

Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeswar

Study Materials

Department of Mathematics

B.Sc. I Semester I

B.Sc. -I Semester I- Paper I :-			
Sr. No.	Syllabus	Teaching Material Link	Format
1	Unit I	<a href="https://drive.google.com/file/d/1tqXQbSjV">https://drive.google.com/file/d/1tqXQbSjV</a>	Video
2	Unit I	<a href="https://drive.google.com/file/d/18plsBckjg">https://drive.google.com/file/d/18plsBckjg</a>	Video
3	Unit I	<a href="https://drive.google.com/file/d/1LuzUybb">https://drive.google.com/file/d/1LuzUybb</a>	Video
4	Unit I	<a href="https://drive.google.com/file/d/1Z72TUkh">https://drive.google.com/file/d/1Z72TUkh</a>	Video
5	Unit I	<a href="https://drive.google.com/file/d/1nUW1W">https://drive.google.com/file/d/1nUW1W</a>	Video
6	Unit I	<a href="https://drive.google.com/file/d/11k8XPtkr">https://drive.google.com/file/d/11k8XPtkr</a>	Video
7	Unit I	<a href="https://drive.google.com/file/d/1rDG_TGF">https://drive.google.com/file/d/1rDG_TGF</a>	Video
8	Unit I	<a href="https://drive.google.com/file/d/1njn07JYH">https://drive.google.com/file/d/1njn07JYH</a>	Video
9	Unit I	<a href="https://drive.google.com/file/d/1j_YsltuPg">https://drive.google.com/file/d/1j_YsltuPg</a>	Video
10	Unit I	<a href="https://drive.google.com/file/d/1RKe905V">https://drive.google.com/file/d/1RKe905V</a>	Video
11	Unit I	<a href="https://drive.google.com/file/d/1BEQOyLI">https://drive.google.com/file/d/1BEQOyLI</a>	Video
12	Unit I	<a href="https://drive.google.com/file/d/1HK_UHfr">https://drive.google.com/file/d/1HK_UHfr</a>	Video
13	Unit I	<a href="https://drive.google.com/file/d/17-zkiKkjg">https://drive.google.com/file/d/17-zkiKkjg</a>	Video
14	Unit I	<a href="https://drive.google.com/file/d/1i4UG5Qr">https://drive.google.com/file/d/1i4UG5Qr</a>	Video
15	Unit I	<a href="https://drive.google.com/file/d/1ZjcmcDn">https://drive.google.com/file/d/1ZjcmcDn</a>	Video
16	Unit I	<a href="https://drive.google.com/file/d/1Bz12Emk">https://drive.google.com/file/d/1Bz12Emk</a>	Video
17	Unit II	<a href="https://drive.google.com/file/d/1y5bHVHh">https://drive.google.com/file/d/1y5bHVHh</a>	Video
18	Unit II	<a href="https://drive.google.com/file/d/1miHprCS">https://drive.google.com/file/d/1miHprCS</a>	Video
19	Unit II	<a href="https://drive.google.com/file/d/1t_baWo4">https://drive.google.com/file/d/1t_baWo4</a>	Video
20	Unit II	<a href="https://drive.google.com/file/d/1hQg9iZn">https://drive.google.com/file/d/1hQg9iZn</a>	Video
21	Unit II	<a href="https://drive.google.com/file/d/1MLBoP2">https://drive.google.com/file/d/1MLBoP2</a>	Video
22	Unit II	<a href="https://drive.google.com/file/d/1aMPq_0">https://drive.google.com/file/d/1aMPq_0</a>	Video
23	Unit II	<a href="https://drive.google.com/file/d/1Cwrdgzv">https://drive.google.com/file/d/1Cwrdgzv</a>	Video
24	Unit II	<a href="https://drive.google.com/file/d/1BhCzr264">https://drive.google.com/file/d/1BhCzr264</a>	Video
25	Unit II	<a href="https://drive.google.com/file/d/13ggS585">https://drive.google.com/file/d/13ggS585</a>	Video
26	Unit II	<a href="https://drive.google.com/file/d/1syZ9dg69">https://drive.google.com/file/d/1syZ9dg69</a>	Video
27	Unit II	<a href="https://drive.google.com/file/d/1zazqUhN">https://drive.google.com/file/d/1zazqUhN</a>	Video
28	Unit II	<a href="https://drive.google.com/file/d/1ByuhicP7">https://drive.google.com/file/d/1ByuhicP7</a>	Video
29	Unit II	<a href="https://drive.google.com/file/d/1cQyQOx">https://drive.google.com/file/d/1cQyQOx</a>	Video
30	Unit II	<a href="https://drive.google.com/file/d/1KsG7-ck">https://drive.google.com/file/d/1KsG7-ck</a>	Video
31	Unit III	<a href="https://drive.google.com/file/d/1JiyXNQ-T">https://drive.google.com/file/d/1JiyXNQ-T</a>	Video
32	Unit III	<a href="https://drive.google.com/file/d/1TjPUVRu">https://drive.google.com/file/d/1TjPUVRu</a>	Video
33	Unit III	<a href="https://drive.google.com/file/d/1BQ19r6R">https://drive.google.com/file/d/1BQ19r6R</a>	Video
34	Unit III	<a href="https://drive.google.com/file/d/18-mrK5n">https://drive.google.com/file/d/18-mrK5n</a>	Video
35	Unit III	<a href="https://drive.google.com/file/d/1xKBkj9ly">https://drive.google.com/file/d/1xKBkj9ly</a>	Video
36	Unit III	<a href="https://drive.google.com/file/d/1qGrhShR">https://drive.google.com/file/d/1qGrhShR</a>	Video
37	Unit IV	<a href="https://drive.google.com/file/d/13SW_hR">https://drive.google.com/file/d/13SW_hR</a>	Video
38	Unit IV	<a href="https://drive.google.com/file/d/1xLUBqVc">https://drive.google.com/file/d/1xLUBqVc</a>	Video
39	Unit IV	<a href="https://drive.google.com/file/d/1-OenaSO">https://drive.google.com/file/d/1-OenaSO</a>	Video

40	Unit V	<a href="https://drive.google.com/file/d/1QWEtvTg">https://drive.google.com/file/d/1QWEtvTg</a>	Video
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<b>B.Sc -I Semester I- Paper II :- Differential and Integral Calculus</b>			
<b>Sr. No.</b>	<b>Syllabus</b>	<b>Teaching Material Link</b>	<b>Format</b>
1	Successive differentiation	<a href="https://youtu.be/7wbziGQY5Y0">https://youtu.be/7wbziGQY5Y0</a>	Video
2	Basic	<a href="https://youtu.be/SbJkKGelVuA">https://youtu.be/SbJkKGelVuA</a>	Video
3	Basic	<a href="https://youtu.be/zco80ukSAvg">https://youtu.be/zco80ukSAvg</a>	Video
4	MCQ 10 May-2021 Indeterminate fo	<a href="https://drive.google.com/file/d/1NIVJQuQ">https://drive.google.com/file/d/1NIVJQuQ</a>	PDF
5	MCQ of 8 May - 2021 Mean Value t	<a href="https://drive.google.com/file/d/1NFy8hhNr">https://drive.google.com/file/d/1NFy8hhNr</a>	PDF
6	MCQ PARTIAL DERIVATIVE 5 M	<a href="https://drive.google.com/file/d/11CCZCUn">https://drive.google.com/file/d/11CCZCUn</a>	PDF





Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeswar

Study Materials

Department of Mathematics

B.Sc. I Semester II

B.Sc. -I Semester II- Paper III :- Differential Equations: Ordinary and

Sr. No.	Syllabus	Teaching Material Link	Format
1	special type of PDE	<a href="https://youtu.be/L0mvTQTDDfI">https://youtu.be/L0mvTQTDDfI</a>	Video
2	Special method for PI	<a href="https://youtu.be/SUfkArk3LOc">https://youtu.be/SUfkArk3LOc</a>	Video
3	charpits method	<a href="https://youtu.be/rozvHHyL7c">https://youtu.be/rozvHHyL7c</a>	Video
4	PDE Particular Integral	<a href="https://youtu.be/oNITp9dzMpI">https://youtu.be/oNITp9dzMpI</a>	Video
5	Higher order DE	<a href="https://youtu.be/TreiO0ZeQUo">https://youtu.be/TreiO0ZeQUo</a>	Video
6	DE	<a href="https://youtu.be/hS5Wr0H-dXY">https://youtu.be/hS5Wr0H-dXY</a>	Video
7	Differential Equations Reducible to Linear	<a href="https://youtu.be/X8A70BUYr20">https://youtu.be/X8A70BUYr20</a>	Video
8	Particular integral Type IV	<a href="https://youtu.be/RjKzqj3YFOs">https://youtu.be/RjKzqj3YFOs</a>	Video
9	DE PI type 1,2, 3	<a href="https://youtu.be/ASqj5m8MF6s">https://youtu.be/ASqj5m8MF6s</a>	Video
10	DE PI type 1,2, 3	<a href="https://youtu.be/agnKHTNOtHc">https://youtu.be/agnKHTNOtHc</a>	Video
11	Types of Complementary functions	<a href="https://youtu.be/o6yACAFFB14">https://youtu.be/o6yACAFFB14</a>	Video
12	With constant coefficients	<a href="https://youtu.be/H9tIaTHfC_c">https://youtu.be/H9tIaTHfC_c</a>	Video
13	Lecture on DE	<a href="https://youtu.be/PT4oZxnOCIA">https://youtu.be/PT4oZxnOCIA</a>	Video
14	OT and DE with constant coeff	<a href="https://youtu.be/IL_B-mZdU6w">https://youtu.be/IL_B-mZdU6w</a>	Video
15	Solvable for x, y and clauraits form	<a href="https://youtu.be/rQHEXP2rizQ">https://youtu.be/rQHEXP2rizQ</a>	Video
16	Solvable for p	<a href="https://youtu.be/ePQsZZELXzI">https://youtu.be/ePQsZZELXzI</a>	Video
17	Bernoulis DE	<a href="https://youtu.be/RZLoN7vr7kc">https://youtu.be/RZLoN7vr7kc</a>	Video
18	Reducible to Homogeneous DE	<a href="https://youtu.be/athDiEDIdVY">https://youtu.be/athDiEDIdVY</a>	Video
19	reducible to Homogeneous DE	<a href="https://youtu.be/abw1YXOA-Xo">https://youtu.be/abw1YXOA-Xo</a>	Video
20	procedure and examples of homogeneous DE	<a href="https://youtu.be/7BvfnpAAHDU">https://youtu.be/7BvfnpAAHDU</a>	Video
21	examples of homogeneous D E	<a href="https://youtu.be/px8tMwmFmjY">https://youtu.be/px8tMwmFmjY</a>	Video
22	examples of separable DE	<a href="https://youtu.be/fkJG13B8M6s">https://youtu.be/fkJG13B8M6s</a>	Video
23	examples of DE separable DE form	<a href="https://youtu.be/CAT7Ggjsx0I">https://youtu.be/CAT7Ggjsx0I</a>	Video
24	forms of DE , separable form	<a href="https://youtu.be/CgN_f4Phcqk">https://youtu.be/CgN_f4Phcqk</a>	Video
25	Differential equations unit 1	<a href="https://youtu.be/zK53iEEfYrc">https://youtu.be/zK53iEEfYrc</a>	Video
26	DE	<a href="https://youtu.be/Sn-qYGpPwM8">https://youtu.be/Sn-qYGpPwM8</a>	Video

1	Special type of PDE	<a href="https://classroom.google.com/u/1">https://classroom.google.com/u/1</a>	PDF
2	Notes unit-2 of DE	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
3	Special method for PI	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
4	PDE Particular Integral	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
5	Higher order DE	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
6	DE	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
7	Particular integral Type IV	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
8	DE PI type 1,2, 3	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
9	DE PI type 1,2, 3	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
10	Lecture on DE	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
11	DE with constant coefficients	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
12	Lecture on DE	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF
13	OT and DE with constant coeff	<a href="https://classroom.google.com/c/N">https://classroom.google.com/c/N</a>	PDF

14	Solvable for x, y and clauraits form	<a href="https://classroom.google.com/c/\">https://classroom.google.com/c/\</a>	PDF
15	Solvable for p	<a href="https://classroom.google.com/c/\">https://classroom.google.com/c/\</a>	PDF

<b>B.Sc. -I Semester II- Paper IV :- (Vector Analysis and Solid Geome</b>			
<b>Sr. No.</b>	<b>Syllabus</b>	<b>Teaching Material Link</b>	<b>Format</b>
1	Unit I	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
2	Unit I	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
3	Unit I	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
4	Unit I	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
5	Unit I	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
6	Unit I	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
7	Unit I	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
8	Unit I	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
9	Unit I	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
10	Unit II	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
11	Unit II	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
12	Unit II	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
13	Unit II	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
14	Unit II	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
15	Unit II	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
16	Unit II	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video
17	Unit II	<a href="https://drive.google.com/file/d/">https://drive.google.com/file/d/</a>	Video







Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeswar

Study Materials

Department of Mathematics

B.Sc. II Semester III

B.Sc. -II Semester III- Paper V :- (Advanced Calculus)

Sr. No.	Syllabus	Teaching Material Link	Format
1	Unit I	<a href="https://drive.google.com/file/d/1Rv...">https://drive.google.com/file/d/1Rv...</a>	Video
2	Unit I	<a href="https://drive.google.com/file/d/1Yv...">https://drive.google.com/file/d/1Yv...</a>	Video
3	Unit I	<a href="https://drive.google.com/file/d/1m...">https://drive.google.com/file/d/1m...</a>	Video
4	Unit I	<a href="https://drive.google.com/file/d/1uv...">https://drive.google.com/file/d/1uv...</a>	Video
5	Unit I	<a href="https://drive.google.com/file/d/18l...">https://drive.google.com/file/d/18l...</a>	Video
6	Unit I	<a href="https://drive.google.com/file/d/1g6...">https://drive.google.com/file/d/1g6...</a>	Video
7	Unit I	<a href="https://drive.google.com/file/d/1nf...">https://drive.google.com/file/d/1nf...</a>	Video
8	Unit I	<a href="https://drive.google.com/file/d/1Sc...">https://drive.google.com/file/d/1Sc...</a>	Video
9	Unit I	<a href="https://drive.google.com/file/d/1Lf...">https://drive.google.com/file/d/1Lf...</a>	Video
10	Unit I	<a href="https://drive.google.com/file/d/1af...">https://drive.google.com/file/d/1af...</a>	Video
11	Unit I	<a href="https://drive.google.com/file/d/1Ky...">https://drive.google.com/file/d/1Ky...</a>	Video
12	Unit I	<a href="https://drive.google.com/file/d/1ik...">https://drive.google.com/file/d/1ik...</a>	Video
13	Unit I	<a href="https://drive.google.com/file/d/1rC...">https://drive.google.com/file/d/1rC...</a>	Video
14	Unit II	<a href="https://drive.google.com/file/d/1kk...">https://drive.google.com/file/d/1kk...</a>	Video
15	Unit II	<a href="https://drive.google.com/file/d/1IV...">https://drive.google.com/file/d/1IV...</a>	Video
16	Unit II	<a href="https://drive.google.com/file/d/1D...">https://drive.google.com/file/d/1D...</a>	Video
17	Unit II	<a href="https://drive.google.com/file/d/1rn...">https://drive.google.com/file/d/1rn...</a>	Video
18	Unit II	<a href="https://drive.google.com/file/d/1Xj...">https://drive.google.com/file/d/1Xj...</a>	Video
19	Unit II	<a href="https://drive.google.com/file/d/1rP...">https://drive.google.com/file/d/1rP...</a>	Video
20	Unit II	<a href="https://drive.google.com/file/d/1I9...">https://drive.google.com/file/d/1I9...</a>	Video
21	Unit II	<a href="https://drive.google.com/file/d/1nl...">https://drive.google.com/file/d/1nl...</a>	Video
22	Unit II	<a href="https://drive.google.com/file/d/146...">https://drive.google.com/file/d/146...</a>	Video
23	Unit II	<a href="https://drive.google.com/file/d/1O...">https://drive.google.com/file/d/1O...</a>	Video
24	Unit II	<a href="https://drive.google.com/file/d/1D...">https://drive.google.com/file/d/1D...</a>	Video
25	Unit II	<a href="https://drive.google.com/file/d/1n...">https://drive.google.com/file/d/1n...</a>	Video
26	Unit III	<a href="https://drive.google.com/file/d/1N...">https://drive.google.com/file/d/1N...</a>	Video
27	Unit III	<a href="https://drive.google.com/file/d/1o...">https://drive.google.com/file/d/1o...</a>	Video
28	Unit III	<a href="https://drive.google.com/file/d/1o...">https://drive.google.com/file/d/1o...</a>	Video
29	Unit III	<a href="https://drive.google.com/file/d/1w...">https://drive.google.com/file/d/1w...</a>	Video
30	Unit III	<a href="https://drive.google.com/file/d/1X...">https://drive.google.com/file/d/1X...</a>	Video
31	Unit III	<a href="https://drive.google.com/file/d/1LC...">https://drive.google.com/file/d/1LC...</a>	Video
32	Unit III	<a href="https://drive.google.com/file/d/14r...">https://drive.google.com/file/d/14r...</a>	Video
33	Unit III	<a href="https://drive.google.com/file/d/1d0...">https://drive.google.com/file/d/1d0...</a>	Video
34	Unit IV	<a href="https://drive.google.com/file/d/1Q...">https://drive.google.com/file/d/1Q...</a>	Video
35	Unit IV	<a href="https://drive.google.com/file/d/1vt...">https://drive.google.com/file/d/1vt...</a>	Video
36	Unit V	<a href="https://drive.google.com/file/d/179...">https://drive.google.com/file/d/179...</a>	Video
37	Unit V	<a href="https://drive.google.com/file/d/1N...">https://drive.google.com/file/d/1N...</a>	Video

**B.Sc. -II Semester III- Paper VI :- Elementary Number Theory**

Sr. No.	Syllabus	Teaching Material Link	Format
1	Basic	<a href="https://youtu.be/SbJKKGclVuA">https://youtu.be/SbJKKGclVuA</a>	Video
2	Basic	<a href="https://youtu.be/zco80ukSAvg">https://youtu.be/zco80ukSAvg</a>	Video
3	Prime Numbers	<a href="https://youtu.be/-cMKq1iAyJI">https://youtu.be/-cMKq1iAyJI</a>	Video
4	Divisibility	<a href="https://youtu.be/_lp3j3BILAQ">https://youtu.be/_lp3j3BILAQ</a>	Video
5	Divisibility	<a href="https://youtu.be/w76At5Ybkpo">https://youtu.be/w76At5Ybkpo</a>	Video
6	Divisibility	<a href="https://youtu.be/FVatBlkGbkq">https://youtu.be/FVatBlkGbkq</a>	Video
7	Divisibility part-1	<a href="https://youtu.be/eSQIQ2LNC48">https://youtu.be/eSQIQ2LNC48</a>	Video
8	Divisibility part-2	<a href="https://youtu.be/-nyxLIDzvjA">https://youtu.be/-nyxLIDzvjA</a>	Video
9	Divisibility part-1	<a href="https://youtu.be/7i0MXxg4-hc">https://youtu.be/7i0MXxg4-hc</a>	Video
10	Divisibility	<a href="https://youtu.be/KhzXcRQ449E">https://youtu.be/KhzXcRQ449E</a>	Video
11	Divisibility	<a href="https://www.youtube.com/watch?v=">https://www.youtube.com/watch?v=</a>	Video
12	Divisibility part-2	<a href="https://youtu.be/5WgnWXieRRo">https://youtu.be/5WgnWXieRRo</a>	Video
13	Divisibility part-1	<a href="https://youtu.be/KU7AIH0_Lic">https://youtu.be/KU7AIH0_Lic</a>	Video
14	Divisibility	<a href="https://youtu.be/u89Wvy7PW18">https://youtu.be/u89Wvy7PW18</a>	Video
15	Number theory	<a href="https://youtu.be/1GIQTm8B2KE">https://youtu.be/1GIQTm8B2KE</a>	Video
16	Division Algorithm	<a href="https://youtu.be/jTNIkY6c">https://youtu.be/jTNIkY6c</a>	Video
17	Divisibility	<a href="https://youtu.be/Glvi1kVwx20">https://youtu.be/Glvi1kVwx20</a>	Video

Divisibility notes	<a href="https://classroom.google.com/u/1/w/">https://classroom.google.com/u/1/w/</a>	PDF
Divisibility notes	<a href="https://drive.google.com/file/d/11-2/">https://drive.google.com/file/d/11-2/</a>	PDF



<b>Credit</b>
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Study Materials

Department of Mathematics

B.Sc. II Semester IV

B.Sc. -II Semester IV- Paper VII:- Modern Algebra: groups and rings

Sr. No.	Syllabus	Teaching Material Link	Format
1	Subring	<a href="https://youtu.be/boyGLAmPExA">https://youtu.be/boyGLAmPExA</a>	Video
2	Ring	<a href="https://youtu.be/qcy1PcHT7_c">https://youtu.be/qcy1PcHT7_c</a>	Video
3	Homomorphism	<a href="https://youtu.be/3aPL9QM99u0">https://youtu.be/3aPL9QM99u0</a>	Video
4	examples of kernel and thms on homomorphism	<a href="https://youtu.be/sXheH2YBdQI">https://youtu.be/sXheH2YBdQI</a>	Video
5	homomorphism	<a href="https://youtu.be/PBy4r6xj_io">https://youtu.be/PBy4r6xj_io</a>	Video
6	homomorphism	<a href="https://youtu.be/QJE4THjI_k">https://youtu.be/QJE4THjI_k</a>	Video
7	Quotient group	<a href="https://youtu.be/L-Y6w5JGvJs">https://youtu.be/L-Y6w5JGvJs</a>	Video
8	Normal Subgroup	<a href="https://youtu.be/7U2SYuAhSr4">https://youtu.be/7U2SYuAhSr4</a>	Video
9	Normal Subgroup	<a href="https://youtu.be/8DIyUtROHto">https://youtu.be/8DIyUtROHto</a>	Video
10	thm on cosets	<a href="https://youtu.be/QrBojRoqMMY">https://youtu.be/QrBojRoqMMY</a>	Video
11	cosets	<a href="https://youtu.be/ioOCvY_SGVU">https://youtu.be/ioOCvY_SGVU</a>	Video
12	permutations	<a href="https://youtu.be/IE9I8RhcT9k">https://youtu.be/IE9I8RhcT9k</a>	Video
13	Permutations cycles	<a href="https://youtu.be/GZd1fJHBCZE">https://youtu.be/GZd1fJHBCZE</a>	Video
14	equality of permutation	<a href="https://youtu.be/7PixFbUfUm4">https://youtu.be/7PixFbUfUm4</a>	Video
15	Permutation examples	<a href="https://youtu.be/dXeI_ncuAoi8">https://youtu.be/dXeI_ncuAoi8</a>	Video
16	Permutation	<a href="https://youtu.be/fIBhfDfWRMo">https://youtu.be/fIBhfDfWRMo</a>	Video
17	Abelian Group	<a href="https://youtu.be/1YwSAQCrBuw">https://youtu.be/1YwSAQCrBuw</a>	Video
18	thm on subgroup	<a href="https://youtu.be/wHaf8EHWvWE">https://youtu.be/wHaf8EHWvWE</a>	Video
19	tests and thm of subgroup	<a href="https://youtu.be/M3GWRwgHiTo">https://youtu.be/M3GWRwgHiTo</a>	Video
20	Properties of group	<a href="https://youtu.be/PE_puy0a7RE">https://youtu.be/PE_puy0a7RE</a>	Video
21	examples properties of group	<a href="https://youtu.be/Y0bbSUvYplY">https://youtu.be/Y0bbSUvYplY</a>	Video
22	examples of group	<a href="https://youtu.be/Uspd3hv5Ofo">https://youtu.be/Uspd3hv5Ofo</a>	Video
23	Group examples	<a href="https://youtu.be/tOn_5abdruU">https://youtu.be/tOn_5abdruU</a>	Video
24	Group	<a href="https://youtu.be/hIVIqSm8E48">https://youtu.be/hIVIqSm8E48</a>	Video

B.Sc. -II Semester IV- paper VIII:-(Classical Mechanics)

Sr. No.	Syllabus	Teaching Material Link	Format
1	Unit I	<a href="https://drive.google.com/file/d/1qsnWrD">https://drive.google.com/file/d/1qsnWrD</a>	Video
2	Unit I	<a href="https://drive.google.com/file/d/1cIP83Rp">https://drive.google.com/file/d/1cIP83Rp</a>	Video
3	Unit I	<a href="https://drive.google.com/file/d/1f7dkSlcg">https://drive.google.com/file/d/1f7dkSlcg</a>	Video
4	Unit I	<a href="https://drive.google.com/file/d/1CBD-uh0">https://drive.google.com/file/d/1CBD-uh0</a>	Video
5	Unit I	<a href="https://drive.google.com/file/d/1OIKeSzm">https://drive.google.com/file/d/1OIKeSzm</a>	Video
6	Unit I	<a href="https://drive.google.com/file/d/1jwqYTxn">https://drive.google.com/file/d/1jwqYTxn</a>	Video
7	Unit I	<a href="https://drive.google.com/file/d/1qAh_CR">https://drive.google.com/file/d/1qAh_CR</a>	Video
8	Unit I	<a href="https://drive.google.com/file/d/1T4vpON">https://drive.google.com/file/d/1T4vpON</a>	Video
9	Unit I	<a href="https://drive.google.com/file/d/1A2Yw6y">https://drive.google.com/file/d/1A2Yw6y</a>	Video
10	Unit II	<a href="https://drive.google.com/file/d/1eKJH4tV">https://drive.google.com/file/d/1eKJH4tV</a>	Video
11	Unit II	<a href="https://drive.google.com/file/d/11ORDz1">https://drive.google.com/file/d/11ORDz1</a>	Video
12	Unit II	<a href="https://drive.google.com/file/d/1Fn9zaV-">https://drive.google.com/file/d/1Fn9zaV-</a>	Video

13	Unit II	<a href="https://drive.google.com/file/d/1uZFLMLz">https://drive.google.com/file/d/1uZFLMLz</a>	Video
14	Unit II	<a href="https://drive.google.com/file/d/1MDvihj5">https://drive.google.com/file/d/1MDvihj5</a>	Video



Dr. A. S. Bansod

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Vinayak Vidnyan Mahavidyalaya, Nandgaon Khandeswar

Study Materials

Department of Mathematics

B.Sc. III Semester V

B.Sc. -III Semester V- Paper IX :- ( Mathematical Analysis )			
Sr. No.	Syllabus	Teaching Material Link	Format
1	Unit I	<a href="https://drive.google.com/file/d/13">https://drive.google.com/file/d/13</a>	Video
2	Unit I	<a href="https://drive.google.com/file/d/16">https://drive.google.com/file/d/16</a>	Video
3	Unit I	<a href="https://drive.google.com/file/d/1r">https://drive.google.com/file/d/1r</a>	Video
4	Unit I	<a href="https://drive.google.com/file/d/1D">https://drive.google.com/file/d/1D</a>	Video
5	Unit I	<a href="https://drive.google.com/file/d/1x">https://drive.google.com/file/d/1x</a>	Video
6	Unit I	<a href="https://drive.google.com/file/d/1P">https://drive.google.com/file/d/1P</a>	Video
7	Unit I	<a href="https://drive.google.com/file/d/18">https://drive.google.com/file/d/18</a>	Video
8	Unit I	<a href="https://drive.google.com/file/d/1H">https://drive.google.com/file/d/1H</a>	Video
9	Unit I	<a href="https://drive.google.com/file/d/1">https://drive.google.com/file/d/1</a>	Video
10	Unit I	<a href="https://drive.google.com/file/d/1h">https://drive.google.com/file/d/1h</a>	Video
11	Unit I	<a href="https://drive.google.com/file/d/1C">https://drive.google.com/file/d/1C</a>	Video
12	Unit I	<a href="https://drive.google.com/file/d/1V">https://drive.google.com/file/d/1V</a>	Video
13	Unit I	<a href="https://drive.google.com/file/d/1s">https://drive.google.com/file/d/1s</a>	Video
14	Unit I	<a href="https://drive.google.com/file/d/1p">https://drive.google.com/file/d/1p</a>	Video
15	Unit I	<a href="https://drive.google.com/file/d/1R">https://drive.google.com/file/d/1R</a>	Video
16	Unit I	<a href="https://drive.google.com/file/d/1c">https://drive.google.com/file/d/1c</a>	Video
17	Unit I	<a href="https://drive.google.com/file/d/1Y">https://drive.google.com/file/d/1Y</a>	Video
18	Unit I	<a href="https://drive.google.com/file/d/1e">https://drive.google.com/file/d/1e</a>	Video

B.Sc. -III Semester V- Paper X :- Mathematical Methods			
Sr. No.	Syllabus	Teaching Material Link	Format
1	Basic	<a href="https://youtu.be/SbJkKgclVuA">https://youtu.be/SbJkKgclVuA</a>	Video
2	Basic	<a href="https://youtu.be/zco80ukSAvg">https://youtu.be/zco80ukSAvg</a>	Video
3	Laplace transform inverse examples	<a href="https://youtu.be/iUN9t60rwX8">https://youtu.be/iUN9t60rwX8</a>	Video
4	inverse of Laplace transform examples	<a href="https://youtu.be/gLWrPG-sfAg">https://youtu.be/gLWrPG-sfAg</a>	Video
5	Laplace Transform	<a href="https://youtu.be/E3462po3yNg">https://youtu.be/E3462po3yNg</a>	Video
6	Laplace transform	<a href="https://youtu.be/1R1FXT6EFP0">https://youtu.be/1R1FXT6EFP0</a>	Video
7	Laplace Transform	<a href="https://youtu.be/fin5OzsC5b4">https://youtu.be/fin5OzsC5b4</a>	Video
8	Fourier series part-1	<a href="https://youtu.be/fAm0zR269E0">https://youtu.be/fAm0zR269E0</a>	Video
9	Fourier series part 2	<a href="https://youtu.be/Y0IKEGJH3Lw">https://youtu.be/Y0IKEGJH3Lw</a>	Video
10	half range Fourier Series part 1	<a href="https://youtu.be/uH2mlSnMkls">https://youtu.be/uH2mlSnMkls</a>	Video
11	Fourier Series	<a href="https://youtu.be/cA0VQoUx6aU">https://youtu.be/cA0VQoUx6aU</a>	Video
12	half range Fourier Series	<a href="https://studio.youtube.com/video/">https://studio.youtube.com/video/</a>	Video
13	Fourier Series	<a href="https://youtu.be/Oit-njm9qh4">https://youtu.be/Oit-njm9qh4</a>	Video
14	Fourier Series	<a href="https://youtu.be/IQVSSN3YdO8">https://youtu.be/IQVSSN3YdO8</a>	Video
15	Fourier Series	<a href="https://youtu.be/WpZr1Wgz_FE">https://youtu.be/WpZr1Wgz_FE</a>	Video
16	Fourier Series	<a href="https://youtu.be/TeZePAEybhY">https://youtu.be/TeZePAEybhY</a>	Video
17	Fourier series part-2	<a href="https://youtu.be/vJmnggGIso">https://youtu.be/vJmnggGIso</a>	Video
18	Fourier series part 1	<a href="https://youtu.be/uFxr4FDugx8">https://youtu.be/uFxr4FDugx8</a>	Video

19	Fourier series part-2	<a href="https://youtu.be/kD8GhiN1yRQ">https://youtu.be/kD8GhiN1yRQ</a>	Video
20	Fourier series part 1	<a href="https://youtu.be/uv7mzhf0h-g">https://youtu.be/uv7mzhf0h-g</a>	Video
21	Fourier series	<a href="https://youtu.be/YU6MxueQ2Aw">https://youtu.be/YU6MxueQ2Aw</a>	Video
22	29 September 2021 Fourier series	<a href="https://youtu.be/77StiRhXQDM">https://youtu.be/77StiRhXQDM</a>	Video



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Study Materials

Department of Mathematics

B.Sc. III Semester VI

B.Sc. -III Semester VI- Paper XII :- (Optional) Graph Theory

Sr. No.	Syllabus	Teaching Material Link	Format
1	Vector space associated with graph	<a href="https://youtu.be/zeTbdCTyCJE">https://youtu.be/zeTbdCTyCJE</a>	Video
2	Region by Planar Graph	<a href="https://youtu.be/WVGjObzHDxE">https://youtu.be/WVGjObzHDxE</a>	Video
3	Planar graph	<a href="https://youtu.be/XBzeOIKLcBc">https://youtu.be/XBzeOIKLcBc</a>	Video
4	Complete graph	<a href="https://youtu.be/eqkJ5nX4uYw">https://youtu.be/eqkJ5nX4uYw</a>	Video
5	Planar graph, NON planar graph	<a href="https://youtu.be/tG5Mdqwgq-s">https://youtu.be/tG5Mdqwgq-s</a>	Video
6	Cutset	<a href="https://youtu.be/dsjZWspyU3M">https://youtu.be/dsjZWspyU3M</a>	Video
7	Graph theory Fundamental circuit	<a href="https://youtu.be/3lnODJF_rlg">https://youtu.be/3lnODJF_rlg</a>	Video
8	Labeled and unlabeled tree	<a href="https://youtu.be/P6L3XATH1_U">https://youtu.be/P6L3XATH1_U</a>	Video
9	Level of tree, height of tree	<a href="https://youtu.be/SdNiXhT2wXE">https://youtu.be/SdNiXhT2wXE</a>	Video
10	Graph theory properties of binary tree	<a href="https://youtu.be/EFVX4JRliG8">https://youtu.be/EFVX4JRliG8</a>	Video
11	Eccentricity and centre of the graph	<a href="https://youtu.be/2zSR9UOxsn0">https://youtu.be/2zSR9UOxsn0</a>	Video
12	Lagranges thm and other thms Unit 2	<a href="https://youtu.be/v8D7VFCIBw0">https://youtu.be/v8D7VFCIBw0</a>	Video
13	properties of tree	<a href="https://youtu.be/FnBo2FrLDPk">https://youtu.be/FnBo2FrLDPk</a>	Video
14	tree	<a href="https://youtu.be/gMa9wGKz5RA">https://youtu.be/gMa9wGKz5RA</a>	Video
15	koninsberg problem	<a href="https://youtu.be/20P_R5Hreew">https://youtu.be/20P_R5Hreew</a>	Video
16	Graph Theory Decomposition	<a href="https://youtu.be/HXXUewwDAMg">https://youtu.be/HXXUewwDAMg</a>	Video
17	Graph theory	<a href="https://youtu.be/fErNXeBc198">https://youtu.be/fErNXeBc198</a>	Video
18	Graph theory	<a href="https://youtu.be/HBwsMsYbmkA">https://youtu.be/HBwsMsYbmkA</a>	Video
19	Graph theory	<a href="https://youtu.be/4QgtXu8booo">https://youtu.be/4QgtXu8booo</a>	Video
20	Graph theory- Euler Line	<a href="https://youtu.be/IbCwPp965jA">https://youtu.be/IbCwPp965jA</a>	Video
21	complete graph and chemical structure s	<a href="https://youtu.be/ka3wm6_Egjk">https://youtu.be/ka3wm6_Egjk</a>	Video
22	graph theory thm of edges	<a href="https://youtu.be/_r7kZun-gpw">https://youtu.be/_r7kZun-gpw</a>	Video
23	subgraph with examples	<a href="https://youtu.be/SHk5Ns7QSAo">https://youtu.be/SHk5Ns7QSAo</a>	Video
24	walk, path, circuit	<a href="https://youtu.be/U31STOmYblE">https://youtu.be/U31STOmYblE</a>	Video
25	examples of graph and subgraph	<a href="https://youtu.be/2VJWUzMRD_Q">https://youtu.be/2VJWUzMRD_Q</a>	Video

B.Sc. -III Semester VI- Paper XI :- (Linear Algebra )

Sr. No.	Syllabus	Teaching Material Link	Format
1	Unit I	<a href="https://drive.google.com/file/d/1DnFFcN">https://drive.google.com/file/d/1DnFFcN</a>	Video
2	Unit I	<a href="https://drive.google.com/file/d/1127BSez">https://drive.google.com/file/d/1127BSez</a>	Video
3	Unit I	<a href="https://drive.google.com/file/d/1vu3zVx">https://drive.google.com/file/d/1vu3zVx</a>	Video
4	Unit I	<a href="https://drive.google.com/file/d/1zB9q45">https://drive.google.com/file/d/1zB9q45</a>	Video
5	Unit I	<a href="https://drive.google.com/file/d/1tFYfQ_J">https://drive.google.com/file/d/1tFYfQ_J</a>	Video
6	Unit I	<a href="https://drive.google.com/file/d/1RCMj8t">https://drive.google.com/file/d/1RCMj8t</a>	Video
7	Unit I	<a href="https://drive.google.com/file/d/1lcDKFh">https://drive.google.com/file/d/1lcDKFh</a>	Video
8	Unit I	<a href="https://drive.google.com/file/d/1adcVoM">https://drive.google.com/file/d/1adcVoM</a>	Video
9	Unit I	<a href="https://drive.google.com/file/d/18jaNJvY">https://drive.google.com/file/d/18jaNJvY</a>	Video
10	Unit I	<a href="https://drive.google.com/file/d/10uGVlH">https://drive.google.com/file/d/10uGVlH</a>	Video
11	Unit I	<a href="https://drive.google.com/file/d/1GYyIWc">https://drive.google.com/file/d/1GYyIWc</a>	Video

12	Unit I	<a href="https://drive.google.com/file/d/1d5-DwS">https://drive.google.com/file/d/1d5-DwS</a>	Video
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Dr. A. S. Bansod