

BHUBANANANDA ORISSA SCHOOL OF ENGINEERING, CUTTACK
MATHEMATICS AND SCIENCE DEPARTMENT ACADEMIC PLAN

SEMESTER/BRANCH-1ST SEM (All branches)

SUBJECT:- ENGINEERING MATH-I (2020-21 WINTER)

Session-B

FACULTY NAME:- Mrs Champa Saro, Mr Jyendra Behera

Semester From Dt.09.11.2020 to Dt. 31.03.2021

No of week:15

9	27/1/21 28/1/21 29/1/21 30/1/21 1/2/21 2/2/21 3/2/21	UNIT-3 Co-Ordinate Geometry in two-dimensions (straight line): e) Equation of the line passing through the intersection of two lines f) Determine the perpendicular distance from a point to a line	CSL CSL CSL CSL CSL CSL CSL
10	41/2/21 5/2/21 9/2/21 10/2/21 11/2/21 12/2/21	Unit-4 Circle: Equation of circle. (i) centre and radius form (ii) general equation of a circle (iii) end points of diameter form	CSL CSL CSL CSL CSL CSL
11	02.01.21 03.01.21 08.01.21 09.01.21	Unit-5 5) CO-ORDINATE GEOMETRY IN THREE DIMENSIONS (i) Distance formulae, section formulae, direction ratio, direction cosine (ii) Angle between two lines (condition of parallelism and perpendicularity)	CSL CSL CSL CSL CSL CSL
12	15.01.21 16.01.21	Unit-5 5) CO-ORDINATE GEOMETRY IN THREE DIMENSIONS a) Equation of a plane General form Angle between two planes	3 3

13	21/01/21 13/2/21 15/2/21 17/2/21 18/2/21 19/2/21 20/2/21 23/2/21	Unit-5 5) CO-ORDINATE GEOMETRY IN THREE DIMENSIONS) b) perpendicular distance of a point from a plane equation of a plane passing through a point parallel to a plane perpendicular to a plane	<u>Isac</u> <u>Isac</u> <u>Isac</u> <u>Isac</u> <u>Isac</u> <u>Isac</u> <u>Isac</u>
14	24/2/21 25/2/21 1/3/21 2/3/21 3/3/21 4/3/21	Unit-6 SPHERE Equation of a sphere i) center radius form ii) general form iii) two end points of a diameter form (only formulae and problems) Problem practice	<u>Isac</u> <u>Isac</u> <u>Isac</u> <u>Isac</u> <u>Isac</u> <u>Isac</u>
15	5/3/21 6/3/21 8/3/21 10/3/21 20/3/21	Review	<u>Isac</u> <u>Isac</u> <u>Isac</u> <u>Isac</u> <u>Isac</u>

BHUBANANANDA ORISSA SCHOOL OF ENGINEERING, CUTTACK
MATHEMATICS AND SCIENCE DEPARTMENT ACADEMIC PLAN

SEMESTER/BRANCH-1ST SEM (All branches)

SUBJECT:- ENGINEERING MATH-I (2020-21 WINTER)

MECH. (SEC.-F)

FACULTY NAME:- Dr. Jitendra Kumar Behera, Mrs. Champa Sahoo

Semester From Dt. 09.11.2020 to Dt. 31.03.2021

No of week:15

Week No.	Dates	No. of Periods available	Topics to be Covered	Date of teaching	Shortfall if any	Reasons	Date of make up of shortfall	Initial of Faculty
1	01.11.20 02.11.20 03.11.20 12.11.20 13.11.20		Unit-1 Matrices & Determinants a) Types of matrices b) Algebra of matrices c) Determinant	9/11/20 10/11/20 11/11/20 12/11/20 13/11/20			(Sal CSar CSar CSar CSar)	
2	16.11.20 17.11.20 18.11.20 19.11.20 20.11.20 21.11.20		Unit-1 Matrices & Determinants a) properties of determinants b) Inverse of matrix (second and third order)	16/11/20 17/11/20 18/11/20 19/11/20 20/11/20 21/11/20			(Sal CSar CSar CSar CSar CSar)	
3	23.11.20 24.11.20 25.11.20 26.11.20 27.11.20 28.11.20		Unit-1 Matrices & Determinants a) Cramer's Rule (only two variable) Solution of simultaneous equations by matrix inverse method (only two variable)	23/11/20 24/11/20 25/11/20 26/11/20 27/11/20 28/11/20			(Sal CSar CSar CSar CSar CSar)	
4	01.12.20 02.12.20 03.12.20 04.12.20 05.12.20		UNIT-2 TRIGONOMETRY a) Trigonometrical ratios b) Compound angles, multiple and sub-multiple angles (only formulae) c) Define inverse circular functions and its properties (no derivation)	12.11.20 13.11.20 14.11.20 20.11.20 21.11.20 26.11.20			(3 3 3 3 3 3)	

5	03-12-20 10-12-20 11-12-20 12-12-20	UNIT-2 TRIGONOMETRY b) Compound angles, multiple and sub-multiple angles (only formula)	28-12-20 03-12-20 04-12-20 05-12-20 10-12-20	$\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$
6	10-12-20 15-12-20 16-12-20 17-12-20 18-12-20 19-12-20	UNIT-2 TRIGONOMETRY c) Define inverse circular functions and its properties (no derivation)	11-12-20 12-12-20 13-12-20 14-12-20 15-12-20 24-12-20	$\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$
7	21-12-20 22-12-20 23-12-20 24-12-20 25-12-20 26-12-20	UNIT-3 Co-Ordinate Geometry in two-dimensions (straight line): a) Introduction of geometry in two dimension b) Define slope of a line and angle between two lines, conditions of perpendicularity and parallelism of two lines	21-12-20 22-12-20 23-12-20 24-12-20 25-12-20 26-12-20	$\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$
8	28-12-20 29-12-20 30-12-20 31-12-20 32-12-20 33-12-20	UNIT-3 Co-Ordinate Geometry in two-dimensions (straight line): c) Different forms of straight lines (only formulae)	28-12-20 29-12-20 30-12-20 31-12-20 32-12-20 33-12-20	$\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$ $\frac{7}{2}$

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6	UNIT-3 Co-Ordinate Geometry in two-dimensions (straight line):	411121		<u>Ques</u> <u>Soln</u> <u>Soln</u> <u>Soln</u> <u>Soln</u> <u>Soln</u>
7	e) Equation of the line passing through the intersection of two lines	511121		<u>Ques</u> <u>Soln</u>
8	f) Determine the perpendicular distance from a point to a line	611121		<u>Ques</u> <u>Soln</u>
9		711121		<u>Ques</u> <u>Soln</u>
10	Unit-4 Circle: Equation of circle. (i) centre and radius form (ii) general equation of a circle (iii) end points of diameter form	811121		<u>Ques</u> <u>Soln</u> <u>Soln</u> <u>Soln</u> <u>Soln</u>
11	Unit-5 5) CO-ORDINATE GEOMETRY IN THREE DIMENSIONS (i) Distance formulae, section formulae, direction ratio, direction cosine (ii) Angle between two lines (condition of parallelism and perpendicularity)	111121 121121 131121 141121 151121 161121	111121 121121 131121 141121 151121 161121	<u>Ques</u> <u>Soln</u> <u>Soln</u> <u>Soln</u> <u>Soln</u> <u>Soln</u>
12	Unit-5 5) CO-ORDINATE GEOMETRY IN THREE DIMENSIONS a)Equation of a plane General form Angle between two planes	171121 181121 191121 201121	26.12.20 02.01.21 03.01.21 08.01.21	T_1 T_2 T_3 T_4

13	61.02.21 62.02.21 63.02.21 64.02.21 65.02.21 66.02.21	Unit-5 5) CO-ORDINATE GEOMETRY IN THREE DIMENSIONS b) perpendicular distance of a point from a plane equation of a plane passing through a point parallel to a plane perpendicular to a plane	21.01.21 	$\frac{1}{2}$
14	67.02.21 68.02.21 69.02.21 70.02.21 71.02.21 72.02.21	Unit-6 SPHERE Equation of a sphere i) center radius form ii) general form iii) two end points of a diameter form (only formulae and problems)	28.01.21 29.01.21 30.01.21 04.02.21 06.02.21 12.02.21	$\frac{1}{2}$
15	73.02.21 74.02.21 75.02.21 76.02.21 77.02.21 78.02.21	Problem practice	13.02.21 14.02.21 15.02.21 16.02.21 20.02.21	$\frac{1}{2}$
16	Revision upto 31 March 2021			
				$\frac{1}{2}$