

		:- Basic Mathematics	Video:duration
Video clips			hr:mn:sc
1	Lecture	01.Trignometry Expressing Angles in Degrees Radians	00:10:13
2	Lecture	02. Trigonometry Positive Negative Angle	00:19:58
3	Lecture	03. Trigonometry function of other Quadrants	00:37:06
4	Lecture	04.Trignometry Concept Discussion 1	00:12:17
5	Lecture	05.Trignometry Concept Discussion 2	00:37:28
6	Lecture	06.Inverse Trigonometry	00:14:03
7	Lecture	07.Plotting Straight-line Basic Quardinate Geometry 1	00:23:46
8	Lecture	08.Plotting Straight-line Basic Quardinate Geometry 2	00:21:17
9	Lecture	09.Plotting Parabola Basic Quardinate Geometry 1	00:21:17
10	Lecture	10.Plotting Parabola Basic Quardinate Geometry 2	00:23:31
11	Lecture	11.Applications of Parabola Basic Quardinate Geometry 3	00:19:28
12	Lecture	12.Elimentery Differentiation Basics Calculus	00:28:36
13	Lecture	13.Diffrentiation Graphical Representation of derivative of function 1	00:17:36
14	Lecture	14.Diffrentiation Graphical Representation of derivative of function2	00:29:46
15	Lecture	15.Diffrentiation Graphical Representation of derivative of function 3	00:17:40
16	Lecture	16.Differentiation Important functions 1	00:23:37
17	Lecture	17.Differentiation Important functions 2	00:26:27
18	Lecture	18.Differentiation Important functions Illustrations 1	00:23:01
19	Lecture	19.Differentiation Important functions Illustrations 2	00:29:14
20	Lecture	20.Differentiation Minima Maxima 1	00:26:25
21	Lecture	21.Differentiation Minima Maxima 2 Illustrations	00:29:00
22	Lecture	22.Elementry Integration	00:23:42
23	Lecture	23.Elementry Integration important formulae & functions 1	00:30:12
24	Lecture	24.Elementry Integration important formulae & functions 2	00:32:19
25	Lecture	25.Integration by Substitutional	00:31:37
26	Lecture	26.Use of integration in physics 1	00:30:05
27	Lecture	27.Use of integration in physics 2	00:14:13
28	Lecture	28.Integration positive negative Change in velocity	00:16:26
29	Lecture	29.Application of integration	00:19:01
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		:- Dimension Analysis	Video:duration
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30	Lecture	01. Dimension Analysis Quantities in Physics	00:09:16
31	Lecture	02. Dimension Analysis Different types of Units	00:31:10
32	Lecture	03.Important points and formulae	00:09:46
33	Lecture	04.Application of Dimension Analysis	00:22:43
34	Lecture	05.Convert newton into dyne & convert jule into erg.	00:10:49
35	Lecture	06.Convert 1km into meter.p.s	00:04:02
36	Lecture	07.To check the Correctness of Given Physics Equation	00:12:02
37	Lecture	08.Research tool to Drive New Relations	00:12:31

38	Lecture	09.Concept Application Exercise 1	00:33:54
39	Lecture	10.Concept Application Exercise 2	00:38:44
40	Lecture	11.Rules of Rounding off	00:14:08
41	Lecture	12.Singnificant Error 1	00:23:07
42	Lecture	13.Singnificant Error 2	00:37:08
43	Lecture	14.Errors in Measurement permissible error	00:10:44
44	Lecture	15.Calculation error. Absolute error. Relative percentage error	00:14:18
45	Lecture	16.Propagation and combination error	00:21:00
46	Lecture	17.illustrations	00:29:35
		Total Duration	05:35:06
		:-Vectors	Video:duration
			hr:mn:sc
47	Lecture	01.Vectors & Scalars. Representation of vector	00:18:01
48	Lecture	02.Types of Vectors	00:25:26
49	Lecture	03.Vector Addition	00:27:35
50	Lecture	04.Subtraction of Vector	00:24:23
51	Lecture	05.Components of Vector 1	00:31:12
52	Lecture	06.Components of Vector 2	00:11:40
53	Lecture	07.Components of Vector 3	00:30:52
54	Lecture	08.Components of Vector 4	00:30:50
55	Lecture	09.Components of vector 5	00:27:32
56	Lecture	10.Components of Vector 6	00:18:36
57	Lecture	11.Resultant of Vector 1	00:26:24
58	Lecture	12.Resultant of Vector 2	00:29:06
59	Lecture	13.Direction cosines of vector	00:16:02
60	Lecture	14.The Scalar. Dot Product	00:09:25
61	Lecture	15.Properties of Dot Product	00:18:18
62	Lecture	16.Scalar-DoT Product Illustration	00:11:44
63	Lecture	17.Geometric interpretation of Dot Product	00:13:03
64	Lecture	18.Application of Dot Product in Kinematics	00:28:47
65	Lecture	19.Vector Product-Cross Product 1	00:08:56
66	Lecture	20.Vector Product-Cross Product 2	00:14:19
67	Lecture	21.Properties of Cross Product	00:08:17
68	Lecture	22.Applications of Cross Product	00:10:05
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		:-Kinematics-Motion in One Dimension	Video:duration
			hr:mn:sc
69	Lecture	01.What Is Kinematics	00:17:53

70	Lecture	02.What Is Trajectory	00:30:57
71	Lecture	03What is Distance Displacement Learning Basic Terminology of Motions 1	00:18:46
72	Lecture	04.Learning Basic Terminology of Motions Conclusion-Illustration 2	00:07:39
73	Lecture	05.Basic Terminology of Motions Average Velocity-Speed-Instantaneous	00:09:20
74	Lecture	06.Strengthening the concept with some class exercise and discussion	00:24:40
75	Lecture	07.Kinematics Understanding Motion Through Graphs 1	00:26:13
76	Lecture	08.Displacement Time Graph Particle Moving with Constant Acceleration 2	00:35:55
77	Lecture	09.Kinematics Time Velocity Graphs	00:41:47
78	Lecture	10.Representing Motion Through Graphs	00:11:47
79	Lecture	11.Representing Motion Graphs Under Gravity	00:24:14
80	Lecture	12.Representing Motion Graphs Under Gravity Illustrations	00:24:43
81	Lecture	13.Some Additional Graphs 1	00:21:26
82	Lecture	14.Some Additional Graphs Illustration 2	00:06:52
83	Lecture	15.Some Additional Graphs & Illustration 3	00:28:35
84	Lecture	16.Kinematics Equation 1	00:34:01
85	Lecture	17.Kinematics Equation 2	00:11:12
86	Lecture	18.Kinematic Equation -Situation Related to Overtaking	00:12:54
87	Lecture	19.Kinematics Equation Displacement in The Nth Second of Motion	00:21:32
88	Lecture	20.Motion Under Gravity 1	00:21:56
89	Lecture	21.Motion Under Gravity 2	00:22:58
90	Lecture	22.Motion on An Inclined Plane 1	00:21:19
91	Lecture	23.Motion on Inclined Plane Along A Line Other Than the Line of Greatest Slope	00:10:15
92	Lecture	24.Motion in Incline Plane Sliding of Bead Along the Chord of a Circle	00:07:12
93	Lecture	25.Learning Basics of Relative Motion in One Dimension 1	00:18:25
94	Lecture	26.Learning Basics of Relative Motion in One Dimension 2	00:20:22
95	Lecture	27.Relative Motion Illustrations	00:20:20
96	Lecture	28.Application Kinematics Equations in Relative Motion	00:19:31
97	Lecture	29.River Boat Problem in One Dimension	00:22:44
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		Misc.Problems Motion in One Dimension	
98		01.Motion Under Gravity Illustrations 1	00:20:30
99		02.Motion Under Gravity Illustrations 2	00:05:37
100		03.Motion Under Gravity Illustrations 3	00:15:28
101		04.Motion Under Gravity Illustrations 4	00:28:25
102		05.Motion Under Gravity Illustrations 5	00:07:59
103		06.Motion Under Gravity Illustrations 6	00:23:18
104		07.Motion Under Gravity Illustrations 7	00:05:50
105		01. Kinematics Equation illustrations 1	00:09:11
106		02. Kinematics Equation illustrations 2	00:09:46

107		01.Kinematic Equation problem solving by Graphical method illustration 1	00:16:08
108		02.Kinematic Equation problem solving by Graphical method illustration 2	00:15:30
109		01.Relative Motion NCERT Problem 1	00:10:01
110		02.Relative Motion NCERT Problem 2	00:04:36
111		03.Relative Motion NCERT Problem 3	00:04:09
112		04.Relative Motion NCERT Problem 4	00:07:31
113		05.Relative Motion NCERT Problem 5	00:07:13
114		01.Role of Proper frame of Reference in problem 1	00:12:22
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		:-Kinematics-Motion in Two Dimension	Video:duration
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115	Lecture	01.Motion in Two Dimension 1	00:14:31
116	Lecture	02.Motion in Two Dimension 2	00:10:28
117	Lecture	03.Projectile Motion 1	00:21:56
118	Lecture	04.Projectile Motion 2	00:16:43
119	Lecture	05.Finding Various Parameters of Projectile Motion 1	00:18:50
120	Lecture	06.Finding Various Parameters of Projectile Motion 2	00:19:57
121	Lecture	07.Projectile Motion-Equation of Trajectory	00:26:40
122	Lecture	08.Projectile Motion-Projection from Height	00:40:30
123	Lecture	09.Projection from Moving Frame	00:20:57
124	Lecture	10.Projectile Motion-Inclined Plane 1	00:33:08
125	Lecture	11.Projectile Motion-Inclined Plane 2	00:23:27
126	Lecture	12.Projectile Motion-Inclined Plane 3	00:18:04
127	Lecture	13.Relative Motion 1	00:23:07
128	Lecture	14.Relative Motion 2	00:17:48
129	Lecture	15.Relative Velocity River Man Problem	00:41:38
130	Lecture	16.Swiming Directed Direction	00:16:45
131	Lecture	17.Relative Velocity Man Umbrella Problem 1	00:17:21
132	Lecture	18.Relative Velocity Man Umbrella Problem 2	00:28:08
133	Lecture	19.Finding Shortest Distance 1	00:13:26
134	Lecture	20.Finding Shortest Distance 2	00:24:53
135	Lecture	21.Velocity of Approach 1	00:25:52
136	Lecture	22.Velocity of Approach 2	00:21:53
		Total Duration	8:16:02

		:-Laws of Motion without Friction	Video:duration
			hr:mn:sc
137	Lecture	01.Basics of Newton's Laws of Motion 1	00:25:43
138	Lecture	02.Basics of Newton's Laws of Motion 2	00:27:03
139	Lecture	03.Basics of Newton's Laws of Motion 3	00:22:43
140	Lecture	04.Basics of Newton's Laws of Motion 4	00:32:04
141	Lecture	05.Applicatoin's Of Newton's Law of Motion Analyzing Particle in Equilibrium 1	00:25:11
142	Lecture	06.Applicatoin's Of Newton's Law of Motion Analyzing Particle in Equilibrium 2	00:21:35
143	Lecture	07.Applicatoin's Of Newton's Law of Motion Analyzing Particle in Equilibrium 3	00:29:29
144	Lecture	08.Application of Laws of Motion 1	00:26:23
145	Lecture	09.Application of Laws of Motion 2	00:25:30
146	Lecture	10.Application of Laws of Motion -Tension Force 1	00:38:26
147	Lecture	11.Application of Laws of Motion -Tension Force 2	00:27:18
148	Lecture	12.Application of Laws of Motion -Tension Force 3	00:32:32
149	Lecture	13.Tension in Strings or Ropes with Mass 1	00:20:52
150	Lecture	14.Tension in Strings or Ropes with Mass 2	00:21:01
151	Lecture	15.Pseudo Force 1	00:33:14
152	Lecture	16.Pseudo Force 2	00:37:42
153	Lecture	17.Constraint Relation 1	00:17:34
154	Lecture	18.Constraint Relation Pulley Block 2	00:27:11
155	Lecture	19.Applications Constraint Relation 3	00:26:40
156	Lecture	20.Constraint Relation Wedge Pulley 4	00:23:19
157	Lecture	21. Constraint Relation Wedge Block Problem 5	00:11:00
158	Lecture	22.Constraint Relation Wedge Block Problem Solving Different Approach 6	00:38:45
159	Lecture	23.Analysis of Spring Force in Laws of Motion 1	00:40:55
160	Lecture	24.Application of Spring Force in Laws of Motion 2	00:22:57
161	Lecture	25.Application of Spring Force In Laws of Motion 3	00:33:32
		Total Duration	11:28:39
		:-Miscellaneous Problems of Laws of Motion 1	Video:duration
162	Lecture	Illustration-1	00:07:59
163	Lecture	Illustration-2	00:07:52
164	Lecture	Illustration-3	00:04:46
165	Lecture	Illustration-4	00:04:47
166	Lecture	Illustration-5	00:04:36
167	Lecture	Illustration-6	00:04:23
168	Lecture	Illustration-7	00:05:59
169	Lecture	Illustration-8	00:06:26
170	Lecture	Illustration-9	00:05:59
171	Lecture	Illustration-10	00:09:57
172	Lecture	Illustration-11	00:08:03
173	Lecture	Illustration-12	00:07:26

174	Lecture	Illustration-13	00:16:56
175	Lecture	Illustration-14	00:10:42
176	Lecture	Illustration-15	00:08:04
177	Lecture	Illustration-16	00:08:44
178	Lecture	Illustration-17	00:06:45
179	Lecture	Illustration-18	00:06:15
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		:-Laws of Motion 1-miscellaneous Problems	Video:duration
180	Lecture	01.Application of Law of motion With different Methods 1	00:43:17
181	Lecture	02.Application of Law of motion With different Methods 2	00:34:38
182	Lecture	03.Application of Law of motion With different Methods 3	00:33:50
183	Lecture	04.Application of Law of motion With different Methods 4	00:19:28
184	Lecture	05.Application of Law of motion With different Methods 5	00:25:13
185	Lecture	06.Application of Law of motion With different Methods 6	00:23:53
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		:-Laws of Motion (with Friction)	Video:duration
186	Lecture	01.Understanding Friction and Frictional Forces	00:38:42
187	Lecture	02.Analyzing Static and Kinetic Force 1	00:26:12
188	Lecture	03.Analyzing Static and Kinetic Force 2	00:16:29
189	Lecture	4.Friction Force Angle of Repose	00:25:12
190	Lecture	05.Friction Force Maximum Minimum Force to Make Object Stationery	00:34:12
191	Lecture	06.Diffrent Cases of Laws of Motion in Friction Force 1	00:20:59
192	Lecture	07.Diffrent Cases of Laws of Motion in Friction Force 2	00:25:37
193	Lecture	08.Problem Involving Friction Force in Laws of Motion 1	00:20:36
194	Lecture	09.Problem Involving Friction Force in Laws of Motion 2	00:36:07
195	Lecture	10.Analyzing Friction Force Multiple Surfaces 1	00:17:30
196	Lecture	11.Analyzing Friction Force Multiple Surfaces 2	00:19:41
197	Lecture	12.Analyzing Friction Force Multiple Surfaces 3	00:07:22
198	Lecture	13.Anylyzing Friction Force While Walking	00:31:00
199	Lecture	14.Application Friction and Frictional Forces	00:32:18
		Total Duration	05:51:57
		More Problems of Friction Force	Video:duration
200	Lecture	01.Friction Force Problem	00:24:26
201	Lecture	02.Friction Force Problem	00:28:18

202	Lecture	03.Friction Force Problem	00:26:00
203	Lecture	04.Friction Force Problem	00:12:57
204	Lecture	05.Friction Force Problem	00:15:22
205	Lecture	06.Friction Force Problem	00:08:52
206	Lecture	07.Friction Force Problem	00:06:43
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207	Lecture	01.Variables of Circular Motion 1	00:32:40
208	Lecture	02.Variables of Circular Motion 2	00:16:15
209	Lecture	03.Variables of Circular Motion 3	00:23:20
210	Lecture	04.Relation Between Linear and Angular Velocity 1	00:21:48
211	Lecture	05.Relation Between Linear and Angular Velocity 2	00:29:58
212	Lecture	06.Acceleration in Circular Motion 1	00:36:04
213	Lecture	07.Accelereation In Circular Motion Illustration 2	00:17:12
214	Lecture	08.Radius of Curvature	00:19:56
215	Lecture	09.Dynamics of Circular Motion Centripetal Force-Center Seeking Force 1	00:24:01
216	Lecture	10.Dynamics of Circular Motion Centripetal Force-Center Seeking Force 2	00:21:13
217	Lecture	11.Dynamics of Circular Motion-Centrifugal Force 1	00:22:33
218	Lecture	12.Dynamics of Circular Motion-Centrifugal Force 2	00:21:01
219	Lecture	13.Applications of The Concept of Circular Motion in Different Situations 1	00:32:08
220	Lecture	14.Applications of The Concept of Circular Motion in Different Situations 2	00:27:37
221	Lecture	15.Circular Motion in Vertical Plane 1	00:39:19
222	Lecture	16.Circular Motion in Vertical Plane Illustrations 2	00:29:25
223	Lecture	17.Circular Motion in Vertical Plane Illustrations 3	00:21:23
224	Lecture	18.Circular Motion in Vertical Plane Illustrations 4	00:28:20
225	Lecture	19.Motion of Body Outside the Spherical Surface 1	00:18:41
226	Lecture	20.Motion of Body Outside the Spherical Surface 2	00:21:35
227	Lecture	21.Some Special Cases of Circular Motion 1	00:26:23
228	Lecture	22.Some Special Cases of Circular Motion 2	00:11:48
		Total Duration	9:02:40
		-Circular Motion-Miscellaneous Problems	Video:duration
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229	Lecture	Illustration-1	00:05:26
230	Lecture	Illustration-2	00:11:12
231	Lecture	Illustration-3	00:09:34
232	Lecture	Illustration-4	00:08:24
233	Lecture	Illustration-5	00:10:53
234	Lecture	Illustration-6	00:06:24
235	Lecture	Illustration-7	00:12:55
236	Lecture	Illustration-8	00:16:06
237	Lecture	Illustration-9	00:07:21
238	Lecture	Illustration-10	00:09:56
239	Lecture	Illustration-11	00:03:03
240	Lecture	Illustration-12	00:09:40
241	Lecture	Illustration-13	00:08:03
242	Lecture	Illustration-14	00:08:45
243	Lecture	Illustration-15	00:10:55
244	Lecture	Illustration-16	00:11:20
		Total Duration	02:30:05
		:-Work Power Energy	Video:duration
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245	Lecture	01.Definition of Work 1	00:20:00
246	Lecture	02.Definition of Work Done by Pair of Interacting Forces	00:22:47
247	Lecture	03.Concept Application Exercises	00:19:13
248	Lecture	04.Work Done by Variable Forces 1	00:30:25
249	Lecture	05.Work Done by Variable Forces 2	00:30:40
250	Lecture	06.Work Power Theorem 1	00:20:53
251	Lecture	07.Work Power Theorem 2	00:28:58
252	Lecture	08.Work Power Theorem Applications 1	00:26:42
253	Lecture	09.Work Power Theorem Applications 2	00:23:21
254	Lecture	10.Work Power Theorem Applications 3	00:13:11
255	Lecture	11.Conservative and Non-Conservative forces	00:25:18
256	Lecture	12.Understanding Potential Energy 1	00:28:20
257	Lecture	13.Potential Energy illustrations 2	00:24:16
258	Lecture	14.Potential Energy Illustrations 3	00:19:50
259	Lecture	15.Potential Energy Equilibrium	00:39:48
260	Lecture	16.Conservaton Of Mechanical Energy & Mechanical Power 1	00:26:07
261	Lecture	17.Conservaton Of Mechanical Energy & Mechanical Power 2	00:30:34
262	Lecture	18.Application of Law of Conservation of Mechanical Energy 1	00:24:01
263	Lecture	19.Application of Law of Conservation of Mechanical Energy 2	00:20:34
264	Lecture	20.Mechanical Power 1	00:25:54

265	Lecture	21.Mechanical Power 2	00:32:45
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