

Excelling in IIT-JEE Since 2001...



**Resonance**<sup>®</sup>  
Educating for better tomorrow

Growing in Boards Since 2013...

**PARA-SCHOOLING PROGRAM DIVISION (PSPD)**  
Centre of Excellence for School/Board Examinations

## **COURSE PLANNER**

**Academic Session: 2019-20**

### **CLASS-XII | BRILLIANT (BEL)**

**Target: 12<sup>th</sup> Board Exams (CBSE/RBSE)**

**(Medium: English)**

**Course Commencement: 15.03.2019 | Course Ends: 08.12.2019**

#### **COURSE CONCEPT**

This course is designed for students who wish to excel at 12<sup>th</sup> board exams in science stream. This Year-long Classroom Contact Program ensures conceptual understanding of the subject with sufficient emphasis on definitions, labelled diagrammatic presentations, writing skill and speed, detailed steps of answers etc. which play a key role in scoring marks at Boards.

Exhaustive study material and well conceived Periodic Test & Cumulative Tests simulated as per Board Pattern are there to enhance the confidence level and performance of candidates.

#### **RESONANCE TEACHING METHODOLOGY**

##### **Preparation for 12<sup>th</sup> Board Exams (CBSE/RBSE)**

Classroom Teaching

Study Material (Sheets/Modules)

PT - Periodic Test

CT - Cumulative Test

BPTS – Board Pattern Test Series (Part Test, HST\*, FST\*)

Classroom Teaching for fourth subject (English)

Support for fifth subject (Hindi, Phy.E.)

#### **TEACHING/ LEARNING TOOLS**

- ♦ **Periodic Test (PT):** Periodic Tests are conducted after every two weeks. Syllabus of Periodic Test is whatever is taught in last 15 days.
- ♦ **Cumulative Test:** After every 3 PT, a CT (Cumulative Test) is conducted syllabus for CT is the syllabus of last 3 PTs.
- ♦ **Board Pattern Test Series:** Board Pattern Test Series comprising of 5 Part tests & 2 Half syllabus & 2 full syllabus test of each subject to be conducted after completion of course.
- ♦ **Study Material:** Modules comprising of Topic wise key concepts, theoretical explanations, solved and unsolved exercises with Board exams question paper of last years are provided.

#### **TOTAL ACADEMIC HOURS**

- ♦ **Course Duration:** 10 Months
- ♦ **Total Number of Lectures:** 528
- ♦ **Duration of one lecture:** 75 minutes
- ♦ **Total Duration of Classroom Teaching:** 660 hrs
- ♦ **Total Duration of Doubt Clearance Class:** 88 hrs
- ♦ **Total Duration of Testing Hours (PT):** 57 hrs
- ♦ **Total Duration of Testing Hours (BPTs):** 78 hrs
- ♦ **Total Classroom Hours in BEL Course:** 883 hrs

#### **Disclaimer:**

- ♦ The Institute reserves all the right to increase/decrease the number of lectures allotted to any topic and also make changes in the sequence to the topics of each subject depending upon the course requirements.
- ♦ The information given in the course planner is proposed for Academic Session 2019-20. The institute reserves the right to make changes in course planner in the interest of students.

# SUBJECT WISE SYLLABUS PLAN

PHYSICS [P]		
S. No.	Topic Name/Sequence	Lecture No.
1	NUCLEI	L1-15
2	ELECTRIC CHARGES AND FIELDS	L16-30
3	ELECTROSTATIC POTENTIAL AND CAPACITANCE	L31-43
4	CURRENT ELECTRICITY	L44-60
5	MOVING CHARGES AND MAGNETISM	L61-70
6	MAGNETISM AND MATTER	L71-81
7	RAY OPTICS & OPTICAL INSTRUMENTS	L82-108
8	WAVE OPTICS	L109-118
9	DUAL NATURE OF RADIATION & MATTER	L119-124
10	ATOMS	L125-129
11	ELECTROMAGNETIC INDUCTION	L130-136
12	ALTERNATING CURRENT	L137-142
13	ELECTROMAGNETIC WAVES	L143-145
14	SEMICONDUCTOR & ELECTRONICS DEVICES	L146-158
15	COMMUNICATION SYSTEMS	L159-161

161 lect × 75 Min. = 201.25 hr

CHEMISTRY [C]		
S. No.	Topic Name/Sequence	Lecture No.
1	CHEMICAL KINETICS	L1-15
2	SOLUTIONS	L16-28
3	ELECTROCHEMISTRY	L29-41
4	SOLID STATE	L42-53
5	SURFACE CHEMISTRY	L54-67
6	HALOALKANES AND HALOARENES	L68-83
7	ALCOHOLS, PHENOLS AND ETHERS	L84-95
8	ALDEHYDES, KETONES AND CARBOXYLIC ACIDS	L96-105
9	ORGANIC COMPOUNDS CONTAINING NITROGEN (AMINES)	L106-111
10	BIOMOLECULES	L112-120
11	POLYMERS	L121-125
12	COORDINATION COMPOUND	L126-135
13	THE P-BLOCK ELEMENT	L136-149
14	THE D & F- BLOCK	L150-154
15	GENERAL PRINCIPLE AND PROCESSES OF ISOLATION OF ELEMENT	L155-159
16	CHEMISTRY IN EVERYDAY LIFE	L160-161

161 lect × 75 Min. = 201.25 hr

MATHEMATICS [M]		
S. No.	Topic Name/Sequence	Lecture No.
1	Relations And Functions	L1-15
2	Inverse Trigonometric Functions	L16-23
3	Matrices	L24-31
4	Determinants	L32-41
5	Continuity And Differentiability	L42-53
6	Application of Derivatives	L54-68
7	Indefinite Integrals	L69-85
8	Definite Integrals	L86-95
9	Application of Integrals	L96-104
10	Differential Equations	L105-115
11	Vector Algebra	L116-125
12	Three Dimensional Geometry	L126-135
13	Linear Programming	L136-142
14	Probability	L143-161

161 lect × 75 Min. = 201.25 hr

BIOLOGY [B]		
S. No.	Topic Name/Sequence	Lecture No.
1	Sexual Reproduction in Flowering Plants	L1-15
2	Reproduction in Organisms	L16-23
3	Human Reproduction	L24-35
4	Reproductive Health	L36-42
5	Principles Of Inheritance and Variation	L43-60
6	Molecular Basis of Inheritance	L61-81
7	Evolution	L82-91
8	Human Health and Disease	L92-101
9	Strategies for Enhancement in Food Production	L102-111
10	Microbes in Human Welfare	L112-121
11	Biotechnology: Principles and Processes	L122-131
12	Biotechnology and its Applications	L132-138
13	Organisms and Populations	L139-144
14	Ecosystem	L145-149
15	Biodiversity and Conservation	L150-154
16	Environmental Issues	L155-161

161 lect × 75 Min. = 201.25 hr

English 45 Lect. × 75 Min. = 56.25 Hr

## WEEKLY LECTURE PLANNER (Per Subject)

Week No.	Week Duration		P	No. of Lecture				Total No. of Lectures
	From	To		P	C	M/B	E	
W-1	15-MAR	17-MAR	2	2	2	0	6	
W-2	18-MAR	24-MAR	3	3	3	0	9	
W-3	25-MAR	31-MAR	6	6	5	1	18	
W-4	01-APR	07-APR	5	4	5	1	15	
W-5	08-APR	14-APR	0	0	0	0	0	
W-6	15-APR	21-APR	0	0	0	0	0	
W-7	22-APR	28-APR	6	5	6	1	18	
W-8	29-APR	05-MAY	5	5	4	1	15	
W-9	06-MAY	12-MAY	6	5	6	1	18	
W-10	13-MAY	19-MAY	6	5	6	1	18	
W-11	20-MAY	26-MAY	4	5	5	1	15	
W-12	27-MAY	02-JUN	5	5	4	1	15	
W-13	03-JUN	09-JUN	5	5	4	1	15	
W-14	10-JUN	16-JUN	5	5	4	1	15	
W-15	17-JUN	23-JUN	4	4	3	1	12	
W-16	24-JUN	30-JUN	0	0	0	0	0	
W-17	01-JUL	07-JUL	5	5	6	2	18	
W-18	08-JUL	14-JUL	4	5	5	1	15	
W-19	15-JUL	21-JUL	6	5	5	2	18	

Week No.	Week Duration		P	No. of Lecture				Total No. of Lectures
	From	To		P	C	M/B	E	
W-20	22-JUL	28-JUL	5	5	4	1	15	
W-21	29-JUL	04-AUG	5	6	6	1	18	
W-22	05-AUG	11-AUG	5	4	5	1	15	
W-23	12-AUG	18-AUG	4	3	4	1	12	
W-24	19-AUG	25-AUG	4	5	5	1	15	
W-25	26-AUG	01-SEP	5	5	6	2	18	
W-26	02-SEP	08-SEP	4	5	5	1	15	
W-27	09-SEP	15-SEP	4	5	5	1	15	
W-28	16-SEP	22-SEP	4	3	4	1	12	
W-29	23-SEP	29-SEP	6	5	6	1	18	
W-30	30-SEP	06-OCT	6	4	3	2	15	
W-31	07-OCT	13-OCT	3	3	4	2	12	
W-32	14-OCT	20-OCT	4	4	5	2	15	
W-33	21-OCT	27-OCT	0	0	0	0	0	
W-34	28-OCT	03-NOV	2	3	2	2	9	
W-35	04-NOV	10-NOV	6	5	5	2	18	
W-36	11-NOV	17-NOV	4	5	4	2	15	
W-37	18-NOV	24-NOV	5	6	5	2	18	
W-38	25-NOV	01-DEC	4	5	4	2	15	
W-39	02-DEC	08-DEC	4	6	6	2	18	

# PERIODIC / CUMULATIVE TEST SCHEDULE & SYLLABUS

PERIODIC TEST SYLLABUS							
S. No.	Periodic Test Type and No.	Periodic Test Date	PHYSICS [P]	CHEMISTRY [C]	MATHEMATICS [M]	BIOLOGY [B]	ENGLISH [E]
1	PT-01	05-05-19 SUNDAY	Electric charges & field	Solutions till vapour pressure	Inverse Trigonometric Functions	Reproduction in Organisms	
2	PT-02	19-05-19 SUNDAY	Electric potential & capacitance	Solutions, Electrochemistry till Electrochemical cell	Matrices	Human Reproduction	
3	CT-01	01-06-19 to 02-06-19 SATURDAY & SUNDAY	Electric charges, Electric potential & Capacitance Current Electricity	Chemical Kinetics, Solutions & Electrochemistry	Relations And Functions, Inverse Trigonometric Functions, Matrices	Sexual Reproduction in Flowering Plants, Reproduction in Organisms and Human Reproduction	Literary Terms, The Last Lesson, Letter writing (Business or Official), Letter to Editor, Application for Job), Speech writing, Article writing, Debate, Notice
4	PT-03	16-06-19 SUNDAY	Moving charges & magnetism	Solid State	Continuity, Differentiation till, Implicit	Principles Of Inheritance	
5	PT-04	14-07-19 SUNDAY	Magnetism & Matter	Surface Chemistry	Differentiation, ADD till Increasing and decreasing	Principles of Inheritance, Molecular Basis of Inheritance	
6	PT-05	28-07-19 SUNDAY	Ray optics (half)	Haloalkanes	Maxima and Minima, Till indefinite integration	Molecular Basis of Inheritance	
7	CT-02	10-08-19 to 11-08-19 SATURDAY & SUNDAY	Moving Charges and Magnetism & Matter and Ray Optics	Solid State, Surface chemistry, Haloalkanes, Haloarenes	Integration, ADD, Differentiation	Principles Of Inheritance and Molecular Basis of Inheritance	My Mother at Sixty-Six, An Elementary School Classroom in a Slum, Lost Spring, The Tiger King, The Enemy, Should Wizard Hit Mommy, Invitations and Replies
8	PT-06	25-08-19 SUNDAY	Wave optics	Alcohols, Phenols & Ethers	AOI	Evolution	
9	PT-07	08-09-19 SUNDAY	Dual Nature	Aldehydes, Ketones and Carboxylic Acids	Differential Equations till homogenous	Human Health and Disease	
10	PT-08	22-09-19 SUNDAY	Atoms	Organic Compound containing Nitrogen (Amines) and Biomolecules till Amino Acids	DE, Vector till Dot product	Strategies for Enhancement in Food Production	
11	CT-03	05-10-19 to 06-10-19 SATURDAY & SUNDAY	Dual Nature, Atoms, EMI	Haloalkanes, Haloarenes, Alcohols, Phenols & Ethers, Aldehydes, Ketones and Carboxylic Acids, Amines, Biomolecules, Polymers	Vector, 3D till line, DE, AOI	Human Health & Disease, Evolution, Microbes in Human welfare and Strategies for Enhancement in Food Production, Biotechnology: principals & processes	Deep Water, The Rattrap, On the Face of It, Indigo, Advertisement, Posters
12	PT-09	20-10-19 SUNDAY	AC	Coordination Compounds	3D	Biotechnology: Principles and Processes, Biotechnology & its application	
13	PT-10	10-11-19 SUNDAY	EMW, AC	p-Block till oxygen family	LPP	Organisms and Populations	
14	PT-11	24-11-19 SUNDAY	Semi-conductor	p-Block, d-Block & f-Block	Probability till Baye's	Ecosystem, Biodiversity and Conservation	
15	CT-04	07-12-19 to 08-12-19 SATURDAY & SUNDAY	EMW, Semi-conductor, communication	Coordination Compounds, p-Block, d-Block & f-Block, General Principles & Processes of Isolation of Elements, Chemistry in Everyday Life	3D, LPP, Probability	Biotechnology: Principles and Processes , Organisms and Populations, Ecosystem, Biodiversity and Conservation, Environmental Issues	Keeping Quiet, A thing of Beauty, Going Places, Aunt Jennifer's Tigers, Evans Tries An O-Level, Memories of Childhood

# ACTIVITIES @ PSPD

Session - 2018-19

Bindas Bol



ResoTIPS



Guru Purnima



Picnic



World Environment Day



ResoSHARP



ResoQUEST  
Season-2



PERFUME  
Edition-2



## UNIQUE FEATURES:

- All Subjects Taught.
- Support for Practical.
- Zero DPP (Revision of Previous Class)
- Daily Care Classes (Doubt Clearance Session).
- Special Focus on Subjective Approach of Answer and Writing Skills.
- Regular Assignments through School Examination Preparatory (SEP) Sheets
- Specially Designed Board Practice Test Papers.
- Periodic Test after every 15 days.
- ResoSHARP (Resonance Student Hard Work Appreciation & Reward Program)
- ResoGHAR (Resonance Grievance Handling and Redressal)
- SAPER (Student Academic Performance and Evaluation Report).
- Motivational Session & Workshops.
- Student Feedback Mechanism.
- PTSM (Parent Teacher & Student Meeting).
- ResoTIPS (Resonance Toppers Interaction with Present Students)
- Co-Curricular Activities like Picnic, Festival Celebration, Annual Function etc.

**Holidays/ Vacations:** 1. Holi 20<sup>th</sup> March 2019 to 21<sup>st</sup> March 2019 2. Eid-UI-Fitr 5<sup>th</sup> June 2019 3. Summer Break 22<sup>nd</sup> June 2019 to 30<sup>th</sup> June 2019  
4. Eid-UI-Zuha (Bakr-Id) 12<sup>nd</sup> August 2019 5. Independence day 15<sup>th</sup> August 2019 6. Raksha Bandhan 15<sup>th</sup> August 2019 7. Muharram 10<sup>th</sup> September 2019  
8. Navmi 7<sup>th</sup> October 2019 9. Dusshera 08<sup>th</sup> October 2019

### RESONANCE EDUVENTURES LTD.

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**JHALAWAR STUDY CENTRE:** (Badi Kothi) Prithvi vilas, Civil Lines, Jhalawar (Rajasthan)-326001 | **Tel. No.:** 7340010303

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