TARGET: INDIAN INSTITUTES OF TECHNOLOGY (IITs)

Resonance®
Educating for better tomorrow

Academic Session: 2017-18

COURSE PLANNER

For Students of

CLASS-XI | VIPUL (JB03)

Target: JEE (Main+Advanced) 2019

Medium: English | Hindi

COURSE CONCEPT

A Course which offers ample time of 2 years to become an expert in the curriculum of JEE (Main+Advanced). The course progresses with basic fundamental study; covering upon the syllabus of boards alongwith the preparation for JEE (Main+Advanced). The course helps in development of concepts, rigorous practice for board examinations as well as competitive examinations, enhancement of analytical thinking and increasing the confidence level of IIT aspirants.

Course Commencement: 12.06.2017 (Batch will get merged with JB01 on 27th Aug '17) | **Course End: 14.02.2018**

RESONANCE TEACHING METHODOLOGY

Preparation for JEE (Main+Advanced)	Preparation for Board Examination
Classroom Teaching	Classroom Teaching & NCERT Book Discussion
Daily Practice Problems (DPPs)	Resonance Board Worksheets (RBWs)
Study Material (Sheets/Modules)	Study Material (Sheets/Modules)
APT - Advanced Pattern Part Test	Board (BPTs) Pattern Tests
ACT - Advanced Pattern Cumulative Test	Doubt Classes
MCT - Main Pattern Cumulative Test	Support for Fourth Subject (English)*
Doubt Classes	Support for Fifth Subject*
	Support for Practical (Physics & Chemistry)

*The support for Fourth subject (English), Fifth subject & Practical is provided by the institute to students on Optional & Nominal Chargeable basis.

TOTAL ACADEMIC HOURS

- **Course Duration:** 36 Weeks
- **Total Number of Lectures: 426** (P: 139 | C: 148 | M: 139)
- **Duration of one lecture:** 1.5 hrs = 90 minutes
- **Total Duration of Classroom Teaching:** 639 hrs
- **Total Duration of Testing Hours (ACTs/APTs/MCTs/BPTs/MT/AIOT):** 60 hrs
- **Total Academic Hours in VIPUL Course: 699** hrs

TEACHING/ LEARNING TOOLS

- **Daily Practice Problems (DPPs):** A handout having problems for home assignment, practice and classroom discussion covering current and previous topics. A DPP for JEE (Advanced) has 7-10 problems and DPP for JEE (Main) contains upto 20 problems.
- **Board Worksheet:** Questions on board pattern with blank spaces (to write their answers) are provided to students in the form of worksheets. Students after completing the worksheet; have to submit it for evaluation. It ensures written practice of students for board examinations.
- **Study Material (Sheets/Modules):** Topic wise study material having key concepts, problems for practice in various Exercise Levels and questions asked in previous years (Board/JEE (Main)/JEE (Advanced)).
- **Periodic Tests:** Periodic Tests are conducted having part syllabus (Part Tests - PTs) with many problems of seen nature and Tests comprising of the syllabus taught till date (Cumulative Tests - CTs) with unseen problems. Both PTs and CTs are conducted on the pattern of JEE (Main and Advanced) in offline and online mode. Board Practice Tests (BPTs) are also conducted.

Disclaimer:

- The Institute reserves the right to increase/decrease the number of lectures alloted to any topic and also make changes in the sequence of the topics of each subject depending upon the course requirements.
- This Course Planner in all respects is applicable only at Kota (Rajasthan). At other Resonance Study Centres, Students/Parents may find some 'minor' variations to accommodate City specific features/factors.
- The Topic Start Date mentioned here might vary for batches starting on different dates of the particular course. However the coverage of the content in any topic shall remain the same, it is done by altering the frequency of proposed/planned lectures in a particular week.
- The information given in this Course Planner is proposed for Academic Session 2017-18. The institute reserves the right to make changes in it in the interest of students.

Holidays/ Vacations (Total: 12-Days): 1. Independence Day: 15th August, 2017 : One Day **2.** Deepawali Holidays: From 16th October, 2017 (Monday) to 25th October, 2017 (Wednesday): 10 Days **3.** Republic Day: 26th January, 2018: One Day (Applicable only at Kota SC and at other SC's Deepawali vacation will be informed to students as per respective SC holiday calender)

SUBJECT WISE SYLLABUS PLAN

- Topic Name
- Topic Sequence
- Topic Commencement
- No. of Lectures allotted to each Topic

PHYSICS [P]

S. No.	Topic Name/Sequence	No of Lectures	Starting Date
1	Mathematical Tools	11	12-Jun-17
2	Rectilinear Motion	5	28-Jun-17
3	Projectile Motion	5	05-Jul-17
4	Relative Motion	6	13-Jul-17
5	NLM	13	21-Jul-17
6	Friction	6	16-Aug-17
7	Unit & Dimension	2	23-Aug-17
8	Work, Power & Energy (WPE)	9	28-Aug-17
9	Circular Motion	6	12-Sep-17
10	Centre of mass	11	21-Sep-17
11	Measurement & Error	2	11-Oct-17
12	Rigid Body Dynamics	14	25-Oct-17
13	Simple Harmonic Motion (SHM)	7	21-Nov-17
14	Fluid Mechanics	4	04-Dec-17
15	String Wave	7	11-Dec-17
16	Sound Waves	9	21-Dec-17
17	Kinetic Theory of Gases & Thermodynamics	8	08-Jan-18
18	Calorimetry & Thermal Expansion	3	22-Jan-18
19	Surface Tension	4	25-Jan-18
20	Elasticity & Viscocity	7	02-Feb-18
Total No. of Lectures		139	

CHEMISTRY [C]

S. No.	Topic Name/Sequence	No of Lectures	Starting Date
1	Introduction to Chemistry	4	12-Jun-17
2	Atomic Structure	13	26-Jun-17
3	Gaseous state 1	7	02-Aug-17
4	Mole Concept	13	28-Aug-17
5	Chemical Equilibrium	9	26-Oct-17
6	Gaseous state 2	4	22-Nov-17
7	Thermodynamics	12	05-Dec-17
8	Ionic Equilibrium (Elementary)	6	09-Jan-18
9	Ionic Equilibrium (Advanced)	4	30-Jan-18
10	IUPAC Nomenclature & Structural Isomerism	12	12-Jun-17
11	All basic concepts of Org. Chem (ABC)	4	15-Jul-17
12	Structural identification	3	28-Jul-17
13	Periodic Table	6	05-Aug-17
14	Basic Inorganic Nomenclature	2	21-Aug-17
15	Chemical Bonding	21	28-Aug-17
16	ABC-II	3	26-Oct-17
17	GOC-I	9	06-Nov-17
18	ABC-III	3	18-Dec-17
19	ABC-IV	3	01-Jan-18
20	s-Block Elements	5	11-Jan-18
21	p-Block elements	5	29-Jan-18
Total No. of Lectures		148	

MATHEMATICS [M]

S. No.	Topic Name/Sequence	No of Lectures	Starting Date
1	Sets & Relation	5	12-Jun-17
2	Fundamentals of Mathematics-I	12	20-Jun-17
3	Quadratic Equation	10	06-Jul-17
4	Sequence & Series	9	21-Jul-17
5	Fundamentals of Mathematics-II	12	07-Aug-17
6	Trigonometry	14	28-Aug-17
7	Solution of Triangle	5	21-Sep-17
8	Binomial Theorem	7	29-Sep-17
9	Principle of Mathematical Induction (Only DPP)	2	11-Oct-17
10	Statistics	4	26-Oct-17
11	Straight Line	14	01-Nov-17
12	Circle	11	28-Nov-17
13	Permutation & Combination	12	18-Dec-17
14	Mathematical Reasoning	3	08-Jan-18
15	Conic Section	19	11-Jan-18
Total No. of Lectures		139	

WEEKLY LECTURE PLANNER (Per Subject)

Week No.	Week Duration		No. of Lecture				Total No. of Lectures
	From	To	P	C		M	
				P/I	O		
W-1	12/06	17/06	04	01	03	04	12
W-2	19/06	24/06	05	03	02	05	15
W-3	26/06	01/07	05	02	03	05	15
W-4	03/07	08/07	04	02	02	04	12
W-5	10/07	15/07	05	03	03	05	16
W-6	17/07	22/07	05	02	02	05	14
W-7	24/07	29/07	04	03	03	04	14
W-8	31/07	05/08	04	02	02	04	12
W-9	07/08	12/08	04	02	03	04	13
W-10	14/08	19/08	04	02	02	04	12
W-11	21/08	26/08	04	02	02	04	12
W-12	28/08	02/09	04	01	03	04	12

Week No.	Week Duration		No. of Lecture				Total No. of Lectures
	From	To	P	C		M	
				P/I	O		
W-13	04/09	09/09	04	02	03	04	13
W-14	11/09	16/09	04	02	03	04	13
W-15	18/09	23/09	04	02	03	04	13
W-16	25/09	30/09	04	02	03	04	13
W-17	02/10	07/10	04	02	03	04	13
W-18	09/10	14/10	04	02	03	04	13
W-19	16/10	21/10	Diwali Vacations				
W-20	23/10	28/10	02	01	01	02	06
W-21	30/10	04/11	04	02	02	04	12
W-22	06/11	11/11	03	02	01	03	09
W-23	13/11	18/11	04	02	02	04	12
W-24	20/11	25/11	04	03	01	04	12

Week No.	Week Duration		No. of Lecture				Total No. of Lectures
	From	To	P	C		M	
				P/I	O		
W-25	27/11	02/12	04	02	02	04	12
W-26	04/12	09/12	04	03	01	04	12
W-27	11/12	16/12	04	02	02	04	12
W-28	18/12	23/12	04	03	01	04	12
W-29	25/12	30/12	04	02	02	04	12
W-30	01/01	06/01	04	02	02	04	12
W-31	08/01	13/01	04	02	02	04	12
W-32	15/01	20/01	04	02	02	04	12
W-33	22/01	27/01	04	02	02	04	12
W-34	29/01	03/02	04	02	02	04	12
W-35	05/02	10/02	04	02	02	04	12
W-36	12/02	17/02	02	01	01	02	06

PERIODIC TEST SCHEDULE & RESULT COMMUNICATION

S. No.	Periodic Test Type and No.	Test Pattern	Periodic Test Date	First Display (Notice Board) & Communication to parent with Centre Rank	Display & Communication of Final Result with All Resonance Rank (ARR)	Uploading of Result on Resonance Website	Periodic Test Syllabus				Testing Hours
							Physics	Chemistry		Mathematics	
								Physical/ Inorganic	Organic		
1	MCT-1	JEE (Main)	09-07-17 (Sunday)	13-07-17 (Thursday)	18-07-17 (Tuesday)	20-07-17 (Thursday)	Mathematical tools, Rectilinear Motion	Introduction to Chemistry & Atomic Structure (upto Electronic wave radiation, Quantum theory of Light)	IUPAC-Nomenclature upto chain terminating Functional groups (Aldehyde & Carboxylic acids, (Amides, Oyl halide & Nitriles)	Sets, Relation & Function, Fundamentals of Mathematics-I	3
2	ACT-1	JEE (Advanced)	13-08-17 (Sunday)	17-08-17 (Thursday)	22-08-17 (Tuesday)	24-08-17 (Thursday)	Mathematical tools, Rectilinear, Projectile, Relative, NLM	Introduction to Chemistry & Atomic Structure	IUPAC Nomenclature and structural isomerism complete, ABC-I, Structural Identification	Fundamentals of Mathematics-I, Quadratic Equation, Sequence Series, FOM-II, (Modulus function : Definition, Equations.	6
3	APT-2	JEE (Advanced)	03-09-17 (Sunday)	07-09-17 (Thursday)	12-09-17 (Tuesday)	14-09-17 (Thursday)	Rectilinear, Projectile , Relative, NLM, Friction, WPE (Section A, B)	Introduction to Chemistry, Atomic Structure & Gaseous State-1	Structural identification, Periodic Table & BIN	Fundamentals of Mathematics-I , Quadratic Equation, Sequence Series, FOM-II	6
4	MCT-2+ BPT-1	JEE (Main)+ Board	24-09-17 (Sunday)	28-09-17 (Thursday)	03-10-17 (Tuesday)	05-10-17 (Thursday)	Rectilinear motion, Projectile, Relative, NLM, Friction, Unit and dimension, WPE	Introduction to Chemistry, Atomic Structure, Gaseous state-1, Mole Concept (upto POAC)	Structural Identification, Periodic table, BIN & Chemical Bonding (upto Stability of resonating structures, Finding bond order in oxoanions and their acids)	Set Relations Function, Fundamentals of Mathematics-I , Quadratic Equation, Sequence & Series, FOM-II, Trigonometry	6
5	ACT-2	JEE (Advanced)	12-11-17 (Sunday)	16-11-17 (Thursday)	21-11-17 (Tuesday)	23-11-17 (Thursday)	Rectilinear, Projectile, Relative, NLM, Friction, WPE, Circular motion, COM, RBD (Section A to G)	Introduction to Chemistry, Atomic Structure, Gaseous state-1, Mole Concept, Chemical Equilibrium (upto Reaction Quotient & Characteristics of equilibrium constant).	Periodic Table, BIN, Chemical Bonding and ABC-II	FOM-I & II , Quadratic Equ., Sequence Series, Trigonometry, SOT, Binomial Theorem, St.Line, (Rectangular Cartesian - coordinate system, Distance formula, Section formulas, Special points of Area of, Slope formula, Condition of collinearity of 3 points, Equation of straight line in various forms, General form of Straight Line)	6
6	APT-3	JEE (Advanced)	03-12-17 (Sunday)	07-12-17 (Thursday)	12-12-17 (Tuesday)	14-12-17 (Thursday)	NLM, Friction, WPE, Circular motion, COM, RBD, SHM	Introduction to Chemistry, Atomic Structure, Gaseous State-1 , Mole Concept, Chemical Equilibrium	Chemical Bonding complete, ABC part-II and GOC-I (upto Resonance & Mesomeric Effect).	Trigonometry, SOT, Binomial Theorem, St. Line	6
7	MCT-3+ BPT-2	JEE (Main)+ Board	07-01-18 (Sunday)	11-01-18 (Thursday)	16-01-18 (Tuesday)	18-01-18 (Thursday)	Rectilinear motion, Projectile motion, Relative, motion, NLM, Friction, WPE, Circular, COM, RBD, SHM, String wave	Introduction to Chemistry, Atomic Structure, Gaseous state-1 , Mole Concept, Chemical Equilibrium, Gaseous State-2 & Thermodynamics (upto Second Law and Entropy Calculation(Handout))	ABC part-II and GOC-I, ABC-III.	Set Relations Function, FOM-I & II, Quad. Equ., Sequence Series, Trigonometry, SOT, Binomial Theorem, PMI, Statistics, St. Line, Circle, P & C	6
8	APT-4	JEE (Advanced)	04-02-18 (Sunday)	08-02-18 (Thursday)	13-02-18 (Tuesday)	15-02-18 (Thursday)	NLM, Friction, WPE, Circular motion, COM, RBD, SHM, String wave, sound wave, KTG and thermodynamics	Introduction to Chemistry, Atomic Structure, Gaseous state-1, Mole Concept, Chemical Equilibrium, Gaseous State-2, Thermodynamics & Ionic Equilibrium (Elementary) (upto Properties of water.)	Chemical Bonding, GOC-I & ABC-III & IV, s-block elements	Circle, P & C, Conic Section (Parabola and Ellipse)	6
9	MT	JEE (Main)	17-02-18 (Saturday)	22-02-18 (Thursday)	27-02-18 (Tuesday)	01-03-18 (Thursday)	Full Syllabus Class-XI	Full Syllabus Class-XI	Full Syllabus Class-XI	Full Syllabus Class-XI	3
10	MT	JEE (Advanced)	18-02-18 (Sunday)	22-02-18 (Thursday)	27-02-18 (Tuesday)	01-03-18 (Thursday)	Full Syllabus Class-XI	Full Syllabus Class-XI	Full Syllabus Class-XI	Full Syllabus Class-XI	6
11	AIOT	JEE (Advanced)	04-03-18 (Sunday)	08-03-18 (Thursday)	13-03-18 (Tuesday)	15-03-18 (Thursday)	Full Syllabus Class-XI	Full Syllabus Class-XI	Full Syllabus Class-XI	Full Syllabus Class-XI	6
										Total Testing Hours	**60**

Date of Reshuffling of Batches: 27.08.2017, 26.10.2017

Note: 1. Students are advised to refer their notice board for test timings
2. Their will be no classes on the preceding saturday before every PTs/ CTs (except BPTs).
3. Student can submit their request for re-evaluation in two working days after first display of result.

RESONANCE BOARD WORKSHEET (RBW) SCHEDULE

PHYSICS		
Week No.	RBW Dist. Date	RBW No.
W-5	10-07-2017	1
W-13	04-09-2017	2
W-21	30-10-2017	3
W-25	27-11-2017	4
W-28	18-12-2017	5
W-33	22-01-2018	6
TOTAL RBWs		6

CHEMISTRY		
Week No.	RBW Dist. Date	RBW No.
W-8	31-07-2017 (P)	1
W-20	26-10-2017 (P)	2
W-26	04-12-2017 (P)	3
W-31	08-01-2018 (P)	4
W-05	10-07-2017 (O/I)	1
W-12	28-08-2017 (O/I)	2
W-21	30-10-2017 (O/I)	3
W-27	11-12-2017 (O/I)	4
TOTAL RBWs		8

MATHEMATICS		
Week No.	RBW Dist. Date	RBW No.
W-4	03-07-2017	1
W-7	24-07-2017	2
W-10	14-08-2017	3
W-15	18-07-2017	4
W-18	09-10-2017	5
W-24	20-11-2017	6
W-29	25-12-2017	7
W-33	22-01-2018	8
TOTAL RBWs		8

Discussion Schedule of Daily Practice Problems (DPPs):

S. No.	Week No.	DPP No.				No. of DPPs
		P	C		M	
			P/I	O		
1	Week-1	A1	0	A1	A1	3
2	Week-2	2,3	A1,2	2	2,3	7
3	Week-3	4,5,6	3	3,4	4,5,6	9
4	Week-4	7,8,9	4	5	7,8,9	8
5	Week-5	10,11	5	6	10,11	6
6	Week-6	12,13,14	6,7	7	12,13,14	9
7	Week-7	15,16,17	8	8	15,16,17	8
8	Week-8	18,19,20	9	9	18,19	7
9	Week-9	21,22	10	10	20,21	6
10	Week-10	23,24	11	11,12	22,23	7
11	Week-11	25,26,27	12	13	24,25,26	8
12	Week-12	28,29	13	14	27,28	6
13	Week-13	30,31	14	15	29,30	6

S. No.	Week No.	DPP No.				No. of DPPs
		P	C		M	
			P/I	O		
14	Week-14	32,33	15	16	31,32	6
15	Week-15	34,35	16	17	33,34	6
16	Week-16	36,37	17	18	35,36	6
17	Week-17	38,39	18	19	37,38	6
18	Week-18	40	19	20	39,40	5
19	Week-19	Diwali Vacations				
20	Week-20	B1	B1	0	B1	3
21	Week-21	2,3,4	2	B1	2,3,4	8
22	Week-22	5,6	3	2	5,6,7	7
23	Week-23	7,8	4	3	8,9	6
24	Week-24	9,10,11	5,6	4	10,11,12	9
25	Week-25	12,13,14	7	5	13,14,15	8
26	Week-26	15,16	8,9	6	16,17	7

S. No.	Week No.	DPP No.				No. of DPPs
		P	C		M	
			P/I	O		
27	Week-27	17,18	10	7	18,19	6
28	Week-28	19,20,21	11,12	8	20,21,22	9
29	Week-29	22,23,24	13	9	23,24,25	8
30	Week-30	25,26	14	10	26,27	6
31	Week-31	27,28	15	11	28,29	6
32	Week-32	29,30,31	16	12	30,31	7
33	Week-33	32,33	17	13	32,33	6
34	Week-34	34,35,36	18	14	34,35,36	8
35	Week-35	37,38	19	15	37,38	6
36	Week-36	0	0	0	0	0
Total Number of DPPs						229

P: Physics | C (P): Chemistry (Physical) | C (I/O): Chemistry (Inorganic/Organic) | M: Mathematics

Resonance Eduventures Ltd.

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