

## Engineering Mathematics-I

### Lesson Plan (Tutorial Classes)

<b>Discipline:</b> Civil/Computer Science/Electrical /Mechanical Engg.	<b>Semester:</b> 1st	<b>Name of the Teaching Faculty:</b> Manas Ranjan Sahu
<b>Subject:</b> Engg. Mathematics-I (Th 3)	<b>No. of days/week class allotted:</b> 1	<b>Semester from date:</b> 16.08.2023 To date:11.12.2023  <b>No. of weeks:</b> 15
<b>Week</b>	<b>Class Day</b>	<b>Theory Topics</b>
1 <sup>st</sup>	1 <sup>st</sup>	Problem practice on Construction of Matrices & Algebra of Matrices.
2 <sup>nd</sup>	2 <sup>nd</sup>	Problem practice on Properties of Determinant.
3 <sup>rd</sup>	3 <sup>rd</sup>	Problem Practice on inverse of a square matrix, Cramer's Rule.
4 <sup>th</sup>	4 <sup>th</sup>	Problem Practice on solving system of linear equation on matrix inversion method.
5 <sup>th</sup>	5 <sup>th</sup>	Problem Practice on Compound Angle, Multiple & Submultiple Angles of trigonometric and some problem on conditional trigonometry.
6 <sup>th</sup>	6 <sup>th</sup>	Problem Practice on properties of triangles.
7 <sup>th</sup>	7 <sup>th</sup>	Problem Practice on Inverse Trigonometric Function.
8 <sup>th</sup>	8 <sup>th</sup>	Problem Practice on finding equation of straight line in different conditions.
9 <sup>th</sup>	9 <sup>th</sup>	Problem Practice on finding equation of a line perpendicular/parallel to a line or passing through the intersection of two lines.
10 <sup>th</sup>	10 <sup>th</sup>	Finding the equation of circle in different condition.
11 <sup>th</sup>	11 <sup>th</sup>	Find the equation of circle passing through 3 non-collinear points.
12 <sup>th</sup>	12 <sup>th</sup>	Finding d. rs/d. cs of a line & angle between two lines.
13 <sup>th</sup>	13 <sup>th</sup>	Finding equation of planes in different conditions.
14 <sup>th</sup>	14 <sup>th</sup>	Finding equation of planes in different conditions.
15 <sup>th</sup>	15 <sup>th</sup>	Finding the equation of sphere in different condition.