

ANSWERS TO SEMESTER ONE EXAMINATION JUNE 2005 (MARCH 2005 INTAKE)

1	$160n^4 + 52n^3 - 8n^2 - 2n$
2	i) SHOW ; (ii) 2 ; (iii) 39 ; 88
3	<p>i) $P = c - a - b$ and $Q = (c - a)(c - b)$</p> <p>ii) Asymptotes : $y = x + c - a - b$ and $x = c$.</p> <p>iii) 2 Critical Points.</p> <p>Minimum point at $x = c + \sqrt{(c - a)(c - b)}$ and Maximum point at $x = c - \sqrt{(c - a)(c - b)}$</p> <p>The curve crosses the axes at $\left(0, \frac{-ab}{c}\right)$; $(a, 0)$ and $(b, 0)$</p>