

Dayanand College of Commerce (Jr.),Latur.

Annual Topic Plan

Subject – Mathematics & Statistics - I

For the Academic Year 2021-22

Class – XIIth

Part – I Topic Wise Annual Plan (From- April to January)

Sr.No.	Name of Topic	Topic Contents	Tentative No. of Lectures	
1.00	Chapter-I Mathematical Logic	<ul style="list-style-type: none"> • Statement, truth value open sentence • Exercise 1.1 Q.1 – I to XXV • Logical connectives (and, or) • Exercise 1.2 Q.1,2 • Negation • Exercise 1.3 Q.1,2 • Conditional, biconditional statement • Exercise 1.4 Q.1,2,3,4,5 • Quantifiers and Quantified statement • Exercise 1.5 Q.1,Q.2 • Statement pattern, logical equivalence • Exercise 1.6 Q.1,Q.2 • Duality • Exercise 1.7 Q.1,Q.2 • Converse, Inverse, contrapositive • Exercise 1.8 Q.1,Q.2,Q.3 • Algebra of statements • Exercise 1.9 • Venn diagram • Exercise 1.10 Q.1 • Mis. Exercise • Practical and Activities 	1 1 1 3 1 2 1 2 1 2 1 2 3 2 1 2 2 1 2 2	25
2.00	Chapter-II Matrices	<ul style="list-style-type: none"> • Introduction Types of matrices • Exercise 2.1 Q.1,2,3,4 • Algebra of matrices • Exercise 2.2 Q.1,3 • Exercise 2.3 Q.1,Q.2 • Transpose • Exercise 2.4 Q.1 • Elementary transformation • Inverse of matrix by adjoint • Exercise 2.5 Q.1 to 9 	1 2 1 2 2 1 2 1 1 6	

		<ul style="list-style-type: none"> • Application of matrices 1 • Exercise 2.6 2 • Mis. Exercise 2 • Practical and Activities 2 	26
3.00	Chapter-III Differentiation	<ul style="list-style-type: none"> • Introduction, Derivative of composite Function 1 • Exercise 3.1 Q,I to III 2 • Derivative of Inverse function • Exercise 3.2 Q,I to III 3 • Derivative of logarithmic function • Exercise 3.3 Q.I to III 3 • Derivative of implicit function • Exercise 3.4 Q. I to III 3 • Derivative of parametric function 1 • Exercise 3.5 Q.I to II 2 • Derivative (second order) 1 • Exercise 3.6 Q.I to II 2 • Mis.Exercise Q.1 to 19 2 • Practical and Activities 2 	22
4.00	Chapter-IV Application of derivative	<ul style="list-style-type: none"> • Meaning of derivative 1 • Increasing and decreasing function • Exercise 4.1 Q.1 to Q.3 3 • Exercise 4.2 Q.1 to Q.3 2 • Maxima and minima • Exercise 4.3 Q.1 to Q.4 3 • Application of Derivative in Economics • Exercise 4.4 Q.1 to Q.13 5 • Mis. Exercise Q.I to Q.IV 2 • Practical and Activities 2 	18
5.00	Chapter-V Integration	<ul style="list-style-type: none"> • Introduction Rules of Integration • Exercise 5.1 Q.1 to Q.8 2 • Method of substitution • Exercise 5.2 Q.1 to Q.10 2 • Form} dx 3 • • Exercise 5.3 Q.1 to Q.4 2 • Exercise 5.4 Q.1 to Q.11 2 • Integration by parts • Exercise 5.5 Q.1 to Q.10 4 • Partial fractions • Exercise 5.6 Q.1 to Q.8 4 • Mis. Exercise Q.1 to Q.3 4 • Practical and Activities 2 	25

6.00	Chapter VI Definite Integration	<ul style="list-style-type: none"> • Fundamental theorem of integral calculus 1 • Exercise 6.1 Q.1 to Q.11 2 • Properties 2 • Exercise 6.2 Q.1 to Q.8 4 • Mis. Exercise 2 • Practical and Activities 2 	13
7.00	Chapter VII Application of definite integration	<ul style="list-style-type: none"> • Standard parabola & their shapes • Standard form of ellipse 1 • Area under curve 1 • Exercise 7.1 Q.1 to Q.4 1 • Mis. Exercise Q.I to Q.IV 2 • Practical and Activities 2 	07
8.00	Chapter VIII Differential Equations and application	<ul style="list-style-type: none"> • Differential Equations • Order of differential eqn • Degree of differential eqn • Solution of a differential eqn 1 • Exercise 8.1 Q.1 2 • Exercise 8.2 Q.1 to Q.5 2 • Soln of differential eqn • Exercise 8.3 Q.1 to Q.2 2 • Homogeneous differential eqn & Soln • Exercise 8.4 Q.1 to Q.7 2 • Applications of differential eqn • Exercise 8.5 Q.1 to Q.8 3 • Exercise 8.6 Q.1 to Q.5 4 • Mis. Exercise Q.I to Q.IV 7 • Practical and Activities 2 	25

Part – II No. of Days Required for Examination

Exam Type	Exam Duration (In Days)	Syllabus
1) Unit Test – I	03	Chapter-1,2,
2) First Term Exam	06	Chapter-1,2,3,4,
3) Unit Test – II	03	Chapter-5,6,7
4) First Practice Exam	06	All Syllabus
5) Second Practice Exam	06	All Syllabus
6) Application Based Test(ABT- Final Practical Exam.)	06	All Syllabus
Total Exam Duration (In Days)	30 Days	In Words: Thirty Days
A) The total no. of days required for the completion of Syllabus (Part-I) to be taken throughout the year = 161 Days		
B) The total no. of days required for Examinations (Part-II) to be held throughout the year = 30Days*		
C) Total No. of Days (A+B = C) i.e. 161 Days + 30 Days = 191 Days**		

The above “Annual Topic Planning” is prepared by all the Teachers of respective subject (Maths and Stats-II) sitting together

Sr.No.	Name of the Subject Teacher	Signature	Remark (If Any...)
1.	Dr.Burande A.M.		
2.	Kamble S.M.		
3.	Bansude S.S.		
4.	Mantri N.P.		

Co-ordinator

Supervisor