

**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
<b>1.</b>	<b>Attempt 1 out of 2</b>	<b>1</b>		
1.A	find out the area of triangle with base =3cm and height =4cm. A)6 B)12 C)5 D)4	3	CO1	2
1.B	find the value of $y = x^2$ where x=4 A)1 B)4 C)9 D)16	3	CO2	3
<b>2.</b>	<b>Attempt 1 out of 2</b>	<b>1</b>		
2.A	find the sum $\frac{53}{22} + \frac{11}{22}$	3	CO1	1
2.B	$\begin{matrix} & 1 & 1 & 1 \\ \text{Rank of the matrix} & 1 & 1 & 1 \\ & 1 & 1 & 1 \end{matrix}$	3	CO1	1

<b>3.</b>	<b>Attempt 1 out of 2</b>	<b>1</b>		
3.A	Evaluate the following $\int_2^5 \sqrt{\frac{5x}{2}} \, dx$	3	CO3	3
3.B	Derive $\pi$ as a ratio of circumference and diameter.	3	CO2	4