

# TARGET: INDIAN INSTITUTES OF TECHNOLOGY (IITs)



Academic Session: 2022-23

## COURSE PLANNER

For Students of

**CLASS-X | WINNER & WISDOM**

Target: JEE (Main + Advanced) 2025

Medium: English

### COURSE CONCEPT

Synchronized study of X Board, XII Boards, International Olympiads and National Level Scholastic Exams like National Talent Search Exam (NTSE) and Kishore Vaigyanik Protsahan Yojana (KVPY) Resonance prepares you for JEE (Main + Advanced) in a unique way in which student understands the depth of each and every topic. This means that you are prepared to give your best and optimum performance even if the pattern of the exam is changed at the last minute. Our students do well not only in JEE advanced but also in JEE Main, KVPY, NTSE, X & XII Boards & Other Engineering Entrance Exams.

Course Commencement: 04.04.2022 | Course Ends: 18.02.2023

### RESONANCE TEACHING METHODOLOGY

#### Preparation for JEE (Main + Advanced)

Classroom Teaching  
Daily Practice Problems (DPPs)  
Study Material (Sheets/Modules)  
Doubt Classes

#### Preparation for Board Examination

Classroom Teaching & NCERT Book Discussion  
School Examination Preparatory Sheet (SEP)  
Study Material (Sheets/Modules)  
Board Pattern Tests (BPTs)  
Doubt Classes  
Support for Practical (PCB)

### TEACHING/ LEARNING TOOLS

- ♦ **School Examination Preparatory Sheets (SEP Sheets):** After every chapter, a homework assignment will be given from chapter which will aid in school examinations and also enhance writing skills of students. These assignments are countersigned by parents and faculties. Detailed remarks are given by faculties which helps students in identifying weak areas.
- ♦ **NTSE Pattern Full Syllabus Tests (FST):** These tests are conducted across the nation at Resonance Study Centres to help student gauge their performance at national level. Tests are based on the common minimum syllabus of all classroom programs. The best part is that it is an open test and non-resonites can also participate in these tests making it a talent benchmark test.
- ♦ **Chapter Modules:** On each chapter students will be given chapter practice problems which they have to attempt and submit before the beginning of the next chapter. These solutions will be checked by the faculty and will be returned to the students with remarks and suggestions, thus helping every student to have a very strong command over fundamental concept knowledge, very crucial for getting Top ranks.
- ♦ **Daily Practice Problems (DPP):** Other than concept modules every day DPPs are discussed in classrooms to challenge students in time bound manner and to boost revision of the students.

### TOTAL ACADEMIC HOURS

- ♦ **Course Duration:** 46 Weeks
- ♦ **Total Number of Lectures:** 571 (P: 80 | C: 79 | M: 124)
- ♦ **Duration of one lecture:** 50 minutes
- ♦ **Total Duration of Classroom Teaching:** 476 hrs
- ♦ **Total Duration of Testing Hours:** 137 hrs
- ♦ **Total Academic Hours in WINNER Course:** 612 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 2022-23. The institute reserves the right to make changes in it in the interest of students.

**Holidays/Vacations :** 1. **Resonance Foundation Day:** 11<sup>th</sup> April 2022 | 2. **Summer Break:** 30<sup>th</sup> May to 12<sup>th</sup> June 2022 | 3. **Raksha Bandhan:** 11<sup>th</sup> August, 2022 | 4. **Independence Day:** 15<sup>th</sup> August, 2022 | 5. **Anant Chaturdashi:** 09<sup>th</sup> September, 2022 | 6. **Dussehra:** 05<sup>th</sup> October, 2022 | 7. **Deepawali Holidays:** 21<sup>st</sup> to 30<sup>th</sup> October, 2022 | 8. **Winter Break:** 25<sup>th</sup> Dec. 2022 to 01<sup>st</sup> January, 2023 | 9. **Makar Sankranti:** 14<sup>th</sup> January 2023 | 10. **Republic Day:** 26<sup>th</sup> January, 2023: (Applicable only at Kota SC and at other SC's Deepawali vacation will be informed to students as per respective SC holiday calendar)

PTSM Schedule: 14<sup>th</sup> May, 2022 | 20<sup>th</sup> August, 2022 | 26<sup>th</sup> September, 2022 | 10<sup>th</sup> December, 2022 | 11<sup>th</sup> February, 2023

## SUBJECT WISE SYLLABUS PLAN

◆ Topic Name  
◆ Topic Sequence

◆ No. of Lectures allotted to each Topic

PHYSICS [P]			CHEMISTRY [C]			MATHEMATICS [M]		
S. No.	Topic Name/Sequence	No of Lectures	S. No.	Topic Name/Sequence	No of Lectures	S. No.	Topic Name/Sequence	No of Lectures
1	Light	19	1	Chemical Reaction and Equation	5	1	Basics of Mathematics	18
2	Electricity	22	2	Periodic Table -I	7	2	Equations	14
3	Magnetic Effect of current and EMI	11	3	Acids Bases & Salts	10	3	Similar Triangle & Circle	15
4	Sources of Energy	7	4	Metal & Non Metals	11	4	Basic of Trigonometry	11
5	Mathematical Tools	12	5	Carbon & its compounds	22	5	Mensuration of Combined Figures	8
6	Rectilinear Motion	9	6	Mole Concept-II	17	6	Coordinate Geometry	7
			7	Periodic table - II	7	7	Basic of Probability	5
						8	Sequence & Series -I	5
						9	Statistics (Grouped & Ungrouped )	7
						10	Construction	6
						11	Fundamental of Mathematics-I	28
<b>Total No. of Lectures</b>		<b>80</b>	<b>Total No. of Lectures</b>		<b>79</b>	<b>Total No. of Lectures</b>		<b>124</b>

**PS:** A Lecture of 50 minutes usually comprise of 15 minutes of Sheet discussion & 35 minutes of Theory Class.

## School Examination Preparatory (SEP) Sheet: Schedule

S.No.	Test Syllabus					
	Physics	Chemistry	Mathematics	Biology	English	Social Science
1			Real Number	Nutrition	Tense	Power Sharing
2		Chemical Reactions and Equations	Polynomial	Respiration	Conditionals + Two Gentlemen of Verona	Resources and Development
3	Electricity		Linear equation in two variables	Transportation	The frog and the nightingale + SVA	The Age of Industrialisation + Federalism + The Making of a Global World
4		Periodic Classification of elements	Quadratic equations	Excretion	Mrs. Packitide's Tiger + Reported speech + Modals	Sectors of Indian Economy + Forest & Wild Life Resources
5	Magnetism	Acids, Bases and Salts	Similar triangle	Control and Co-ordination	Determiners + Not Marble nor the Gilded Monuments	Work, Life and leisure: Cities in The Contemporary World + Democracy & Diversity
6			Circles		The dear departed + Novel	Water Resources + Print Culture and the Modern World + Agriculture
7		Metals & Nonmetals	Trigonometry	How Do Organisms Reproduce	Letter /story/article writing + Dialogue completion + editing + omission + newspaper headlines + Prepositions	Gender, Religion and Caste + Novel Society & History + Minerals & Energy Resources
8	Sources of Energy		Heights and distances		Active Passive Voice + Connectors	The Rise of Nationalism in Europe + Money & Credit + Globalisation and the Indian Economy
9			Area related to circles		Ozymandias + Rime of the Ancient Mariner	Popular Struggles and Movements + Nationalism in India
10		Carbon and Its compounds	Surface area and volume		Shady plot + Patol babu	Consumer Rights + Lifelines of the National Economy
11			Statistics			Manufacturing Industries
12			Probability	Heredity and Evolution		
13	Light		Coordinate geometry	Our Environment	Virtually True	Political Parties, Outcomes of Democracy
14		Nuclear Chemistry of Coal & Petroleum	Arithmetic Progression	Management of Natural Resources	Julius Caesar + Dialogue completion + Editing + Omission + Newspaper Headlines	
15			Constructions		Novel	Challenges to Democracy

## Resonance Eduventures Ltd.

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# Academic Planning & Test Grid

JEE Main Pattern Part Test (PT), NTSE Pattern Full Syllabus test (FST), School Exam Preparatory Pattern test (SEP), Major Test (MT) Syllabus									
Periodic Test (PT) Type & No.	Test Type	Physics	Chemistry	Mathematics	Biology	Social Science	English	Mental Ability	Hindi
PT-1	Objective	Light (till image formed by plane mirror)	Chemical reaction and equations (up to concept of redox reaction)	Basics of Mathematics (up to surds and rationalization)	Class X : Nutrition (upto Factors Affecting Photo Synthesis ) Class IX - Cell, Tissue	Power sharing, Resources and development, Rise of Nationalism in Europe, IX ( Geography all)	NA	Alphabet test, Coding-Decoding	NA
SEP-1	Subjective (offline) /Objective (Online)	NA	NA	Class X : Real Number	NA	Power Sharing, Resources and Development, The rise of Nationalism in Europe, Development, Federalism, Sectors of Indian Economy,	NA	NA	NA
SEP-2	Subjective (offline) /Objective (Online)	Light (Complete)	chemical reaction and equation	NA	Class X : Nutrition, Respiration	NA	Tense, Reading comprehension, Subject verb agreement, Nelson Mandela, A triumph of surgery, Two stories about flyinh (part I ), Reported Speech, paragraph writing	NA	NA
CF-1	Objective	NA	NA	NA	NA	NA	A Letter to God, Dust of Snow, Fire and Ice, His First Flight	NA	पर्यवेक, कविर की सखी, शीरा के पत्र, खड़े भाई सखर, आरसी का एक पन्ना, ललित कपीलें कवा
PT-2	Objective	Class X: Light (Complete)	Class X:- Chemical reaction and equations (from redox reactions), Periodic classification of elements (Complete), Acids Bases and Salts (till neutralisation reaction)	Basics of Mathematics, Equations	Class X : Respiration, Transportation, excretion (upto Functioning of Nephron) Class IX : Diversity, Improvement in food Resources	Power sharing, Resource and development, The rise of Nationalism in Europe, Development, Federalism, Sectors of Indian Economy, Nationalism in India, The Making of a Global World, Gender Religion and Caste	NA	Alphabet test, coding-decoding, Number Series, alphabet series, Letter repeating series, Missing term in figure, Mathematical operations, Direction sense test, Sitting arrangement, Ranking & ordering, Blood relation, puzzle test	NA
MSEP1	Subjective (offline) /Objective (Online)	NA	NA	NA	NA	NA	NA	NA	NA
SEP-3	Subjective (offline) /Objective (Online)	NA	NA	Class X: Linear equation in two variables, Similar Triangles, Circles	NA	Power Sharing, Resources and Development, The rise of Nationalism in Europe, Development, Federalism, Sectors of Indian Economy, Forest & Wild Life Resources, Nationalism in India, Democracy and diversity, The Making Of a Global World, Gender, Religion and Caste, Agriculture, The Age of Industrialisation, Mineral and Energy Resources, Money and Credit,	NA	NA	NA
SEP-4	Subjective (offline) /Objective (Online)	Electricity (till combination of resistance)	acids bases and salts and metals and non metals	NA	Transportation, Excretion Control & Coordination ( upto endocrine system)	NA	Reading Comprehension, Determiners Writing section (Letter writing), Two stories about flying (Black aeroplane), P.3.A Tiger in the Zoo The thief's Story, P4 : How to tell wild animals, Molds	NA	NA
PT-3	Objective	Class X: Light, Electricity (Complete)	Class IX : Matter 2, + Structure of atom (after atomic models) Class X:- chemical reaction, periodic table, Acids, Bases and salts, Metals and nonmetals	Basics of Mathematics, Equations, Similar Triangles and Circles, Basics of Trigonometry, Coordinate geometry, Mensuration of Combined Figures	Class X : Excretion, Control & Coordination, How do organisms Reproduce (till male reproductive system) Class IX: why do we fall ill, Natural Resources	Power Sharing, Resources and Development, The rise of Nationalism in Europe, Development, Federalism, Sectors of Indian Economy, Forest & Wild Life Resources, Nationalism in India, Democracy and diversity, The Making Of a Global World, Gender, Religion and Caste, Agriculture The Age of Industrialisation, Money and Credit, Globalisation and the Indian Economy, Print culture and the modern world, Manufacturing Industries, + IX (Pol, Science-III)	NA	Alphabet test, coding - decoding, Number series, alphabet series, Letter repeating series, Missing term in figure, Mathematical operations, Direction sense test, Sitting arrangement, Ranking & ordering, Blood relation, puzzle test, Venn diagram, Syllogism, Analogy, Classification, Pyramid test, calendar test, Dice test, Cube test, clock test, Figure partition & counting, Mirror image & Water image, Paper cutting & folding, Completion & formation of figure, Figure embedded	NA

# Academic Planning & Test Grid

Periodic Test (PT) Type & No.	PT Date	Test Type	JEE Main Pattern Part Test (PT), NISE Pattern Full Syllabus Test (FST), School Exam Preparatory Pattern Test (SEP), Major Test (MT) Syllabus							
			Physics	Chemistry	Mathematics	Biology	Social Science	English	Mental Ability	Hindi
PT-4	09.10.22	Objective	Class-X: Light, Electricity, Magnetic Effect of Electric Current & EMI	Chemical reaction and equation, Acid base and salts, Metals and nonmetals and periodic table	Full syllabus	Class X : Nutrition, Respiration, Transportation, Excretion, Control & Coordination, How do organisms Reproduce, Heredity and Evolution	Development, Sectors of Indian Economy, The Making of a Global World , Gender , Religion and Caste, Agriculture, The Age of Industrialisation, Minerals and energy resources, Money and credit, Globalisation in Indian economy, Print culture, Manufacturing industries, Political parties	NA	Full syllabus	NA
FST1	16.10.22	Objective	Full Syllabus							
FST2	06.11.22	Objective	Full Syllabus							
FST3	13.11.22	Objective	Full Syllabus							
CT2	25.11.22	Objective	NA	NA	NA	NA	NA	The Midnight visitor, A Question of trust, From the Diary of Anne Frank	NA	ब्रह्म-विचार, मुद्रारत्न, अमलित मद्योग, चरम्य, अनुवाद-लेखन, पत्र-लेखन, अथ कर्ण सूत्रों के सुत्र में सुकी होने वाले विहारों के दोष, मनुष्यता, समाज, पाठकर्म में सुकी विचार
SEP-5	04.12.22	Subjective (offline) /Objective (Online)	NA	NA	Class X-Quadratic equations, Circles, Heights and distances	NA	Development, Sectors of Indian Economy, The making of Global World, Gender, Religion and Caste, Agriculture, The Ages of Industrialisation, Minerals and Energy Resources, Money and Credit, Globalisation and the Indian Economy, Print Culture, Manufacturing Industries, Political Parties, Outcomes of Democracy, Challenges to Democracy	NA	NA	NA
MSEP-2	09.12.22	Subjective (offline) /Objective (Online)	NA	NA	NA	NA	NA	NA	NA	NA
SEP-6	18.12.22	Subjective (offline) /Objective (Online)	Electricity, Magnetic effect of electric Current & EMI , Source of Energy (Term-2 syllabus)	Periodic Classification of Elements, Carbon and its Compounds	NA	Control & Coordination, How do organisms Reproduce	NA	Letter writing, Story writing, Reading comprehension, Propositions, Connectors , Clauses, P.10 : The tale of Custard the dragon, P.11: For Anne Gregory, The Hack Driver, Mijbil—the otter, Bholi, Madam rides the bus	NA	NA

**Term - 2**

Subjective

**Term - 2 : 09<sup>th</sup> January to 18<sup>th</sup> February 2023**

Date of Reshuffling of Batches: **13.06.2022 | 26.09.2022**