



## Integrated Program Course Planning (Class 10th)

**Academic Session 2016-17**

### PHYSICS

**Course Name :** Pre-Foundation

**Course Commencement :** 4<sup>th</sup> April 2016

**Course Completion :** Last Week of Jan.'17

S.No	Topic Name	No. of Lectures	Lecture No.	Sub-topic(s) Name	No. of DPPs	Misc. DPP's
1	Electric Field & Electric Potential	2	L-1	Electric Charge, Static and Current Electricity, Electric field and electric potential, Electric Potential Difference.	2	1
			L-2	Electric current, How the Current Flows in a Wire, Electrical symbols, Electrical circuits.		
2	Ohm's Law & Applications	2	L-3	Electrical resistance, Ohm's law, Conductors, Resistors and Insulators, Factors effecting the Resistance of a Conductor.	1	
			L-4	Resistivity, Combination of Resistances(or Resistors)		
3	Heating Effect of Current	2	L-5	Heating Effect of Current, Electric Energy, Electric Power.	1	1
			L-6	Power - Voltage Rating of Electrical Appliances, Applications of Heating Effect of Current, Electric Fuse		
4	House-hold Electricity	2	L-7	House-hold electrical circuits, Tree System, Ring System, Hazards of Electricity.	1	
			L-8	Earthing, Colour coding of wires, Galvanometer, Ammeter, Voltmeter.		
5	Magnetic Effect of current	2	L-9	Magnet, Originate the name magnet, Magnetism, Classification of materials, Properties of magnet, Magnetic Field Lines, Magnetic Effect of Current, Magnetic Field due to a Straight Current Carrying Wire.	2	1
			L-10	Magnetic Field due to Current Carrying Circular Coil, Magnetic Field due to a Current Carrying Solenoid.		
6	Magnetism & Force Due to Magnetic field	2	L-11	Permanent and Temporary Magnets, Electromagnet, Methods of Demagnetising a Permanent Magnet, Uses of Magnetism in medicine.	1	
			L-12	Magnetic Force-Force on a Current-Carrying Conductor in a Magnetic Field, Direction of Force on Current Carrying Conductor, Motion of charged particle in a magnetic field, Lorentz force, Magnitude of Force.		
7	Electromagnetic Induction	2	L-13	Electromagnetic Induction, Faraday's Experiments, Faraday's Laws of Electromagnetic Induction.	2	1
			L-14	Direction of Induced e.m.f., Direct Current (DC) and Alternating Current (AC).		
8	Sources of Energy	3	L-15	Sources of energy, Types of Sources of Energy, Characteristics of Sources of Energy, Solar energy, Composition of Solar Energy (Sunlight), Uses of Solar Energy, Advantages of Solar Energy, Limitations of Solar Energy.	4	1
			L-16	Solar cell & Solar panel, Direct and Indirect Harnessing (or Collection) of Solar Energy		
			L-17	Solar Heating Devices, Wind energy, Hydro energy (hydel power), Tidal energy, Sea waves energy, Ocean Thermal Energy, Ocean Wave Energy, Geothermal energy, Bio energy, Biogas, Biogas Plant, Fuel, Types of Fuels, Fossil Fuels.		
9	Nuclear Physics	2	L-18	Nuclear Energy, Binding Energy, Nuclear Reaction- Nuclear Fusion and Nuclear Fission, Fission Products, Types of Fission Reactions.	2	1
			L-19	Energy Released by Fission Reaction, Process of Nuclear Fission, Nuclear fusion, Secret of Sun's Energy, Hydrogen Bomb.		
10	Reflection of Light	3	L-20	Optics, Light, Nature of light Source of Light, Medium of Light, Behaviour of Light at the Interface of Two Media, Reflection of light, Laws of reflection	3	1
			L-21	Types of reflection, Rectilinear propagation of light, Image, Image formation by plane mirror, Lateral Inversion		
			L-22	Types of mirror-spherical mirrors, Some terms related to spherical mirrors, Rules for the formation of images by concave and convex mirrors.		
11	Reflection of Light	2	L-23	Formation of image by convex mirror, Formation of image by concave mirror, Uses of concave mirror.	2	1
			L-24	Sign convention for measuring distance in concave and convex mirror, Mirror formula, Power of mirror, Relation between focal length (f) and radius of curvature (R), Magnification for concave mirror.		
12	Refraction of Light	2	L-25	Refraction of Light, Cause of Refraction, Effects of refraction of Light, Laws of Refraction, Refractive Index, Refraction through glass slab.	2	
			L-26	Spherical Lenses, Convex lens and its type, Concave lens and its type, Definitions in connection with spherical lens.		
13	Refraction of Light	2	L-27	Convex Lens, Image formed by Convex Lens.	2	1
			L-28	Concave lens, Rules for the formation of images by Concave Lens, Image formed by Concave Lens, Power of a lens, Lens formula, Linear Magnification.		
14	Optical Instrument	4	L-29	Human Eye, Structure and Working of Human Eye, Power of Accommodation, Near Point and Far Point, Least Distance of Distinct Vision, Persistence of Vision, Colour-Blindness, Colour Perception of Animals, Cataract.	2	1

		L-30	Defects of vision and their correction		
		L-31 & 32	Dispersion and spectrum, Scattering of light, Tyndall Effect, Phenomena based upon Scattering of light, Formation of rainbow.		



## Integrated Program Course Planning (Class 10th)

**Academic Session 2016-17**

### CHEMISTRY

Course Name : Pre-Foundation

Course Commencement : 4<sup>th</sup> April 2016

Course Completion : Last Week of Jan.'17

S.No	Topic Name	Total Lectures	Lecture No.	Sub-topic(s) Name	No. of DPPs	Misc. DPP's
1	Chemical reactions and equations	8	L-1	General introduction of chemistry and chemical reactions, Characteristics of chemical reaction, .	3	1
			L-2	Balanced and unbalanced equations, Balancing of equations		
			L-3	Specialities of chemical equation, Limitations of chemical equation and their rectification.		
			L-4	Types of chemical equations - Combination, decomposition, displacement and double displacement.		
			L-5	Oxidation and reduction reactions,		
			L-6	Effect of oxidation in our daily life - Combustion, Respiration, Pollution, Corrosion and Rancidity.		
			L-7	DPP discussion.		
			L-8	NCERT discussion.		
2	Acids, Bases and Salts	15	L-9	Introduction of acids, Classification of acids.	3	1
			L-10	Chemical properties of acids -reaction with metals, metal oxides, carbonates and bicarbonates, bases.		
			L-11	Introduction of bases, Alkalies, Classification of Bases.		
			L-12	Chemical properties of bases, Conducting nature of acids and bases, Role of water in ionisation of acids and bases, Dilution of acids and bases.		
			L-13	Indicators - Definition, Uses, Olfactory indicators, Colour indicators - Litmus, Phenolphthalein, Methyl orange, Red cabbage juice, Turmeric juice, China rose extract.		
			L-14	Neutralisation, pH.		
			L-15	Numerical problems of pH.		
			L-16	Applications of pH - in our digestive system, in tooth decay, in soil treatment, in case of stings of ants and bees.		
			L-17	Salts - Definition, Classification, Important salts - NaCl		
			L-18	Washing soda - Introduction, Manufacturing.		
			L-19	Washing soda - Properties, Uses, Baking soda - Introduction, Manufacturing, Properties, Uses.		
			L-20	Bleaching powder - Introduction, Manufacturing, Uses and Plaster of Paris- Introduction, Manufacturing, properties and Uses, Hydrated salts.		
			L-21	DPP discussion.		
			L-22	DPP discussion.		
			L-23	NCERT discussion.		
3	Metals and Non - Metals	14	L-24	Introduction of metals and non - metals, Position of metals and non - metals in the periodic table, Electronic configuration of metals.Physical properties of metals.	6	2
			L-25	Physical properties of non -metals, Chemical properties of metals.		
			L-26	Chemical properties of metals.		
			L-27	Reactivity series of metals, octet rule		
			L-28	Ionic bond, Properties of ionic compounds.		
			L-29	Occurrence of metals, Minerals and ores, Types of ores, Introduction of metallurgy.Crushing & grinding of ore, concentration of ore –Hydraulic washing, Froth flotation		
			L-30	Concentration of ore - Magnetic separation, Chemical separation.		
			L-31	Extraction of metal from concentrated ore -Calcination, Roasting, Reduction of Metal oxide – By heating, Chemical reduction		
			L-32	Electrolytic reduction, Refining of metals by liquation, distillation		
			L-33	Electrolytic Refining, Methods to obtain ultra pure metals		
			L-34	Corrosion of metals, Alloys.		
			L-35	DPP discussion.		
			L-36	DPP discussion.		
			L-37	NCERT discussion.		

4	Carbon and its compounds	17	L-38	Carbon- Introduction of organic chemistry, vital force theory, Wohler's synthesis,	8	3
			L-39	Covalent bonding, Properties and examples of covalent compounds.		
			L-40	Allotropes of carbon definition, classification, Diamond - Introduction, Structure, Properties, Uses.		
			L-41	Graphite-Introduction, Structure, Properties, Fullerene - Properties, Uses		
			L-42	Versatile nature of carbon classification of organic compounds, Alkanes, Alkenes, Alkynes, Closed chain compounds, Homologous series		
			L-43	Nomenclature - Introduction, Alkanes		
			L-44	Nomenclature of Alkenes, Alkynes, Compounds containing functional group.		
			L-45	Practice of Nomenclature		
			L-46	Isomerism, Chemical properties of carbon compounds - combustion, oxidation, substitution reactions.		
			L-47	Addition reactions, Burning of substance with or without smoky flame, some important carbon compounds-Ethanol (introduction, properties).		
			L-48	Ethanol (some important terms, uses, harmful effects) Ethanoic acid-Introduction, Uses, Tests.		
			L-49	Soaps & Detergents - Introduction, Structure of soap, preparation of soap, limitations of soap.		
			L-50	Detergents - Structure, Preparation, comparison between soaps & detergents.		
			L-51	Cleaning action of soaps & detergents.		
			L-52	DPP discussion.		
L-53	DPP discussion.					
L-54	NCERT discussion.					
5	Periodic table and Periodicity In Properties	6	L-55	Introduction, Early attempts to classify elements - Doberenier's triads, Newlands law of octaves,	3	1
			L-56	Mendeleev's classification,		
			L-57	Modern periodic table,		
			L-58	Periodicity in properties - Valency, Atomic size, Metallic and non - metallic character.		
			L-59	DPP discussion.		
			L-60	NCERT discussion.		



## Integrated Program Course Planning (Class 10th)

**Academic Session 2016-17**

### BIOLOGY

Course Name : Pre-Foundation

Course Commencement : 4<sup>th</sup> April 2016

Course Completion : Last Week of Jan.'17

S.No	Topic Name	Total Lectures	Lecture No.	Sub-topic(s) Name	No. of DPPs	Misc. DPP's
1	Nutrition	7	L-1	Nutrition, Modes of Nutrition,	1	
			L-2 & 3	Nutrition in plant, Light and dark reaction.		
			L-4	Nutrition in Animal, Nutrition in lower Animal,		
			L-5	Nutrition in Humans.		
			L-6	Digestion process		
			L-7	DPP + Test Review		
2	Respiration	5	L-8	Respiration, Respiration in plants.	1	
			L-9	Respiration in animals		
			L-10	Respiration in humans		
			L-11	Mechanism of Respiration		
			L-12	DPP + Test Review		
3	Transportation	5	L-13	Introduction, Transportation in higher plants, Transportation in animals	1	1
			L-15	Transportation in humans, Blood		
			L-16	Blood vessels, Blood group, human heart,		
			L-17	Lymphatic system		
			L-18	DPP + Test Review		
4	Excretion	6	L-19 & 20	Excretion, Waste products, Excretion in plants, Excretion in Animals	1	
			L-21 & 22	, Excretion in humans		
			L-23	Dialysis.		
			L-24	DPP + Test Review		
5	Control & Co-ordination	6	L-25	Introduction, Plant movement.	1	1
			L-26	Chemical co-ordination in plant.		
			L-27 & 28	Control and co-ordination in Animals, Endocrine system.		
			L-29	Nervous system in human (brain & spinal cord), reflex action.		
			L-30	DPP + Test Review		
10	Reproduction	6	L-31	Meaning of Reproduction, Types of Reproduction, Asexual Reproduction	1	
			L-32	Reproduction in a flowering plant,		
			L-33 & 34	Sexual reproduction in Humans, Male reproductive system. Female Reproductive system, Fertilization, Menstrual cycle.		
			L-35	Reproductive health, Population growth, Method Adapted for population control, sexually transmitted disease.		
			L-36	DPP + Test Review		
11	Heredity & Evolution	7	L-37	Heredity, Variations, Mendel's experiment	1	1
			L-38	Monohybrid cross, dihybrid cross		
			L-39	Mendel's laws of inheritance, Sex determination		
			L-40	Origin of life, Lamarckism, Weismann, Darwinism		
			L-41	Evolution, Speciation		
			L-42, 43	Evidence of evolution (Morphological evidences, Embryological evidences, Paleontological evidences for evolution & Fossils), Connecting links, Human evolution.		
			L-44	DPP + Test Review		
12	Our Environment	3	L-45	Ecosystem, Ecosystem components Food chain, Food web, Ecological pyramids	1	
			L-46	Ozone layer depletion, Waste, Managing the garbage we produce.		
			L-47	DPP + Test Review		
13	Management of natural resources	3	L-48	Management of natural resources, Sustainable development, Forest & wildlife, Stakeholders of the forest, Traditional use of forest, Water as a basic natural resource	1	1
			L-49	Fossil fuels		
			L-50	DPP + Test Review		



## Integrated Program Course Planning (Class 10th)

**Academic Session 2016-17**

### MATHEMATICS

Course Name : Pre-Foundation

Course Commencement : 4<sup>th</sup> April 2016

Course Completion : Last Week of Jan.'17

S.No	Topic Name	Total Lectures	Lecture No.	Sub-topic(s) Name	No. of DPPs	Misc. DPP's
1	Real Numbers	7	L-1	General Introduction of Number System, Euclid's Division Lemma	1	1
			L-2	Euclid's Division Algorithm.		
			L-3,4	Fundamental theorem of Arithmetic.		
			L-5,6	Proofs of irrationality of numbers. Terminating/non-terminating recurring decimals and Exercise.		
			L-7	Module and DPP discussion		
2	Polynomials	7	L-8,9	Polynomials, Remainder and Factor Theorem.	1	
			L-10	Zeros of a polynomial. Relationship between zeros and coefficients of a Quadratic Polynomials.		
			L-11	Zeros of a polynomial. Relationship between zeros and coefficients of a cubic Polynomials.		
			L-12,13	Division Algorithm, Graph of Polynomials and Exercise.		
			L-14	Module and DPP discussion		
3	Linear Equation in two variables	8	L-15	General form of Linear equations. Solution of pair of linear equations Graphically	1	
			L-16,17	elimination by substitution and by equating the coefficient		
			L-18,19	cross multiplicatio, equations reducible to linear equations.		
			L-20, 21	Conditions for solvability of linear equations, Word problems and Exercise.		
			L-22	DPP & Module Discussion		
4	Trigonometry	9	L-23	Introduction of trigonometry, trigonometric ratios of an acute angle of a right-angled triangle.	1	1
			L-24	Proof of the existence of T- Ratios. Values (with proofs) of the trigonometric ratios of 30°, 45° & 60°.		
			L-25,26	Trigonometric ratios of complementary angles, Relationships between the trigonometric ratios.		
			L-27,28	Trigonometric identities and problem based on it		
			L-29,30,31	Trigonometric identities and problem based on it and DPP / Module Discussion		
5	Similar Triangles	10	L-32	Basic proportionality theorem and its converse	1	1
			L-33	Application and Problem based on BPT and Its converse		
			L-34,35	Similar triangle and Characteristiv property of similar triangle(AA,SAS,SSS) and problem based on it		
			L-36,37	Areas of Similar triangles and problems.		
			L-38	Pythagoras theorem and its converse problems.		
			L-39,40	Problem based on Pythagoras theorem and its converse.		
			L-41	Module and DPP discussion		
6	Statistics	7	L-42,43	Introduction of measures of central F16tendency, Mean and method of finding mean.	1	
			L-44,45	Median, Mode and method of find median and mode.		
			L-46,47	Cumulative frequency graph (ogive) and Exercise.		
			L-48	Module and DPP discussion		

7	Quadratic Equation	7	L-49,50	Standard form of a quadratic equation $ax^2 + bx + c = 0$ , ( $a \neq 0$ ), Roots of quadratic equation, Solution of the quadratic equations (only real roots) by factorization and problem based on it	1	1
			L-51,52	Solution of the quadratic equations (only real roots) by completing the square and Quadratic formula and problem based on it		
			L-53	Nature of roots.		
			L-54,55	Word problem and Exercise and DPP/ Module Discussion		
8	Arithmetic Progression	6	L-56	Arithmetic Progression : General form, nth Term of an A.P., mth of an AP from end and problem based on it	1	1
			L-57,58	Selection of term .		
			L-59,60	Sum of first n terms, word problems and Exercise.		
			L-61	Module and DPP discussion		
9	Coordinate Geometry	7	L-62,63	Introduction of coordinate geometry, Distance formula and its application.	1	1
			L-64,65	Section formula (Internal division & External division) and its uses.		
			L-66,67	Area of triangle & quadrilateral and Exercise.		
			L-68	Module and DPP discussion		
10	Height & Distances	5	L-69,70	Angle of Elevation and depression. Basic Problems based on heights and distances.	1	1
			L-71,72,73	Higher problems based on height and distance and Exercise. and DPP/ Module Discussion		
11	Circles	5	L-74,75	Definition and general properties of Circle, Tangent & Secant, Theorems( based on circle and tangent) and there proofs.	1	1
			L-76,77,78	Problem based on above theorems and Exercise and DPP/ Module Discussion		
12	Area Related to Circles	5	L-79,80	Definition and general properties of Circle, Tangent & Secant, Theorems( based on circle and tangent) and there proofs.	1	1
			L-81,82	Problem based on above theorems and Exercise.		
			L-83	Module and DPP discussion		
13	Mensuration	8	L-84,85	Problems based on surface areas and volumes of solid figure.	1	1
			L-86,87	Problem based on combinations of any two of the following : cubes, cuboids, spheres, hemispheres and right circular cylinders/cones.		
			L-88,89	Problems involving converting one type of metallic solid into another.		
			L-90	Frustum of a cone and problem based on it and Exercise.		
			L-91	Module and DPP discussion		
14	Probability	4	L-92,93	Introduction and definitions of related terms.	1	1
			L-94,95	Problem based on probability and DPP/ Module Discussion		
15	Constructions	4	L-96,97	Division of a line segment in a given ratio (internally), Tangent to a circle from a point outside it.	0	1
			L-98,99	Construction of a triangle similar to a given triangle and Exercise and DPP/ Module Discussion		



## Integrated Program Course Planning (Class 10th)

Academic Session 2016-17

ENGLISH

Course Name : Pre-Foundation

Course Commencement : 4<sup>th</sup> April 2016

Course Completion : Last Week of Jan.'17

S. no	Topic Name	No. of Classes	No of DPPs
1	Tense	4	1
2	Subject Verb Concord	3	1
3	The Frog And The Nightingale	3	1
4	Two Gentlemen of Verona	1	1
5	Mrs. Packletide's Tiger	2	1
6	Conditionals	3	1
7	Mirror + Letter writing	2	2
8	Passive Voice	3	1
9	Prepositions	3	1
10	The Letter + Article Writing	3	2
11	Not Marble Nor the Gilded Monuments	2	1
12	Connectors & Determiners	3	2
13	Modals	3	1
14	The Dear Departed + Story Writing	3	2
15	Reported Speech	4	1
16	Integrated grammar	3	1
17	Diary of a Young Girl, The Story of my Life	4	2
18	Ozymandias	1	1
19	Shady Plot	3	1
20	Grammar Practice+ Letter writing	2	1
21	Rime of Ancient Mariner	2	1
22	Grammar Practice + Story Writing	2	1
23	Snake	2	1
24	Grammar Practice+ Article writing	2	1
25	Julius Caesar	8	1
26	Grammar Practice	2	1
27	Patol Babu	3	1
28	Virtually True	2	1
29	Novel (The Story of My Life Diary of a Young Girl)	4	2





**Integrated Program Course Planning (Class 10th)**  
**Academic Session 2016-17**  
Mental Ability

Course Name : Pre-Foundation

Course Commencement : 4<sup>th</sup> April 2016  
 Course Completion: Last Week of Jan.'17

S. No.	Topic(s) Name	Total Lectures	Lecture No.	Sub-topic(s) Name	No. of DPPs	Misc. DPPs
1	Number Series	2	L-1, 2	Different type of Number Series.	1	1
2	Alphabet Series	1	L-3	Different type of Alphabet Series, Alpha-Numeric Series.	1	
3	Letter Repeating Series	1	L-4	Different type of Letter Repeating Series.	1	
4	Missing term in figure	2	L-5, 6	Missing term in figure.	1	1
5	Mathematical operations	2	L- 7, 8	Application of BODMAS, Problems Solving by Substitution, Interchange of signs & Numbers, Deriving the appropriate conclusions.	1	
6	Arithmetical Reasoning	1	L- 9	Calculation-Based Problems, Data-Based Questions, Problems on Ages, Venn-Diagram Based Questions.	1	
7	Alphabet Test	2	L-10, 11	Alphabetical Order, Letter-word Problems, Alphabetical Quibble, Word Formation by Unscrambling Letters and Word Formation using letters of a given Word.	1	1
8	Coding-Decoding	2	L- 12, 13	Letter-Letter Coding, Letter-Number Coding, Substitution Coding, Puzzle Based Coding & Column Coding.	1	
9	Sequential Output Tracing	1	L-14	Arranging the given words in forward/reverse alphabetical order, Arranging the given numbers in ascending/descending order, Writing a particular set of words in the reverse order, stepwise, Changing places of words/numbers according to a set pattern.	1	
10	Direction Sense Test	1	L- 15	Direction Sense & Coordinates	1	1
11	Sitting arrangement	1	L-16	Linear Seating Arrangement and Circular Seating Arrangement.	1	
12	Ranking & Ordering- Test	1	L-17	Number Quibble, Alphabetical Quibble, Alpha-Numeric Quibble, Ranking Test & Ordering Test.	1	
13	Blood Relations	2	L-18, 19	Direct Relationship, Relation Puzzle and Coded Relation	1	1
14	Puzzle Test	2	L- 20, 21	Classification type Puzzles, Comparison Type Puzzles, Sequential Order of Things, Selection Based on given Conditions, Family-Based Puzzles and Miscellaneous Puzzles.	1	
15	Venn Diagram	1	L-22	Simple Venn Diagram and Logical Venn Diagram	1	
16	Syllogism	1	L-23	2 Statement and 2 Conclusion, 2 Statement and 4 Conclusion	1	1
17	Analogy	1	L-24	Kinds of Relationships, Word Analogy, Number Analogy and Alphabet Analogy.	1	
18	Classification	1	L-25	Classification of Word, Classification of Letter and Classification of Number	1	
19	Logical Sequence of Words	1	L-26	Arrangement of words in a Logical order.	1	1
20	Pyramid Test	1	L-27	Number Pyramid, Alphabet Pyramid	1	
21	Calendar Test	2	L-28, 29	Odd Days, Counting of Odd Days, Important Facts,	1	
22	Clock Test	2	L-30, 31	Mirror Image of Clock, Angle between two hands	1	1
23	Data Sufficiency	1	L-32	Different type of Data Sufficiency	1	
24	Data Redundancy	1	L-33	Different type of Data Redundancy	1	
25	Cube Test	1	L-34	Different type of cube test.	1	1
26	Dice Test	1	L-35	Different type of Dice test.	1	
27	Mirror & Water Images	1	L-36	Mirror & Water Image of Numbers, Letters, Words, Figures, etc.	1	
28	Paper Folding & Paper Cutting	1	L-37	Paper Folding and Paper Cutting.	1	1
29	Figure Partition & counting	1	L-38	Counting number of figures generated due to partition lines.	1	
30	Completion & Formation of Figures	1	L-39	Figure Completion, Figure Formation.	1	
31	Embedded figure	1	L-40	Different types of embedded figure.	1	1
32	Non-Verbal Series	1	L-41	Different types of Non-Verbal Series.	1	
33	Non-Verbal Analogy	1	L-42	Different Types of Non-Verbal Analogy.	1	
34	Non-Verbal Classification	1	L-43	Different types of Non-Verbal Classification.	1	1
35	Dot situation : Different type of Dot situation	1	L-44	Different type of Dot situation	1	



## Integrated Program Course Planning (Class 10th)

### Academic Session 2016-17

### Computer

Course Name : Pre-foundation

Course Commencement : 4<sup>th</sup> April 2016

Course Completion: Last Week of Jan.'17

S.No	Topic(s) Name	Topic(s) Lectures	Lecture No.	Sub-Topic(s) Name	No. of DPP
1	<b>Introduction to the Internet</b>	3	L-1	History of the Internet,A Technical Viewpoint,Who Governs the Internet?,How the Internet Works,How to log on to the Internet,Internet-related Terminology	1
			L-2	How the Web Works (Surfing the Web),Hypertext Transfer Protocol (HTTP),Hypertext Markup Language (HTML)	
			L-3	Publishing a Web Page,Web Addresses,Network Classes,Uniform Resource Locator (URL)	
2	<b>Internet Services</b>	4	L-4	Information Retrieval,Electronic Mail (E-Mail),Locating Sites Using Search Engines,Finding People on the Internet,	1
			L-5	Chat,Video Conferencing or Video Teleconferencing (VTC),Electronic Commerce (E-Commerce),File Transfer Protocol (FTP)	
			L-6	Network Terminal Protocol : Telnet,Newsgroups,Blog,E-sites	
			L-7	Social Networking,Cloud Computing	
3	<b>Introduction to Databases Access 2013</b>	2	L-8	What is a Database?,What is Access 2013?,Creating a Database in Access 2013,	1
			L-9	Setting the Data Type,Working with Fields,Totalling, Sorting, Filtering, and Searching Data,Importing Table from Excel 2013	
4	<b>Access 2013 Design view,Form,Query and report</b>	2	L-10	Creating a Table in Design View,Data Validation,Modifying Table Design	1
			L-11	Forms,Queries,Reports	
5	<b>Basic concepts of a web Browser</b>	2	L-12	Web Browsers,Internet Explorer	1
			L-13	Mozilla Firefox,Google Chrome	
6	<b>Introduction to HTML 5</b>	5	L-14	Structure of A Web Site,Introduction to HTML5,Web Browsers,HTML Editors	1
			L-15	Creating a Basic HTML Program	
			L-16	HTML Coding	
			L-17	Structure of an HTML Document,Line Break Element	
7	<b>Basic HTML5 Elements</b>	3	L-18	Cascading Style Sheets (CSS)	1
			L-19	HTML Elements,Text Formatting Tags,Text Properties Using CSS,Font Properties Using CSS	
			L-20	Setting Margins Using CSS,Setting Borders Using CSS,Grouping Selectors	
8	<b>Inserting images and creating tables in HTML5</b>	1	L-21	CSS Inline Style,Creating Lists	1
			L-22	Inserting Images,Creating Tables	
9	<b>Links and Frames in HTML5</b>	1	L-23	Linking,Creating Frames,Inserting Audio and Video	1
10	<b>MySQL</b>	8	L-24	SQL Commands	1
			L-25	Starting MySQL,Creating a Database	
			L-26	MySQL Data Types,MySQL Tables	
			L-27	Inserting Data in a Table,Changing the Structure of a Table	
			L-28	Select Statement,Working with Operators	
			L-29	Sorting Data in a Table,Deleting Data from Tables	
			L-30	Updating Data in Tables,Aggregate or Group Functions,	
L-31	Group By clause,Having Clause				
11	<b>XML</b>	4	L-32	Differences Between XML and HTML,XML Elements	1
			L-33	Well-formed XML Document,Validating an XML Document	

			<b>L-34</b>	XML Application Architecture,XML Parser,Declaring Child Elements	
			<b>L-35</b>	Attribute List Declaration,Entity	
12	<b>Societal impact of information Technology</b>	3	<b>L-36</b>	Virus,Worm,Trojan Horse,Antivirus Software,Spyware	1
			<b>L-37</b>	Malware,Spam,Data Backup and Recovery Tools and Methods	
			<b>L-38</b>	Hackers and Crackers,Information Security ,IT and ICT	



## Integrated Program Course Planning (Class 10th)

**Academic Session 2016-17**

### SOCIAL SCIENCE

**Course Name :** Pre-Foundation

**Course Commencement :** 4<sup>th</sup> April 2016

**Course Completion :** Last Week of Jan.'17

S.No	Topic Name	Total Lectures	Lecture No.	Sub-topic(s) Name	No. of DPPs	Misc. DPP's
1	Power Sharing	3	L-1	Belgium and Sri Lanka, Majoritarianism in Sri Lanka, Accommodation in Belgium,	1	
			L-2	Why power sharing is desirable, Forms of power sharing		
			L-3	Exercise		
2	The Age of Industrialisation	7	L-4	Before the Industrial Revolution, hand Labour and Steam Power, Industrialisation in the Colonies,	1	1
			L-5	Factories Come Up,		
			L-6	The Peculiarities of Industrial Growth, market for Goods		
			L-7	Exercise		
3	Resources and Development	4	L-8	Types of Resources, Development of Resources, Resource Planning, Resource planning in India,	1	
			L-9	Land resources, Land use pattern in India, Land degradation and Conservation measures		
			L-10	Soil as a resource, Classification of soils, Soil erosion and soil conse		
			L-11	Exercise		
4	Development	3	L-12	What development promises - different people, different goals, Income and other goals, National development,	1	
			L-13	Factors on which basis different countries can be compared. Income and other criteria, Public facilities, Sustainability of development		
			L-14	Exercise		
5	Federalism	3	L-15	What is federalism, What makes India a federal country.	1	1
			L-16	How is federalism practised,		
			L-17	Decentralisation in India.		
			L-18	Exercise		
6	Sectors of the Indian Economy	3	L-19	Sectors of economic activities, Comparing the three sectors, Primary, Secondary and Tertiary sectors in India,	1	
			L-20	Division of sectors as Organised and Unorganised, Sectors in terms of ownership Public and private sectors.		
			L-21	Exercise		
7	The Making of a Global World	4	L-22	The Pre-modern World,	1	
			L-23	The Nineteenth Century (1815 -1914), The Inter-war Economy,		
			L-24	Rebuilding a World Economy: The Post-war Era.		
			L-25	Exercise		
8	Forest & Wild Life Resources	3	L-26	Flora & Fauna In India, Classification of existing plants & animal Species, Negative features which cause fearful depletion	1	1
			L-27	Conservation of Forest & Wildlife in India, Types & Distribution of Forest & Wildlife Resources, Community and conser.		
			L-28	Exercise		
9	Cities in The Contemporary World	4	L-29	Characteristics of the City, Social Change in the City,	1	
			L-30	Politics in the City,		
			L-31	The City in Colonial India, Cities and the Challenge of the Environment		
			L-32	Exercise		
10	Water Resources	3	L-33	Water scarcity and its causes, Multi-purpose river projects and integrated water resources management,	1	1

			L-34	Rainwater harvesting		
			L-35	Exercise		
11	Democracy & Diversity	3	L-36	A story of Mexico Olympics, Differences , similarities divisions,	1	
			L-37	Politics of social divisions		
			L-38	Exercise		
12	Print Culture and the Modern World	4	L-39	The First Printed Books, Print Comes to Europe,	1	
			L-40	The Print Revolution and its Impact, The Reading mania, The Nineteenth Century, India and the World of Print,		
			L-41	Religious Reform and Public Debates, New Forms of Publication, print and Censorship.		
			L-42	Exercise		
13	Gender, Religion and Caste	3	L-43	Gender and politics (public and private division, women's political representation),	1	
			L-44	Religion, communalism and politics (Communalism, Secular state), Caste and politics (Caste inequalities, Caste in politics, Politics in caste).		
			L-45	Exercise		
14	Agriculture	3	L-46	Types of farming, Major Crops, cropping pattern	1	1
			L-47	Contribution of Agriculture to national economy – Employment & output, food security, impact of globalisation.		
			L-48	Exercise		
15	Novel Society & History	4	L-49	Emergence of the novel in the west	1	
			L-50	Early Novels in nineteenth century India.		
			L-51	Influence of novels on the society		
			L-52	Exercise		
16	The Rise of Nationalism in Europe	4	L-53	The French Revolution and the Idea of the Nation, The making of Nationalism in Europe,	1	
			L-54	The Age of Revolutions: 1830-1848, The making of Germany and Italy,		
			L-55	Visualising the Nation Nationalism and Imperialism.		
			L-56	Exercise		
17	Minerals & Energy Resources	3	L-57	What is a mineral ?, Mode of occurrence of minerals, Ferrous minerals, Non-ferrous minerals, Non-metallic minerals, Rock minerals, Conservation of minerals,	1	1
			L-58	Energy resources, Conventional sources of energy, Non-conventional sources of energy, Conservation of resources		
			L-59	Exercise		
18	Money & Credit	3	L-60	Money as a Medium of Exchange, Modern forms of Money, Loan activities of Banks, Two different credit situations,	1	
			L-61	Terms of credit, Formal sector credit in India, Self-help groups for the poor.		
			L-62	Exercise		
19	Popular Struggles and Movements	3	L-63	Popular struggles in Nepal and Bolivia (Movement for democracy in Nepal, Bolivia's Water War, Democracy and popular I struggles), Mobilisation and organisations,	1	
			L-64	Pressure groups and movements (Sectional interest groups and public interest groups, Movements		
			L-65	Exercise		
20	Globalisation and the Indian Economy	3	L-66	Production across countries, Interlinking production across countries, Foreign trade and integration of markets, What is globalisation?,	1	1
			L-67	Factors that have enabled globalisation, World Trade Organisation, Impact of globalisation in India, The struggle for a fair Globalisation		
			L-68	Exercise		
21	Nationalism in India	4	L-69	The First World War, Khilafat and Non-Cooperation,	1	
			L-70	Differing Strands		

				within the Movement, Towards Civil Disobedience,		
			L-71	The Sense of Collective Belonging.		
			L-72	Exercise		
22	Consumer Rights	3	L-73	The consumer in the marketplace, Consumer movement, Consumer rights (Safety is everyone's right, Information about goods and services.	1	
			L-74	When choice is denied, Where should consumers go to get justice?), Learning to become well-informed consumers, Taking initiatives.		
			L-75	Exercise		
23	Manufacturing Industries	3	L-76	Importance of manufacturing, Contribution of industry to national economy, Industrial location, Agro-based industries.	1	1
			L-77	Mineral based industries, Industrial Pollution and Environmental degradation.		
			L-78	Exercise		
24	Lifelines of National economy	3	L-79	Transport (Roadways, Railways, Pipelines, Waterways, Major sea Ports, Airways)	1	
			L-80	Communication, International Trade, Tourism as a trade.		
			L-81	Exercise		
25	Political Parties	3	L-82	Why do we need political parties? (meaning, functions, necessity), How many parties should we have?,	1	
			L-83	National political parties, State parties, Challenges to political parties, How can parties be reformed?		
			L-84	Exercise		
26	Outcomes of Democracy	3	L-85	How do we assess democracy's outcomes?, Accountable, responsive and legitimate government, Economic growth and development.	1	1
			L-86	Reduction of inequality and poverty, Accommodation of social diversity, Dignity and freedom of the citizens.		
			L-87	Exercise		
27	Challenges to Democracy	3	L-88	Thinking about challenges, Different contexts, different challenges.	1	
			L-89	Different types of challenges, Thinking about political reforms, Redefining democracy.		
			L-90	Exercise		