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COURSE PLANNER FOR STUDENTS

CLASS-XIII | AJAY (ER01)

Target: JEE (Main) 2019

Medium: English | Hindi

COURSE CONCEPT

A Course which offers ample time of 1 year to become an expert in the curriculum of JEE (Main). The course progresses with basic fundamental study (At Kota study centre) alongwith the preparation for JEE (Main). The course helps in development of concepts, enhancement of analytical thinking and increasing the confidence level of aspirant.

Course Commencement: 13.06.2018 | Course Ends: 03.03.2019

RESONANCE TEACHING METHODOLOGY

Preparation for JEE (Main)

Classroom Teaching MPT - Main Pattern Part Test

Daily Practice Problems (DPPs) MCT - Main Pattern Cumulative Test

Study Material (Sheets/Modules) Doubt Classes

TEACHING/ LEARNING TOOLS

- ♦ **Daily Practice Problems (DPPs):** A handout having problems for home assignment, practice and classroom discussion covering current and previous topics. Most of the DPPs contains upto 10 problems or more.
- ♦ **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) along with school exam material is provided.
- ♦ **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) in offline and online mode. Board Practice Tests (BPTs) are also conducted.

Holidays/ Vacations (Total: 12-Days): 1. Independence Day: 15th August, 2018 : One Day 2. Deepawali Holidays: From 5th November, 2018 (Monday) to 14th November, 2018 (Wednesday): 10 Days 3. Republic Day: 26th January, 2019: One Day (Applicable only at Kota SC and at other SCs Deepawali vacation will be informed to students as per respective SC holiday calendar)

TOTAL ACADEMIC HOURS

- ♦ **Course Duration: 38 Weeks**
- ♦ **Total Number of Lectures: 564** (P: 182 | C: 200 | M: 182)
- ♦ **Duration of one lecture: 1.5/1.75 hrs = 90/105 minutes**
- ♦ **Total Duration of Classroom Teaching: 923 hrs**
- ♦ **Total Duration of Testing Hours (MCTs/MPTs/MT/AIOT): 42 hrs**
- ♦ **Total Academic Hours in AJAY Course: 965 hrs**

Disclaimer:

- ♦ The Institute reserves the right to increase/decrease the number of lectures allotted 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 2018-19. The institute reserves the right to make changes in it in the interest of students.

SUBJECT WISE SYLLABUS PLAN

- ◆ Topic Name
- ◆ Topic Sequence

- ◆ Topic Commencement
- ◆ No. of Lectures allotted to each Topic

PHYSICS (PI)			
S. No.	Topic Name/Sequence	No of Lectures	Starting Date
1	Rectilinear motion	4	13.06.18
2	Projectile motion	3	19.06.18
3	Relative motion	4	22.06.18
4	Geometrical Optics	14	28.06.18
5	Newton's laws of motion	6	18.07.18
6	Friction	3	26.07.18
7	Work, Power, Energy	5	31.07.18
8	Electrostatics	14	07.08.18
9	Gravitation	3	27.08.18
10	Buffer	2	30.08.18
11	Current electricity	6	03.09.18
12	Capacitance	6	11.09.18
13	Circular motion	5	19.09.18
14	Centre of mass	7	26.09.18
15	Rigid body dynamics	14	05.10.18
16	Simple Harmonic Motion	7	25.10.18
17	String wave	6	15.11.18
18	Sound wave	7	22.11.18
19	EMF	8	03.12.18
20	EMI	7	13.12.18
21	Alternating current	3	24.12.18
22	Modern Physics-I	6	27.12.18
23	Nuclear Physics	4	04.01.19
24	Wave Optics	5	10.01.19
25	EM Wave (1)	1	17.01.19
26	Fluid Mechanics	6	18.01.19
27	Surface Tension	3	28.01.19
28	Elasticity and viscosity	1	31.01.19
29	KTG and thermodynamics	7	01.02.19
30	Calorimetry & Thermal expansion	3	11.02.19
31	Heat Transfer	3	14.02.19
32	Semiconductor	3	18.02.19
33	POC	2	21.02.19
34	Error & Measurement	3	25.02.19
35	Unit & Dimension	1	28.02.19
Total No. of Lectures		182	

CHEMISTRY (CI)			
S. No.	Topic Name/Sequence	No of Lectures	Starting Date
1	IUPAC Nomenclature	4	18.06.18
2	Structural isomerism	1	02.07.18
3	Structure Identification and POC-I	4	03.07.18
4	GOC-I	6	17.07.18
5	GOC-II	8	07.08.18
6	Stereoisomerism	9	04.09.18
7	ORM-I	6	08.10.18
8	ORM-II	7	29.10.18
9	Reduction, Oxidation & Hydrolysis	4	28.11.18
10	ORM-III	4	10.12.18
11	ORM-IV	3	19.12.18
12	Aromatic Compounds	5	26.12.18
13	Carbonyl compounds	4	14.01.19
14	Acid & derivatives	2	28.01.19
15	Biomolecules	3	29.01.19
16	Polymer	1	11.02.19
17	Physical Properties & Chem. in Everyday Life	3	12.02.19
18	Mole Concept	7	13.06.18
19	Quantum Mechanical Model of Atom (QMM)	2	26.06.18
20	Periodic Table	3	02.07.18
21	Real Gases	3	09.07.18
22	Chemical Bonding	13	16.07.18
23	Chemical Equilibrium	8	14.08.18
24	Surface Chemistry	3	03.09.18
25	Ionic Equilibrium	7	10.09.18
26	Coordination compound	9	25.09.18
27	Electrochemistry	8	16.10.18
28	s-Block	4	15.11.18
29	p-Block Elements (B&C Family)	4	21.11.18
30	Metallurgy	5	29.11.18
31	Chemical Kinetics	9	06.12.18
32	Solution & Colligative Properties	9	21.12.18
33	p-Block Elements	8	03.01.19
34	Solid State	8	14.01.19
35	Thermodynamics & Thermochemistry	9	30.01.19
36	Equivalent Concept	2	18.02.19
37	d & f-Block Element	4	20.02.19
Total No. of Lectures		200	

MATHEMATICS (MI)			
S. No.	Topic Name/Sequence	No of Lectures	Starting Date
1	Fundamentals of Mathematics	10	13.06.18
2	Quadratic Equation	8	27.06.18
3	Function & ITF	12	09.07.18
4	Limits, Continuity & Derivability	12	25.07.18
5	Application of Derivatives	14	10.08.18
6	Statistics	2	30.08.18
7	Matrices & Determinant	9	03.09.18
8	Straight Line	10	14.09.18
9	Circle	7	28.09.18
10	Conic Section	14	09.10.18
11	Mathematical Reasoning	3	29.10.18
12	Sets & Relation	2	01.11.18
13	Vector & 3-D	13	15.11.18
14	Indefinite Integration	6	03.12.18
15	Definite Integration & Its Application	12	11.12.18
16	Differential Equation	6	27.12.18
17	Binomial Theorem	6	04.01.18
18	Permutation & Combination	10	14.01.18
19	Probability	6	28.01.18
20	Complex Number	10	05.02.18
21	Sequence & Series	6	16.02.18
22	Solution of Triangle	4	25.02.18
Total No. of Lectures		182	

WEEKLY LECTURE PLANNER (Per Subject)

Week No.	Week Duration		No. of Lecture				Total No. of Lectures
	From	To	P	C	O	M	
W-1	13/6	16/6	3	3	0	3	9
W-2	18/6	23/6	5	3	2	5	15
W-3	25/6	30/6	5	3	2	5	15
W-4	2/7	7/7	5	3	2	5	15
W-5	9/7	14/7	5	3	2	5	15
W-6	16/7	21/7	5	3	2	5	15
W-7	23/7	28/7	5	3	2	5	15
W-8	30/7	4/8	5	3	2	5	15
W-9	6/8	11/8	5	3	2	5	15
W-10	13/8	18/8	5	3	2	5	15
W-11	20/8	25/8	5	3	2	5	15
W-12	27/8	1/9	5	3	2	5	15
W-13	3/9	8/9	5	3	2	5	15

Week No.	Week Duration		No. of Lecture				Total No. of Lectures	
	From	To	P	C	O	M		
W-14	10/9	15/9	5	3	2	5	15	
W-15	17/9	22/9	5	3	2	5	15	
W-16	24/9	29/9	5	3	2	5	15	
W-17	1/10	6/10	5	3	2	5	15	
W-18	8/10	13/10	5	3	2	5	15	
W-19	15/10	20/10	5	3	2	5	15	
W-20	22/10	27/10	5	3	2	5	15	
W-21	29/10	3/11	5	3	2	5	15	
W-22	5/11	10/11	Diwali Vacations					
W-23	12/11	17/11	3	2	1	3	9	
W-24	19/11	24/11	5	3	2	5	15	
W-25	26/11	1/12	5	5	3	5	18	
W-26	3/12	8/12	5	5	3	5	18	

Week No.	Week Duration		No. of Lecture				Total No. of Lectures
	From	To	P	C	O	M	
W-27	10/12	15/12	5	3	2	5	15
W-28	17/12	22/12	5	5	3	5	18
W-29	24/12	29/12	5	5	3	5	18
W-30	31/12	5/1	5	5	3	5	18
W-31	7/1	12/1	5	4	1	5	15
W-32	14/1	19/1	5	5	3	5	18
W-33	21/1	26/1	5	3	2	5	15
W-34	28/1	2/2	5	3	2	5	15
W-35	4/2	9/2	6	4	2	6	18
W-36	11/2	16/2	6	4	2	6	18
W-37	18/2	23/2	5	4	1	5	15
W-38	25/2	2/3	4	3	1	4	12

PERIODIC TEST SCHEDULE & RESULT COMMUNICATION

S. Periodic Test No. 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	Physics		Chemistry		Mathematics	Testing Hours
						Physics	Chemistry	Physical/ Inorganic	Organic		
1	MPT-1	08-07-18 (Sunday)	12-07-18 (Thursday)	17-07-18 (Tuesday)	19-07-18 (Thursday)	Rectilinear Motion, Projectile Motion, Relative Motion	Mole Concept, GMM	IUPAC Nomenclature	Fundamental of Mathematics.	3	
2	MCT-1	29-07-18 (Sunday)	02-08-18 (Thursday)	07-08-18 (Tuesday)	09-08-18 (Thursday)	MPT-1 + Geometrical optics & NLM (upto constrained motion)	Mole concept, GMM, Periodic Table, Real gas	IUPAC Nomenclature, Structural isomerism, Structure Identification & POC-I	FDM, Quadratic Equation, Function & ITF (upto even/odd)	3	
3	MPT-2	19-08-18 (Sunday)	23-08-18 (Thursday)	28-08-18 (Tuesday)	30-08-18 (Thursday)	Geometrical Optics, NLM, Friction, WPE, Electrostatics (Up to Electric Field)	Periodic Table, Real gas, Chemical Bonding (upto hybridisation)	Structure Identification, POC-I & GOC-I	Quadratic Equation + Function & ITF + Limits, Continuity.	3	
4	MCT-2	16-09-18 (Sunday)	20-09-18 (Thursday)	25-09-18 (Tuesday)	27-09-18 (Thursday)	MCT-1 + Friction, WPE, Circular Motion, Electrostatics, Gravitation, Current electricity	MCT-1 + Chemical Bonding, Chemical equilibrium	Structure Identification, POC-I, GOC-I & II	FDM, Quadratic Equation, Function & ITF + LCD + AOD	3	
5	MPT-3	07-10-18 (Sunday)	11-10-18 (Thursday)	16-10-18 (Tuesday)	18-10-18 (Thursday)	Electrostatics, Gravitation, Current electricity, capacitance, Circular Motion, Center of mass (up to impulse)	Chemical bonding, Chemical Equilibrium, Surface Chemistry, Ionic Equilibrium	GOC-II, Geometrical isomers & Optical Stereoisomers (upto relation among stereoisomers)	Limits, Continuity & Derivability + AOD + Statistics + Matrices & Determinant + Straight line (upto special points of triangle)	3	
6	MCT-3	28-10-18 (Sunday)	01-11-18 (Thursday)	06-11-18 (Tuesday)	08-11-18 (Thursday)	MCT-2 + Capacitance, Centre of Mass & Rigid Body Dynamics	Mole concept, GMM, Periodic table, Real Gas, Chemical Bonding, Chemical Equilibrium, Surface Chemistry, Ionic Equilibrium, Coordination compounds, Electrochemistry (upto Concentration cells)	Stereoisomerism, Organic reaction mechanisms-I (upto reaction of acidic hydrogen)	MCT2 + Statistics + Matrices & Determinant + Straight line + Circle	3	
7	MPT-4	25-11-18 (Sunday)	29-11-18 (Thursday)	04-12-18 (Tuesday)	06-12-18 (Thursday)	Centre of Mass, Rigid Body Dynamics, Simple Harmonic Motion	Coordination Compound, Electrochemistry	Organic reaction mechanisms-I & II (upto Halogenation, Nitration, Sulphonation of benzene)	Straight line + Circle + Conic Section (upto Parabola)	3	
8	MCT-4	16-12-18 (Sunday)	20-12-18 (Thursday)	25-12-18 (Tuesday)	27-12-18 (Thursday)	All Above + SHM, String Waves, Sound Waves, EMF	Mole concept, GMM, Periodic table, Real Gas, Chemical Bonding, Chemical Equilibrium, Surface Chemistry, Ionic Equilibrium, Coordination compounds, Electrochemistry, s-block, p-block (13 and 14)	Organic reaction mechanisms-I, II & Reduction Reaction	MCT3 + Conic section + Mathematical reasoning + Sets & relation + Vector & 3D (upto Direction cosines and direction ratios)	3	
9	MCT-5	13-01-19 (Sunday)	17-01-19 (Thursday)	22-01-19 (Tuesday)	24-01-19 (Thursday)	MCT-4 + EMI, Alternating current, Modern Physics-I	MCT-4 + s-block elements, p-Block Elements (BSC Family), Metallurgy, Chemical Kinetics & Solution & Colligative Properties	Reduction, Oxidation, Hydrolysis, ORM-III & IV	MCT-4 + Vector & 3D Indefinite Integration, Definite Integration & Its Application	3	
10	AJOT	27-01-19 (Sunday)	31-01-19 (Thursday)	05-02-19 (Tuesday)	07-02-19 (Thursday)	Full Syllabus	Full Syllabus	Full Syllabus	Full Syllabus	3	
11	MPT-5	03-02-19 (Sunday)	07-02-19 (Thursday)	12-02-19 (Tuesday)	14-02-19 (Thursday)	String Wave, Sound Wave, EMF, EMI, AC, MP-I, NP, Wave Optics, Fluid Mechanics	Metallurgy, Chemical kinetics, Solution and colligative properties, p-block (15&16)	Reduction oxidation, hydrolysis, ORM-III, IV & Aromatic compound	Conic Section + Mathematical Reasoning + Sets & relation + Vector & 3D + Indefinite Integration + Definite Integration & Its application → Differential equation → Binomial theorem	3	
12	MT	03-03-19 (Sunday)	07-03-19 (Thursday)	12-03-19 (Tuesday)	14-03-19 (Thursday)	Full Syllabus	Full Syllabus	Full Syllabus	Full Syllabus	3	
13	JPT-1 (Mains)	10-03-19 (Sunday)	14-03-19 (Thursday)	19-03-19 (Tuesday)	21-03-19 (Thursday)	Full Syllabus	Full Syllabus	Full Syllabus	Full Syllabus	3	
14	JPT-2 JPT-3 JPT-4	17-03-19 (Sunday)	21-03-19 (Thursday)	26-03-19 (Tuesday)	28-03-19 (Thursday)	Full Syllabus	Full Syllabus	Full Syllabus	Full Syllabus	3	
Take Home Downloadable (24-03-2018)										Total Testing Hours	42

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/ CIs (except BPTs).
3. Student can submit their request for re-evaluation in two working days after first display of result.

Discussion Schedule of Daily Practice Problems (DPPs):

S. No.	Week No.	DPP No.				No. of DPPs	S. No.	Week No.	DPP No.				No. of DPPs	S. No.	Week No.	DPP No.				No. of DPPs
		P	C		M				P	C		M				P	C		M	
			P/I	O						P/I	O						P/I	O		
1	W-1	0	A1	0	0	1	14	W-14	4,5,6	2	2	4,5,6	8	27	W-27	34,35,36	18	14	34,35,36	8
2	W-2	A1,2	2	A1	A1,2	6	15	W-15	7,8	3	3	7,8	6	28	W-28	37,38	19, 20	15	37,38	7
3	W-3	3,4	3	2	3,4	6	16	W-16	9,10,11	4, 5	4	9,10,11	9	29	W-29	39,40,41	21, 22	16	39,40,41	9
4	W-4	5,6	4	3	5,6	6	17	W-17	12,13,14	6	5	12,13,14	8	30	W-30	42,43,44	23, 24	17	42,43,44	9
5	W-5	7,8	5	4	7,8	6	18	W-18	15,16	7	6	15,16	6	31	W-31	45,46,47	25	0	45,46,47	7
6	W-6	9,10,11	6	5	9,10,11	8	19	W-19	17,18,19	8	7	17,18,19	8	32	W-32	48,49	26, 27	18	48,49	7
7	W-7	12,13,14	7	6	12,13,14	8	20	W-20	20,21,22	9, 10	8	20,21,22	9	33	W-33	50,51,52	28	19	50,51,52	8
8	W-8	15,16	8	7	15,16	6	21	W-21	23,24	11	9	23,24	6	34	W-34	53,54	29	20	53,54	6
9	W-9	17,18,19	9	8	17,18,19	8	22	W-22	Diwali Vacations				35	W-35	55,56,57	30	21	55,56,57	8	
10	W-10	20	10	9	20	4	23	W-23	25	12	0	25	3	36	W-36	58,59	31	22	58,59	6
11	W-11	21,22	11	10	21,22	6	24	W-24	26,27,28	13	10	26,27,28	8	37	W-37	60,61,62	32, 33	0	60,61,62	8
12	W-12	23,24,25	12, 13	11	23,24,25	9	25	W-25	29,30	14, 15	11	29,30	7	38	W-38	63	34	0	63	3
13	W-13	B1,2,3	B1	B1	B1,2,3	8	26	W-26	31,32,33	16, 17	12,13	31,32,33	10	Total Number of DPPs					314	

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

Resonance Eduventures Ltd.

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