ADVANCE INFORMATION - HIGHER TIER - EDEXCEL - NOV 22 ONLY

| Paper 1 |  |  |  | RAG |
| :---: | :---: | :---: | :---: | :---: |
| Number | Multiplication of decimals |  |  |  |
| Arithmetic | Fraction arithmetic |  |  |  |
| Fractions | One amount as a fraction of another |  |  |  |
| Properties | Multiples |  |  |  |
|  | Highest common factor |  |  |  |
|  | Product of prime factors |  |  |  |
| Powers and roots | Laws of indices |  |  |  |
|  | Fractional indices |  |  |  |
|  | Simplification of surds |  |  |  |
|  | Calculate exactly with surds |  |  |  |


| Algebra |  |  |
| :---: | :---: | :---: |
| Manipulation | Simplification |  |
|  | Substitute values |  |
|  | Factorise |  |
|  | Difference of two squares |  |
|  | Algebraic fractions |  |
| Equations and <br> inequalities | Linear simultaneous equations |  |
| Graphs | Quadratic equation |  |
| Sequences | Graph of cubic function |  |
| Graph of trigonometric functions |  |  |
|  | Geometric sequence |  |


| Ratio, proportion, and rates of change |  |  |
| :---: | :---: | :---: |
| Percentages | One quantity as a percentage of another |  |
| Ratio | Write as a ratio |  |
|  | Use of ratio |  |
| Proportion | Inverse proportion |  |
| Compound Measures | Pressure |  |


| Geometry and measures |  |  |
| :---: | :---: | :---: |
| Shape | Transformations |  |
| Angles | Angles in a triangle |  |
|  | Circle theorems |  |
| Length, area and volume | Area of a rectangle |  |
|  | Arc length |  |
|  | Volume and surface area of a cone |  |
|  | Volume and surface area of a sphere |  |
| Pythagoras \& Trigonometry | Sine rule |  |
|  | Exact trigonometric values |  |


| Probability |
| :--- |
| Probability |


| Paper 2 |  | RAG |
| :---: | :---: | :---: |
| Number |  |  |
| Arithmetic | Money |  |
| Fractions | Recurring decimal to fraction |  |
| Approximation and Estimation | Bounds |  |
| Algebra |  |  |
| Manipulation | Substitute values |  |
| Equations and inequalities | Equations of parallel lines |  |
|  | Quadratic equation |  |
|  | Equation of a circle |  |
|  | Equation of a tangent to a circle |  |
| Graphs | Coordinates |  |
|  | Quadratic graph |  |
|  | Region defined by linear inequalities |  |
|  | Gradient of a curve |  |
| Functions | Composite and inverse functions |  |
| Sequences | nth term of a linear sequence |  |


| Number |  | RAG |  |
| :---: | :---: | :---: | :---: |
| Standard Form | Conversion |  |  |
|  | Calculation |  |  |
| Approximation and <br> Estimation | Error interval |  |  |
| Other | Mathematical symbols |  |  |
|  | Product rule for counting |  |  |


| Ratio, proportion, and rates of change |  |  |
| :--- | :---: | :--- |
|  | Percentage profit |  |
|  | Depreciation |  |
|  | Reverse percentage |  |
| Proportion | Direct proportion |  |
| Compound Measures | Compound interest |  |
| Growth and decay | General iterative processes |  |

## Geometry and measures

| Shape | Plan and elevation |  |
| :---: | :---: | :---: |
|  | Areas and volumes of similar figures |  |
| Length, area and <br> volume | Area of a rectangle |  |
|  | Area of a triangle |  |
|  | Area of a sector |  |
|  | Trigonometry |  |
|  | Pythagoras's Theorem |  |
|  | Trigonometry in 3-D |  |


| Statistics |  |  |  |
| :---: | :---: | :---: | :---: |
| Diagrams | Scatter graph |  |  |
|  | Cumulative frequency graph |  |  |
|  | Box Plot |  |  |
| Measures | Median, upper and lower quartiles |  |  |
| Population | Capture-recapture method |  |  |


| Algebra |  |  |
| :---: | :---: | :---: |
| Manipulation | Simplification |  |
|  | Change subject of a formula |  |
|  | Laws of indices |  |
|  | Expand brackets |  |
|  | Completing the square |  |
|  | Algebraic fractions |  |
| Graphs | Transformations of functions |  |
|  | Turning point |  |


\left.| Ratio, proportion, and rates of change |  |  |
| :---: | :---: | :---: |
| Conversion | Volume, speed |  |
| Percentages | One quantity as a percentage of |  |
| another |  |  |$\right]$

## Geometry and measure

| Shape | Combined transformations |  |
| :---: | :---: | :---: |
|  | Congruent triangles |  |
|  | Similar triangles |  |
| Angles | Angles on a straight line |  |
|  | Angles in a triangle |  |
|  | Angles of a polygon |  |
|  | Circle theorems |  |
| Length, area and volume | Area of a triangle |  |
|  | Volume of a cylinder |  |
| Pythagoras \& Trigonometry | Cosine rule |  |
| Vectors | Vector geometry |  |
| Probability |  |  |
| Probability | Frequency tree |  |
|  | Expected frequency |  |
|  | Tree diagram |  |
|  | Combined events |  |
| Statistics |  |  |
| Diagrams | Cumulative frequency graph |  |
| Measures | Mean |  |

