

# GDC Memorial College, Bahal (Bhiwani)

NAAC Accredited Grade "B"

## Lesson Plan- Jan to May 2024

Name - Jaiveer

Department - Maths

Class - BA/BSC 4th sem

Subject - Mechanics (20UMTH401)

### Unit-1

6-Feb-24

Composition and resolution of Forces

7-Feb-24

Do

9-Feb-24

Do

12-Feb-24

Resultant of Two Parallel forces and their application

13-Feb-24

Do

14-Feb-24

Do

16-Feb-24

Do

19-Feb-24

Do

20-Feb-24

Test

### Unit-2

21-Feb-24

Moments and Couples

23-Feb-24

Do

26-Feb-24

Do

27-Feb-24

Analytical Condition of equilibrium of Coplanar Forces

28-Feb-24

Do

1-Mar-24

Do

4-Mar-24

Do

5-Mar-24

Do

6-Mar-24

Do

8-Mar-24

Test

### Unit-3

11-Mar-24

Velocity and Acceleration along radial

12-Mar-24

Do

13-Mar-24

Do

15-Mar-24

Velocity and Acceleration along transverse

18-Mar-24

**Do**

19-Mar-24

Do

20-Mar-24

Velocity and Acceleration along Tangential

20-Mar-24

Do

22-Mar-24

Do

25-Mar-24

Velocity and Acceleration along Normal Direction

26-Mar-24

Do

27-Mar-24

Do

30-Mar-24

Relative velocity and acceleration

1-Apr-24

Do

2-Apr-24

Do

3-Apr-24

Simple Harmonic motion

5-Apr-24	Do
8-Apr-24	Do
9-Apr-24	test
	<b>Unit-4</b>
10-Apr-24	Elastic Strings
12-Apr-24	Do
15-Apr-24	Do
16-Apr-24	Newton's laws of Motion
19-Apr-24	Do
22-Apr-24	Do
23-Apr-24	Work
24-Apr-24	Power
26-Apr-24	Do
29-Apr-24	Energy
1-May-24	Do
3-May-24	Test
6-May-24	Revision

## **GDC Memorial College, Bahal (Bhiwani)**

**NAAC Accredited Grade "B"**

**Lesson Plan- Jan to May 2024**

**Name - Jaiveer**

**Department - Mathematics**

**Class - B.Sc.**

**Subject - Vector Calculus & Geometry**

**Semester - 2nd**

**Subject Code - 20UMTH202**

	<b>UNIT-1</b>
6-Feb-24	Gradient
7-Feb-24	Directional derivatives
8-Feb-24	Geometrical interpretation of grad
9-Feb-24	Divergence
13-Feb-24	Curl
14-Feb-24	Do
15-Feb-24	Do
16-Feb-24	Identities of Curl Divergence Grad
20-Feb-24	Laplacian operator
21-Feb-24	do
	<b>UNIT-2</b>
22-Feb-24	Curvilinear Coordinates
23-Feb-24	Do
27-Feb-24	Condition of Orthogonal coordinates
28-Feb-24	Grad curl divergence in term of laplacian operator
29-Feb-24	do

2-Mar-24	do
5-Mar-24	do
6-Mar-24	Cylindrical coordinate
7-Mar-24	do
8-Mar-24	spherical co ordinate
12-Mar-24	do
13-Mar-24	do
14-Mar-24	test
	<b>UNIT-3</b>
15-Mar-24	Vector Integration
19-Mar-24	do
20-Mar-24	Line Integral
21-Mar-24	surface integral
22-Mar-24	volume integration
26-Mar-24	do
27-Mar-24	do
28-Mar-24	do
29-Mar-24	green Gauss and stocks theorem
2-Apr-24	do
3-Apr-24	do
4-Apr-24	do
5-Apr-24	do
9-Apr-24	Test
	<b>UNIT-4</b>
10-Apr-24	General eq of secound degree
11-Apr-24	Tracing of conic
12-Apr-24	Tangent at any point to conic
16-Apr-24	do
18-Apr-24	do
19-Apr-24	do
23-Apr-24	chord of contact
24-Apr-24	Pole of line to the conic
25-Apr-24	do
26-Apr-24	Director circle of conic
30-Apr-24	do
1-May-24	do
2-May-24	Revision
3-May-24	Revision
6-May-24	Revision

**GDC Memorial College, Bahal (Bhiwani)**  
**NAAC Accredited Grade "B"**

## Lesson Plan- Jan to May 2024

Name - Jaiveer  
Class - B.A/B.Sc.  
Semester -6th

Department - Mathematics  
Subject - Advanced Calculus  
Subject Code - 20UMTH604

	Unit-1
5-Feb-24	Uniform Continuity
7-Feb-24	Do
8-Feb-24	Chain Rule of Differentiability
9-Feb-24	Do
12-Feb-24	Mean Value Theorems
14-Feb-24	Roll's Theorem
15-Feb-24	Do
16-Feb-24	Lagrange's mean value theorem
19-Feb-24	Do
21-Feb-24	Taylor's Theorem with various forms of Remainders
22-Feb-24	Darboux intermediate value theorem for Derivatives
23-Feb-24	Do
26-Feb-24	Indeterminate Forms
	Unit-2
28-Feb-24	Limit and Continuity of Real valued function of Two Variables
29-Feb-24	Do
1-Mar-24	Partial differentiation
4-Mar-24	Do
6-Mar-24	Total differentiation
7-Mar-24	Composite function & implicit Function
8-Mar-24	Do
11-Mar-24	Change Of Variable
13-Mar-24	Do
14-Mar-24	Homogeneous function & Euler's theorem on Homogeneous Function
15-Mar-24	Do
18-Mar-24	Do
20-Mar-24	Test
	Unit-3
21-Mar-24	Taylor's Theorems for Function of Two variable
22-Mar-24	Do
27-Mar-24	Differentiability of real valued function of two variables
28-Mar-24	Do
29-Mar-24	Do
1-Apr-24	Schwarz and Young's theorems
3-Apr-24	Do
4-Apr-24	Implicit Function
5-Apr-24	Do
8-Apr-24	Maxima , Minima
10-Apr-24	Saddle points of two variables

11-Apr-24	Do
12-Apr-24	Do
15-Apr-24	Test
	<b>Unit-4</b>
18-Apr-24	Lagrange's method of multipliers
19-Apr-24	Do
22-Apr-24	Jacobian
24-Apr-24	Differentiation under integral Sign
25-Apr-24	Application of Tripple integrals
26-Apr-24	Do
29-Apr-24	Change of variable in Double and triple integrals
1-May-24	Do
2-May-24	Do
3-May-24	Test
6-May-24	Revision

<b>GDC Memorial College, Bahal (Bhiwani)</b>	
<b>NAAC Accredited Grade "B"</b>	
<b>Lesson Plan- Jan to May 2024</b>	
<b>Name - Prem singh</b>	<b>Department - Mathematics</b>
<b>Class - B.sc, B.A</b>	<b>Subject - Special Function &amp; integral transforms</b>
<b>Semester - 6th</b>	<b>Subject Code - 20UMTH601</b>
	<b>UNIT-1</b>
6-Feb-24	Series Solution of Differential equation
7-Feb-24	Power series Method
8-Feb-24	do
9-Feb-24	do
13-Feb-24	Definition of Beta & Gamma function
14-Feb-24	do
15-Feb-24	Bessel equation
16-Feb-24	do
20-Feb-24	Bessel function and their properties
21-Feb-24	do
22-Feb-24	Convergence recurrence
23-Feb-24	do
27-Feb-24	Relation and generating function
28-Feb-24	do
29-Feb-24	Orthogonality of Bessel function
1-Mar-24	do
	<b>UNIT-2</b>
5-Mar-24	Legendre differential equation

6-Mar-24	solution of Legendre equation
7-Mar-24	do
8-Mar-24	Legendre function
12-Mar-24	properties of Legendre function
13-Mar-24	recurrence relation
14-Mar-24	generating function
15-Mar-24	Orthogonality of Legendre function
19-Mar-24	Rodrigues formula for Legendre function
20-Mar-24	Integral representation of Legendre polynomial
21-Mar-24	do
22-Mar-24	Test
	<b>UNIT-3</b>
26-Mar-24	Laplace Transforms
27-Mar-24	Linearity of Laplace transforms
28-Mar-24	Shifting Theorem
29-Mar-24	Laplace transforms of derivatives and integral
2-Apr-24	Differentiation and integration of Laplace transform
3-Apr-24	Convolution Theorem
4-Apr-24	do
5-Apr-24	Inverse Laplace transforms
9-Apr-24	do
10-Apr-24	Solution of Ordinary Differential equation with constant coefficients using Laplace Transform
11-Apr-24	Test
	<b>UNIT-4</b>
12-Apr-24	Fourier transforms
16-Apr-24	Linearity property
17-Apr-24	Shifting Property
18-Apr-24	Modulation
19-Apr-24	do
23-Apr-24	Convolution Theorem
24-Apr-24	do
25-Apr-24	Fourier transforms of Derivatives
26-Apr-24	Relation between Fourier transforms and Laplace transforms
30-Apr-24	Parseval's identity for Fourier series
1-May-24	do
2-May-24	Solution of Ordinary Differential equation with constant coefficients using Fourier Transform
3-May-24	do