (causes and effects)

### اُردو:

- قواعد: اسم، فعل، حرف اور انکی اقسام، صرف و نحو، فعل، فاعل اور مفعول، محاورے اور ان کا جملوں میں استعمال، الفاظ متضاد، تذکیر و تانیث، واحد جمع، الفاظ مترادف، سابقے اور لاحقے، اعراب۔ روزمرہ اور محاورے کے لحاظ سے جملوں کی درستی۔ ضرب الامثال کی پہچان۔ متشابہ الفاظ۔ ذو معنی الفاظ۔ اصناف سخن (حمد، نعت)۔ املا کی درستی۔ تشبیہات۔ اسم صفت، استعارہ، فعل معروف و مجہول۔ اسم صفت کی اقسام (ذاتی، نسبتی، عددی، مقدراری)۔ علامات اوقاف (رموز اوقاف) علامات فہمیہ۔ استفہام، واوین، قوسین، تفصیلیہ، تخلص، شعر، حذف۔ قافیہ ردیف۔ مرکب کی اقسام (ناقص، تام) نادیدہ عبارت کی تقسیم۔ کسی بھی موضوع پر پیرا گراف، درخواست یا خط تحریر کرنا۔

### General Knowledge: Basics of Pakistan and current affairs