KOLHAPUR INSTITUTE OF TECHNOLOGY'S
COLLEGE OF ENGINEERING (AUTONOMOUS),KOLHAPUR

First Year BTech
MID SEMESTER EXAMINATION
Engineering Mathematics 1 (123)

Day and Date : PRN:

Time : Max Marks:30

Instructions:

IMP: Verify that you have received question paper with correct course, code, branch, etc

i) All Questions are Compulsory
ii)Figure to right indicate full marks
iii)Assume suitable data wherever necessary

QNo	Question	Marks	CO	BL

1.	**Attempt 2 out of 4**	**10**		
1.A	find the value of $y = x^2$ where x=4 A)1 B)4 C)9 D)16	3	CO2	3
1.B	find out the area of triangle with base =3cm and height =4cm. A)6 B)12 C)5 D)4	3	CO1	2
1.C	What is the Volume of Cylinder which has radius=4cm and height and 6 cm .π =3.14. A)25 B)32 C)25 D)30	3	CO5	4
1.D	$\frac{1-\cos a}{\sin a}$ equals tp: A)$\frac{\sin a}{1-\cos a}$ B)$\frac{\sin a}{1+\cos a}$ C)$\frac{\cos a}{1-\cos a}$ D)$\frac{\cos a}{1+\cos a}$	3	CO1	2
2.	**Attempt 2 out of 2**	**10**		
2.A	Derive π as a ratio of circumfrence and diameter.	3	CO2	4
2.B	Rank of the matrix $\begin{matrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \end{matrix}$	3	CO1	1
3.	**Attempt 1 out of 2**	**10**		
3.A	Evaluate the following $\int_2^5 \sqrt{\frac{5x}{2}}$ dx	3	CO3	3
3.B	Differentiate $x^3 dx$	3	CO3	1