

**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:

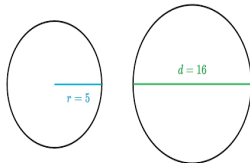
IMP: Verify that you have received question paper with correct course, code, branch, etc

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

QNo	Question	Marks	CO	BL
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1.	Attempt 2 out of 3	6		
1.A	find the value of $y = x^2$ where $x=4$ A)1 B)4 C)9 D)16	4	CO2	3
1.B	The Square of Hypotenus is the sum of squares of 2 adjacent sides. This law is termed as. A)Euler's law B)Pythagoras Theorem C)Newton's Law D)Aryabhatta's Law	5	CO1	1
1.C	What is the Volume of Cylinder which has radius=4cm and height and 6 cm . $\pi =3.14$. A)25 B)32 C)25 D)30	4	CO5	4

2.	Attempt 2 out of 3	10		
2.A	Rank of the matrix $\begin{matrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \end{matrix}$	5	CO1	1
2.B	find the sum $\frac{53}{22} + \frac{11}{22}$	5	CO1	1
2.C	Evaluate $\sum_3^5 (x + x^4)$	5	CO1	1

3.	Attempt 2 out of 3	10		
3.A	Differentiate $x^3 dx$	5	CO3	1
3.B	Derive the following equation $y = x^4$	4	CO2	1
3.C	Difference between area of 2 circles  Figure 3.C	4	CO5	1