

**MTH-5163**

**Subject-Specific Content**

<b>Categories of Knowledge</b>	<b>Prescribed Knowledge</b>
Geometric transformations	<ul style="list-style-type: none"><li>• Representing and describing geometric transformations</li></ul>
Finding measurements	<ul style="list-style-type: none"><li>• Equivalent figures</li><li>• Finding measurement of:<ul style="list-style-type: none"><li>– arcs or angles</li><li>– lengths (segments, chords)</li><li>– areas</li><li>– volumes</li><li>– capacities</li></ul></li></ul>
Geometric loci and relative position: plane loci involving lines or circles only, and conics	<ul style="list-style-type: none"><li>• Describing and representing and constructing geometric loci (plane loci involving lines or circles only, and conics)</li></ul>
Trigonometric relations	<ul style="list-style-type: none"><li>• Standard unit circle (radian and arc length)</li><li>• Manipulating simple trigonometric expressions using definitions (sine, cosine, tangent, secant, cosecant and cotangent)</li></ul>
Vectors	<ul style="list-style-type: none"><li>• Resultant and projection</li><li>• Operations on vectors</li></ul>