

Koyana Education Society's
Balasaheb Desai College, Patan
Monthly Teaching Plan
2023-2024

Subject Name: Mathematics

Class: B. Sc-I

Paper Name: Calculus

Month: October

Date	Unit/Subunit	Teaching Method
03/10/23	If a function f is continuous in a closed interval $[a, b]$ then bounded in $[a, b]$	Lecture/ Problem solving
04/10/23	If a function f is continuous in a closed interval $[a, b]$ then it attains its bound at least once in $[a, b]$	Lecture
05/10/23	If a function f is continuous in a closed interval $[a, b]$ and $f(a)$ and $f(b)$ are of opposite signs then there exists $c \in [a, b]$ such that $f(c)=0$. (statement only)	Lecture
07/10/23	If a function f is continuous in a closed interval $[a, b]$ and $f(a) \neq f(b)$ then f assumes every value between $f(a)$ and $f(b)$ (statement only)	Lecture
09/10/23	Examples on Continuity	Problem solving
10/10/23	Examples on Continuity	Problem solving
11/10/23	Examples on Continuity	Problem solving
12/10/23	Examples on Continuity	Lecture


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Subject Name: Mathematics

Class: B. Sc-II

Paper Name: Numerical Methods

Month: October

Date	Unit/Subunit	Teaching Method
03/10/23	Examples on Newton's Backward interpolation formulae	Problem solving
04/10/23	Unit 2 :2.1 Numerical Integration: Trapezoidal Rule, Simpson's 1/3 rd & 3/3 th rule	Lecture
05/10/23	Examples on Trapezoidal Rule, Simpson's 1/3 rd & 3/3 th rule	Problem solving
07/10/23	2.2 Numerical Solutions of ODE: Introduction, Taylor's series method & examples	Lecture
09/10/23	Picard's series method & examples	Problem solving
10/10/23	Euler's method & modified method & examples	Problem solving
11/10/23	R-K 2 nd & 4 th order method & examples	Problem solving
12/10/23	Gauss elimination & Gauss-seidel method & examples	Problem solving


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Subject Name: Mathematics

Class: B. Sc-III

Paper Name: Calculus

Month: October

Date	Unit/Subunit	Teaching Method
03/10/23	Infinite Fourier Sine & cosine transform	Problem solving
04/10/23	Infinite inverse Fourier Sine & cosine transform	Problem solving
05/10/23	Relation between L. T. & F. T.	Lecture
07/10/23	Change of scale property & modulation theorem	Lecture
09/10/23	Derivative & existence theorem	Problem solving
10/10/23	Convolution theorem	Problem solving
11/10/23	Finite Fourier sine & cosine transform & examples	Problem solving
12/10/23	Fourier integral theorem & Fourier sine and cosine integral	Lecture


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