



<b>Q.4</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	Evaluate $\int_0^a x^3(a-x)^{\frac{3}{2}} dx$	<b>Understand (CO4)</b>	<b>6</b>
<b>B)</b>	Trace the curve $y^2(2a-x) = x^3$ .	<b>Understand (CO4)</b>	<b>6</b>
<b>C)</b>	Trace the curve $x = a(\theta - \sin\theta)$ , $y = a(1 - \cos\theta)$ .	<b>Understand (CO4)</b>	<b>6</b>
<b>Q. 5</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	Evaluate $\int_0^1 \int_0^{z^2} \int_0^{z^2-x} xz dx dy dz$	<b>Understand (CO5)</b>	<b>6</b>
<b>B)</b>	Find the area bounded by $y^2 = 4x$ and $2x - 3y = -4$ .	<b>Understand (CO5)</b>	<b>6</b>
<b>C)</b>	Change to polar and evaluate $\int_0^\infty \int_0^\infty e^{-(x^2+y^2)} dx dy$ .	<b>Understand (CO5)</b>	<b>6</b>