

قسم المواد العربيّة

تمنياتنا لك بالتوفيق



ENGLISH REQUIREMENTS FOR GRADE 10 ENTRY

Grade 10 is the second year of the IGCSE programme. The English Entrance Exam will consist of:

Reading

A passage will be given to students to read and they will need to answer related questions.

Students must be able answer questions that could relate to the following:

- Punctuation
- Parts of speech (nouns, verbs, adjectives, adverbs, articles, prepositions and conjunctions)
- Tenses
- Sentence Structure
- Direct and reported speech
- Synonyms and antonyms
- Homophones and homonyms
- Inference, denotation and connotation of words.

<u>Writing</u>

Students are set a writing task and they will need to answer using one of the following styles:

- Writing to inform
- Writing to describe
- Writing to explain
- Writing to narrate
- Writing to persuade
- Writing to advise

An essay should have an effective thesis statement introduction, appropriate transitional devices, three well-planned supporting paragraphs with varied sentence length and structure, as well as an insightful conclusion.

<u>Literature</u>

Students will be given a poem to analysis. This will be a short poem and the questions are designed to test a student's knowledge of poetry and literary conventions at the level that they are expected to be at.



MATHEMATICS REQUIREMENTS for GRADE 10 Entry

NUMBERS

- Understand place value, read, write, order, add and subtract whole numbers
- Multiply and divide whole numbers
- Round to nearest 10, 100 and 1000...
- Understand and use integers (positive, negative and zero) both as positions and translations on a number line
- Use directed numbers in practical situations
- Order integers
- Understand and use integers (positive, negative and zero) both as positions and translations on a number line
- Use directed numbers in practical situations
- Use the four rules of addition, subtraction, multiplication and division
- Use the terms odd, even and prime numbers, factors and multiples
- Identify prime factors, common factors and common multiples
- evaluate Highest Common Factors (HCF) and Lowest Common Multiples (LCM)
- identify square numbers and cube numbers
- understand place value
- Add, subtract, multiple and divide decimals
- Round to a given decimal place or significant figure
- use estimation to evaluate approximations to numerical calculations
- understand and use equivalent fractions identify common denominators
- apply common denominators to order fractions
- understand and use mixed numbers and vulgar fractions
- multiply and divide a given fraction by an integer, by a unit fraction and by a general fraction
- use common denominators to add and subtract fractions
- convert a decimal to a fraction or a percentage
- use a scientific electronic calculator to determine numerical results.
- interpret scales on a range of measuring instruments
- calculate time intervals in terms of the 24-hour and 12-hour clock
- understand and carry out calculations using time
- carry out calculations using standard units of mass, length, area, volume and capacity (metric units)
- carry out calculations using standard units of mass, length, area, volume and capacity(imperial units)
- understand and use the relationship between average speed, distance and time
- identify upper and lower bounds where values are given to a degree of accuracy
- understand that 'percentage' means 'number of parts per 100'
- express a percentage as a fraction and as a decimal
- solve simple percentage problems, including percentage increase and decrease
- express a given number as a percentage of another number
- use ratio notation, including reduction to its simplest form and its various links to fraction notation
- solve word problems about ratio and proportion
- divide a quantity in a given ratio or ratios
- calculate an unknown quantity from quantities that vary in direct proportion
- carry out calculations using money, including converting between currencies

Reviewed for 2019-2020 Entry

GEOMETRY

- distinguish between acute, obtuse, reflex and right angles
- make sensible estimates of a range of measures
- measure an angle to the nearest degree
- understand the exterior angle of a triangle property and the angle sum of a triangle property
- understand the terms isosceles, equilateral and right-angled triangles and the angle properties of these triangles
- use angle properties of intersecting lines, parallel lines and angles on a straight line
- use angle properties of intersecting lines, parallel lines and angles on a straight line
- understand and use the term quadrilateral and the angle sum property of quadrilaterals
- understand the term regular polygon and calculate interior and exterior angles of regular polygons
- understand and use the angle sum of polygons
- understand angle measure including three figure bearings
- use and interpret maps and scale drawings
- measure and draw lines to the nearest millimetre
- measure an angle to the nearest degree understand angle measure including three figure bearings
- understand the terms isosceles, equilateral and right-angled triangles and the angle properties of these triangles
- understand and use the properties of the parallelogram, rectangle, square, rhombus, trapezium and kite
- recognise and give the names of polygons understand congruence as meaning the same shape and size
- understand that two or more polygons with the same shape and size are said to be congruent to each other
- measure and draw lines to the nearest millimetre
- construct triangles and other two-dimensional shapes using a combination of a ruler, a protractor and compasses
- recognise line and rotational symmetry
- identify any lines of symmetry and the order of rotational symmetry of a given two-dimensional figure
- find the perimeter of shapes made from triangles and rectangles
- find the area of simple shapes using the formulae for the areas of rectangles
- find the area of triangles, parallelograms and trapezia
- find the area of simple shapes using the formulae for the areas of triangles and rectangles

ALGEBRA

- understand that symbols may be used to represent numbers in equations or variables in expressions and formulae
- understand that a letter may represent an unknown number or a variable
- use correct notational conventions for algebraic expressions and formulae
- understand that symbols may be used to represent numbers in equations or variables in expressions and formulae
- understand that a letter may represent an unknown number or a variable
- collect like terms
- multiply a single term over a bracket
- take out single common factors
- evaluate expressions by substituting numerical values for letters
- substitute positive and negative integers, decimals and fractions for words and letters in expressions and formulae

Reviewed for 2019-2020 Entry

- understand that algebraic expressions follow the generalised rules of arithmetic
- use index notation and index laws for multiplication and division of positive integer powers
- use index notation for positive integer powers
- use index laws in simple cases
- use brackets and the hierarchy of operations
- multiply a single term over a bracket
- collect like terms
- take out single common factors
- solve linear equations
- solve linear equations with integer or fractional coefficients in one unknown
- solve linear equations, with integer or fractional coefficients, in one unknown in which the unknown appears on either side or both sides of the equation
- set up simple linear equations from given data

STATISTICS

- use appropriate methods of tabulation to enable the construction of statistical diagrams
- use different methods of presenting data (pictograms, pie charts, bar charts, line diagrams, histograms, frequency polygons
- interpret statistical diagrams
- calculate the mean, median, mode and range for a discrete data set
- understand the concept of averages