Mahatma Gandhi Mission's College of Engineering and Technology
Kamothe,Navi Mumbai

Branch: FE (ALL) **Academic Year: 2020-2021**

Course Code: FEC 201 **Course Name: Engineering Mathematics II [Choice Based]**

Tutorial 5

Ques. No.	Question	Module	Level *	PI	CO
1	Evaluate $\int_0^\infty x^{m-1}\cos(ax)\,dx$. $Hint$: $\int_0^\infty x^{m-1}[\text{R.P. of } e^{-iax}.]\,dx$	3	3	1.1.1	3
2	Evaluate $\int_0^\infty e^{-ax}x^{m-1}\sin(bx)\,dx$.- $Hint$: $\int_0^\infty e^{-ax}\,x^{m-1}[\text{I.P. of } e^{-ibx}.]\,dx$	3	3	1.1.1	3
3	a)Evaluate $\int_0^1 \frac{dx}{\sqrt{x.lig(1/x)}}$, $b)$ $\int_0^1 \sqrt{lig(1/x)}\,dx$	3	2	1.1.1	3
4	Evaluate $\int_0^\infty x^2e^{-x^4}\,\mathrm{d}\,x\,.\int_0^\infty e^{-x^4}\,\mathrm{d}\,x$	3	2	1.1.1	3
5	$Evaluate$ $\int_0^\infty 7^{-7x^2}\,\mathrm{d}\,x$	3	2	1.1.1	3
6	$Evaluate$ $\int_0^1 \sqrt{1-x^6}\,\mathrm{d}\,x$	3	2	1.1.1	3

***As per Bloom's Taxonomy**