

MATHS BSC-I, SEM-II PAPER-III

Unit	Topic	Link
1	Degree and the order of a ordinary differential equation	https://youtu.be/ReUzAcMTsS4
	Linear differential equation	https://youtu.be/NQ7bgQqTtC4
	Differential equation reducible to the linear form	https://youtu.be/CrTDssfv-fo
	Exact differential equation	https://youtu.be/o6zBhMDxmY8
	Differential equation of first order and higher degree	https://youtu.be/aYrsPeE7NLQ
	Differential equations solvable for p	https://youtu.be/aYrsPeE7NLQ
	Differential equation solvable for y	https://youtu.be/-PckYOzQ8xQ
	Differential equation in clairaut form	https://youtu.be/pP_uqcoTews
	Orthogonal trajectory	https://youtu.be/nsf9KwRT98s
2	Second order linear differential equation	
	With constant coefficient	https://youtu.be/knNbRK-l_Bo
	Homogeneous linear ordinary differential equation	https://youtu.be/NeO3WwEZHLc
	Equations reducible to homogeneous differential equation	https://youtu.be/8zOt3WL-RNU
3	Reduction of order	https://youtu.be/AL3bHEsXcYo
	Transformation of the equation by	
	Changing the dependable variable	https://youtu.be/J7kxzE2vqwg
	Transformation of the equation by	

	Changing the independent variable	https://youtu.be/K1LPzOClwY8
	Normal form	https://youtu.be/xkz7tgz_VEQ
	Method of variation of parameter	https://youtu.be/bTeWAKfPbYY
	Ordinary simultaneous differential equation	https://youtu.be/eJv4xqO5FgY
4	Formation of partial differential equation	https://youtu.be/xydJU0CUR6o
	Partial differential equation of the first order	https://youtu.be/vZEN4NXhmag
	Total differential equation	https://youtu.be/SREeLSNo6rE
	Lagrange's method	https://youtu.be/FrD7uu6chP0
	special types of equation which can be solved easily by	
	Method other than the general method	https://youtu.be/3j0c_FhOt5U
5	Compatible differential equation	https://youtu.be/BCHgt92ZppQ
	Charpits general method of solution	https://youtu.be/kEN_Ze8QNdM
	Partial differential equation of second & higher order	https://youtu.be/_1_enhroBH8
	Homogeneous equation with constant coefficient	https://youtu.be/EYK4jmDzrOU
	Non-homogeneous equation with constant coefficient	https://youtu.be/a8gsVtiZFnl

MATHS BSC-I, SEM-II Paper - IV

1	Scalar product of three vectors	https://youtu.be/Vw126r74i4s
	Vector product of three vectors	https://youtu.be/_DOQ5l3nFSA
	Product of four vectors	https://youtu.be/QzGOxg51ogY
	Vector differentiation	https://youtu.be/FfJtVvQtqTM
	Vector integration	https://youtu.be/1nrBPf-6d8w
2	Space curve t, n, b vectors	https://youtu.be/GKllISj930
	Fundamental planes	https://youtu.be/5_9Lvw7sPa4
	Curvature	https://youtu.be/f37Q_vjfn0k
	Torsion	https://youtu.be/QXrgsz5zD2l
	Ferret - serret formulae	https://youtu.be/i49MOU9BJLE
3	Gradient, divergence and curl	https://youtu.be/a19x_YG0oLg
	Directional derivatives	https://youtu.be/9CHfHuFBTw8
	Line integral	https://youtu.be/b92PpVtUZvQ
	Workdone	https://youtu.be/sO9Z2RSeH4s
	Greens theorem	https://youtu.be/1w2f29d0VHQ
4	Sphere :	

	Different forms of sphere	https://youtu.be/jYf6o-8vWQ0
	Section of sphere by a plane	https://youtu.be/VaaCLIUU18o
	Sphere through a given circle	https://youtu.be/WXLgbXnuq3Y
	Intersection of sphere and line	https://youtu.be/F48XtDjCU4g
	Orthogonal sphere	https://youtu.be/4MkQFPuIWaw
	Condition of orthogonality	https://youtu.be/XUdwfGIS-dQ
5	Cone:	
	The equation of cone with guiding curve	https://youtu.be/Cef1riB2rJM
	Cone with vertex and origin	https://youtu.be/E14NWp3O63U
	Right circular cone	https://youtu.be/CepTQ7B3uZo
	Cylinder :	
	Equation of right circular cylinder	https://youtu.be/cdQLyz9J8Fs