

Lesson plan for 2023 winter

Subject :-Mathematics (Code) TH-3

Name of faculty-kajal priya pani

Semester :1st Class allotted:- 5p/week

Branch :-Mechanical

| Discipline | Date/Period | From date:- 16/08/23 To date:11/12/23 | Teaching Aid |
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| Subject: | | Theory –Topics /lesson plan | |
| Weeks | | | |

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| Week No-1 | 16/08/23 to 19/08/23 | 1.MATRICES AND DETERMINANT (a) Types of matrices (b) Algebra of matrices (C) Determinant (d) Properties of determinant | White board & marker |
| Week No-2 | 21/08/23 to 26/08/23 | (a) Inverse of a matrix (second order) (b) Inverse of a matrix (Third order) (c) problems of inverse matrix(second order) (d) problems of inverse matrix(third order) (e) problems of matrix both in 2 nd and 3 rd order | White board & marker |
| Week No-3 | 28/08/23 to 02/09/23 | (a)Cramers'rule(two variables). (b)problem on crammers rule (c) problem on crammers rule (d)solutions of simoultaneous equations by matrix method. (e) problems on matrix method | White board & marker |
| Week No-4 | 04/09/23 to 09/09/23 | (a) problems of matrix. (b) problems of matrix. (c) problems of matrix. (d) problems of matrix. | White board & marker |
| Week No-5 | 11/09/23 to 16/09/23 | (2) TRIGONOMETRY (a) Fundamentals of trigonometry (b) Compound angles (c),problems on compound angle (d) multiples angle (e) problems on trigonometry | White board & marker |
| Week No-6 | 18/09/23 to 23/09/23 | (a) sub-multiple angles. (b) Define inverse circular functions. (c) its properties (no derivation). (d) problems on trigonometry (e) problems on trigonometry | White board & marker |

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| Week No-7 | 25/09/23 to 30/10/23 | (a) problems on trigonometry (b) problems on trigonometry (c) problems on trigonometry (d) problems on trigonometry (e) problems on trigonometry | White board & marker |
| Week No-8 | 03/10/23 to 07/10/23 | CO-ORDINATE GEOMETRY IN TWO DIMENSIONS(Straight line) (a) Introduction of geometry in two dimension (b) Distance formulae, division formulae, (c)problems on distance and division formula. (d)Area of a triangle (only formulae no derivation) . (e)Define slope of a line, angle between two lines (only F), | White board & marker |
| Week No-9 | 09/10/23 to 14/10/23 | (a) condition of perpendicularity (b) condition of parallelism. (c) Different forms of straight lines (only formulae) (d) One point form, two point form (e) slope form | White board & marker |
| Week No-10 | 16/10/23 to 20/10/23 | (a) ,intercept form , Perpendicular form (b) Equation of a line passing through a point and parallel to a line (ii) Perpendicular to a line . (c) Equation of a line passing through the intersection of two lines 4) CIRCLE (a) basic idea about circle (b) center of a circle and its problems. | White board & marker |
| Week No-11 | 30/10/23 to 04/11/23 | (a) radius of a circle and its problem (b) Equation of a circle (c) center radius form, problems (d) general equation of a circle, problems, (e) end point of diameter form, problems | White board & marker |
| Week No-12 | 6/11/23 to 11/11/23 | 5) CO-ORDINATE GEOMETRY IN THREE DIMENSIONS a) Distance formula., (b) section formulae. (c) direction ratio. | White board & marker & smart board |
| Week No-13 | 13/11/23 to 18/11/23 | <u>(a)</u> direction cosine, (b) angle between two lines (condition of parallelism (c) angle between two lines (condition of perpendicularity) (d) Equation of a plane (e) General form | White board & marker |
| Week No-14 | 20/11/23 to 25/11/23 | 6) SPHERE (a) Equation of a sphere (b) center radius form (c) general form (d) two end points of a diameter form | White board & marker & smart board |

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| Week No-15 | 28/11/23 to 02/12/23 | Problems of sphere Problems of sphere Problems of sphere Problems of sphere | White board & marker & smart board |
| Week No-16 | 04/12/23 to 09/12/23 | Problems of sphere Problems of sphere Problems of sphere Problems of sphere | White board & marker & smart board |
| Week No-17 | 11/12/23 | Revision | White board & marker & smart board |

K. Panj
Signature of HOD

Kajal Priya Panj
Signature of faculty