

الكفايات المطلوبة لاجتياز امتحانات القبول في مادّة اللّغة العربيّة  
الصفّ التّاسع

. في القراءة :

- . أن تميّز الطّالبة بين أنواع النّصوص وفنونها (السّرد، الوصف، الحوار، المقالة، السّيرة، الرسالة وأنواعها...
- . أن تميّز الطالبة بين أساليب النصوص ومعانيها.
- . أن تستخرج الطّالبة أفكار النّص الرئيّسة والفرعيّة.
- . أن توظّف الطّالبة خبراتها في بناء معاني النّصّ بالإجابة عمّا يُطلب منها.
- . أن تحلّل الطّالبة بعض الصّور البيانيّة ( التشبيه).

. في القواعد :

- . أن تميّز الطّالبة عناصر الجملة الاسميّة الأساسيّة وعناصر الجملة الفعلية الأساسيّة.
- . أن تعرب الطّالبة عناصر الجملة الفعلية وعناصر الجملة الاسميّة.
- . أن تميّز أنواع الأفعال (مزيدة أو مجردة / لازمة أو متعدية).
- . أن تصرّف الأفعال في الماضي والمضارع المرفوع أو المنصوب أو المجزوم مع جميع الضّمائر والأمر مع ضمائر الخطاب.
- . أن تصوغ الطّالبة جملا فعلية واسميّة تامّة المعنى.
- . أن تميّز الطّالبة عناصر الجملة الاسميّة المسبوقة بكان و أخواتها/ إنّ وأخواتها.
- . أن تُعرب الطّالبة عناصر الجملة الاسميّة المسبوقة بكان و أخواتها/ إنّ وأخواتها.

. الإنتاج الكتابي:

- . أن تكتب قصّة قصيرة /مغامرة/ رسالة إخوانيّة / نصّ حواريا/ نصّا وصفيا... من خلال موضوع مطروح.
- . أن تراعي التدرّج المطلوب في بناء النّمت القصصي(من البداية، إلى الأزمة، إلى التّهاية) وتوظّف أركان السّرد (المكان، الزّمان، الشّخصيات، الأحداث) توظيفا مناسباً للموضوع.
- . أن تكتب رسالة إخوانيّة ملتزمة بأركانها( تاريخ /مكان/ صيغة التوجه/المواضيع/عبارة الختام/التوقيع...)
- . أن تلتزم بمنهج النّصّ الحواري.
- . أن تراعي تقنيات الوصف(موصوفات، صفات، أساليب وصف مناسبة، نظام الوصف(التّدرج في الوصف)
- . أن تتوسّع في تحليل الأفكار، وتصف مشاعرهما.
- . أن تكتب نصّها بلغة عربيّة فصيحة.
- . أن تراعي في إنتاجها سلامة قواعد اللّغة نحوا و صرفا ورسمًا إملائيًا.
- . أن تستعمل علامات الوقف المناسبة.
- . أن تلتزم بوضوح الخطّ ونظافة ورقة الاختبار.

تمنياتنا لك بالتوفيق



## ENGLISH REQUIREMENTS FOR GRADE 9 (IGCSE) ENTRY

As this Grade is the beginning of the two year IGCSE course the English Entrance Exam will consist of:

### **Reading**

A short 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.

### **Writing**

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

Students are expected to write a well-constructed essay that has a clear introduction, body and conclusion. Paragraphs must include a topic sentence as well as supporting sentences.

## **Literature**

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 9 Entry

## BASIC OPERATIONS

- Extend mental methods of calculation, working with decimals, fractions, percentages and factors, using jottings where appropriate.
- Solve word problems mentally.
- Consolidate use of the rules of arithmetic and inverse operations to simplify calculations.
- Multiply and divide integers and decimals by decimals such as 0.6 or 0.06, understanding where to place the decimal point by considering equivalent calculations, e.g.  $4.37 \times 0.3 = (4.37 \times 3) \div 10$ ,  $92.4 \div 0.06 = (92.4 \times 100) \div 6$ .
- Multiply by decimals, understanding where to position the decimal point by considering equivalent calculations; divide by decimals by transforming to division by an integer.
- Calculate accurately, choosing operations and mental or written methods appropriate to the numbers and context.

## INDICES AND STANDARD FORMS

- Use positive, negative and zero indices and the index laws for multiplication and division of positive integer powers.
- Use the order of operations, including brackets and powers.

## FRACTIONS AND PERCENTAGES

- Recognise when fractions or percentages are needed to compare different quantities.
- Consolidate writing a fraction in its simplest form by cancelling common factors.
- Add, subtract, multiply and divide fractions, interpreting division as a multiplicative inverse, and cancelling common factors before multiplying or dividing.
- Solve problems involving percentage changes, choosing the correct numbers to take as 100% or as a whole, including simple problems involving personal or household finance, e.g. simple interest, discount, profit, loss and tax.

## LINEAR GRAPHS AND EQUATIONS

- Know the origins of the word *algebra* and its links to the work of the Arab mathematician Al'Khwarizmi
- Construct tables of values and plot the graphs of linear functions, where  $y$  is given implicitly in terms of  $x$ , rearranging the equation into the form  $y = mx + c$ ; know the significance of  $m$  and find the gradient of a straight line graph.
- Substitute positive and negative numbers into expressions and formulae.
- Add, subtract, multiply and divide directed numbers (integers).
- Construct and solve linear equations with integer coefficients (with and without brackets, negative signs anywhere in the equation, positive or negative solution); solve a number problem by constructing and solving a linear equation.
- Find the approximate solutions of a simple pair of simultaneous linear equations by finding the point of intersection of their graphs.
- Solve a simple pair of simultaneous linear equations by eliminating one variable.
- Manipulate numbers, algebraic expressions and equations, and apply routine algorithms.

## PROBABILITY

- Know that the sum of probabilities of all mutually exclusive outcomes is 1 and use this when solving probability problems.

- Find and record all outcomes for two successive events in a sample space diagram.
- Find and list systematically all possible mutually exclusive outcomes for single events and for two successive events.
- Compare estimated experimental probabilities with theoretical probabilities, recognising that:
  - when experiments are repeated different outcomes may result
  - increasing the number of times an experiment is repeated generally leads to better estimates of probability

## TRANSFORMATIONS

- Use the coordinate grid to solve problems involving translations, rotations, reflections and enlargements.
- Transform 2D shapes by combinations of rotations, reflections and translations; describe the transformation that maps an object onto its image.
- Enlarge 2D shapes, given a centre and positive integer scale factor; identify the scale factor of an enlargement as the ratio of the lengths of any two corresponding line segments.
- Recognise that translations, rotations and reflections preserve length and angle, and map objects on to congruent images, and that enlargements preserve angle but not length.
- Know what is needed to give a precise description of a reflection, rotation, translation or enlargement.

## STATISTICAL DIAGRAMS

- Select, draw, and interpret diagrams and graphs, including:
  - frequency diagrams for discrete and continuous data
  - line graphs for time series
  - scatter graphs to develop understanding of correlation
  - back to back stem-and-leaf diagrams
- Calculate statistics for sets of discrete and continuous data; recognise when to use the range, mean, median and mode and, for grouped data, the modal class.
- Compare two distributions, using the range and one or more of the mode, median and mean.
- Compare proportions in two pie charts that represent different totals.
- Interpret tables, graphs and diagrams and make inferences to support or cast doubt on initial conjectures; have a basic understanding of correlation.
- Compare two or more distributions; make inferences, using the shape of the distributions and appropriate statistics.
- Relate results and conclusions to the original question.

## AREA, PERIMETER AND VOLUME

- Derive and use formulae for the area of parallelogram and trapezium; calculate areas of compound 2D shapes.
- Solve problems involving the circumference and area of circles, including by using the  $\pi$  key of a calculator.
- Round numbers to a given number of decimal places or significant figures; use to give solutions to problems with an appropriate degree of accuracy.
- Calculate lengths, surface areas and volumes in right-angled prisms and cylinders.

## SEQUENCES \*

- Generate terms of a linear sequence using term-to-term and position-to-term rules; find term-to-term and position-to-term rules of sequences, including spatial patterns.
- Use a linear expression to describe the  $n$ th term of a simple arithmetic sequence, justifying its form by referring to the activity or practical context from which it was generated.
- Derive an expression to describe the  $n$ th term of an arithmetic sequence.

### ALGEBRAIC MANIPULATION \*

- Substitute positive and negative numbers into expressions and formulae.
- Add, subtract, multiply and divide directed numbers (integers).
- Construct and solve linear equations with integer coefficients (with and without brackets, negative signs anywhere in the equation, positive or negative solution); solve a number problem by constructing and solving a linear equation.
- Construct algebraic expressions.
- Expand the product of two linear expressions of the form  $x \pm n$  and simplify the corresponding quadratic expression.
- Simplify or transform algebraic expressions by taking out single-term common factors.
- Add and subtract simple algebraic fractions.
- Find the inverse of a linear function.
- Derive formulae and, in simple cases, change the subject; use formulae from mathematics and other subjects.

### ANGLES AND CONSTRUCTIONS

- Solve problems using properties of angles, of parallel and intersecting lines, and of triangles, other polygons and circles, justifying inferences and explaining reasoning with diagrams and text.
- Use a straight edge and compasses to:
  - construct the perpendicular from a point to a line and the perpendicular from a point on a line
  - inscribe squares, equilateral triangles, and regular hexagons and octagons by constructing equal divisions of a circle
- Make and use scale drawings and interpret maps.
- Find by reasoning the locus of a point that moves at a given distance from a fixed point, or at a given distance from a fixed straight line.

### GRAPHS, EQUATIONS AND INEQUALITIES\*

- Understand and use inequality signs ( $<$ ,  $>$ ,  $\leq$ ,  $\geq$ ); construct and solve linear inequalities in one variable; represent the solution set on a number line.
- Manipulate numbers, algebraic expressions and equations, and apply routine algorithms.
- Construct functions arising from real-life problems; draw and interpret their graphs

### ESTIMATION AND APPROXIMATION\*

- Round numbers to a given number of decimal places or significant figures; use to give solutions to problems with an appropriate degree of accuracy.
- Use the order of operations, including brackets and powers.

### TRIGONOMETRY (PLUS PYTHAGORAS)

- Know and use Pythagoras' theorem to solve two-dimensional problems involving right-angled triangles.

### CUMULATIVE FREQUENCY\*

- Collect and tabulate discrete and continuous data, choosing suitable equal class intervals where appropriate.
- Calculate statistics and select those most appropriate to the problem.
- Identify, organise, represent and interpret information accurately in written, tabular, graphical and diagrammatic forms.