DELHI PUBLIC SCHOOL,JAMMU SYLLABUS BIFURATION SESSION- (2023-24)

CLASS-XII

SUBJECT: APPLIED MATHEMATICS (241)

App. Maths is a branch of Mathematics that concerns itself with mathematical methods that are typically used in science, engineering, business and industry.

Applied Mathematics also describes the professional specialty in which mathematicians work on practical problems.

Objectives of theory:

- *Promote understanding of basic facts and concept in App. Maths while retaining the excitement of Mathematics.*
- 4 Develop problem solving skills in student
- 4 Acquaint student with different aspect of app. maths used in daily life.
- 4 Develop an interest in the student to study App. Math as a didcipline.

Objectives of activity:

Developing <u>mathematical thinking</u> is about developing habit of mind: defining, systematizing, abstracting, making connection, developing new ways to describe situations and make predictions, creating, inventing, and experimenting.

S.No.	Month	Topic/Chapter
1.	April	Unit-1: Numbers, Quantification and Numerical . Applications . Foundation worksheet on NUMBERS
2.	May	Unit-2: Algebra Revision sheet (algebra) and Sample paper-1 Assignment-1 for revision of topics: (a) Matrices and determinant, (b) Boat and stream. Class test-1 on Numbers, Quantification
3.	June	Unit-4: Probability Distribution Assignment-2 for revision of topics (a) poisson distribution (b) Normal distribution Activity by using sampling method

4.	July	Unit-3(a): Differentiation and Application Assignment-3 for revision of topics (a) Tangent and Normal (b) Increasing and Decreasing
5.	August	Kahoot quiz on App. Of Diff. Unit-3(b): Integration and Application Unit-5: Inferential Statistics Assignment-4 for revision of topics (a) Application of integration (b) Differential equation Team exercise on consumer surplus – producer surplus Activity on investigating graph of function for their properties
6.	September	Unit-8: Linear Programming Revision on LPP and Sample paper-2 Class test-2 on chapters (a) Application of integration (b) Inferential Statistics
7	October	Unit-6(a): Index no. Time series Assignment-5 for revision of topics (a) Construction of index no. (b) Time series Diagnostic Assessment of time series analysis for univariant data
8.	November	Unit-7: Financial Maths Assignment-6 for revision of topics (a) Calculation of EMI (b) Linear meyhod of depreciation PPT on perpetuity, sinking fund,Bonds
9.	December	Unit-6(b): Index no Assignment-7 for revision of topics (a) Trend analysis by moving av. Method (b) Trend analysis by least square Revision sheet and Sample paper-3

10.	January	 Revision with the help of sample paper Activity on population migration data
11.	February	1. Chapter-wise revision and practice of sample paper
		Class test-3 on chapters
		(a) Financial Maths(b) Integration and Application
		(c) Inferential Statistics
12	March	1. Chapter-wise revision and practice of sample paper
		2. Revision

Syllabus of Formative Assessment-1

Unit-1: Numbers, Quantification Unit-2: Algebra

SYLLABUS (HALF YEARLY EXAMINATION)

Unit-1: Numbers, Quantification Unit-2: Algebra Unit-3(A): Differentiation and Application Unit-3(b): Integration and Application Unit-4:Probability Distribution Unit-6: Index no.

PRE BOARD –I

Unit-1: Numbers, Quantification and Numerical Applications Unit-2: Algebra Unit-3(a): Differentiation and Application Unit-3(b): Integration and Application Unit-4: Probability Distribution Unit-5: Inferential Statistics Unit-6: Time series Unit-7: Financial Maths Unit-8: Linear Programming

PRE BOARD –II

Unit-1: Numbers, Quantification and Numerical Applications Unit-2: Algebra Unit-3(a): Differentiation and Application Unit-3(b): Integration and Application Unit-4: Probability Distribution Unit-5: Inferential Statistics Unit-6: Time series Unit-7: Financial Maths Unit-8: Linear Programming

Subject Coordinator