

NAVODAYA VIDYALAYA SAMITI: NOIDA
SPLIT-UP SYLLABUS FOR THE ACADEMIC SESSION 2019-20

CLASS: IX

SUBJECT: SCIENCE

Unit No.	Name of the Unit	Marks
I	Matter- Its Nature and behaviour	23
II	Organisation in the living world	20
III	Motion, Force and Work, Sound	27
IV	Our Environment	06
V	Food; Food Production	04
Total		80
Internal assessment		20
Grand Total		100

- Internal Assessment: Note Book Submission(NBS): 05 Marks
- Subject Enrichment Activities(SEA): 05 Marks
- Periodic Written Test(PWT): 10 Marks

Months	No. Of Days	Periods	Units/Topics to be covered	Practicals/Activities	PWT	SEA/NBS
April/June	23 days	12	Organisation in Living World Cell - Basic Unit of life : Cell as a basic unit of life; prokaryotic and eukaryotic cells, Multi cellular organisms; cell membrane and cell wall, cell vacuoles, endoplasmicreticulum, Golgiapparatus; Nucleus, chromosome-basic structure, number	1. To prepare stained temporary mounts of (a) onion peel and (b)human cheek cells and to record observations and draw their labeled diagrams		
		10	MATTER ITS NATURE AND BEHAVIOUR definition of matter- solid, liquid and gas. Charecterestics- shape, volume, density.			
		11	Motion Motion:- Distance and displacement, velocity; uniform and non unifom motion along a straight line; Acceleration ,distance-time and velocity-time graphs for uniform motion and uniformly accelerated motion,			SEA/NBS
Assessment of practical Activities and Checking of notebooks						

July	27 days	9	MATTER ITS NATURE AND BEHAVIOUR: Change of state-melting, freezing, evaporation, condensation, sublimation, Cooling by evaporation.	Practical1. To determine the melting point of ice and the boiling point of water.			
		11	Motion Force & Work: Derivation of Equations of motion by graphical method; elementary idea of uniform circular motion. Force and motion, Newton's laws of motion, inertia of a body, inertia and mass.		PWT-1	SEA/NBS	
		9	Tissues, Organs, Organ System, Organism Structure and functions of animal and plant tissues (only four types of tissues in animals; meristematic and permanent tissues in plants).	2.To identify parenchyma and sclerenchyma tissues in plants striated ,smooth and cardiac muscle fibers and nerve cells in animals from prepared slides and to draw their labeled diagrams.			
			Assessment of practical Activities and Checking of notebooks				
August	25 days	9	Organisation in the Living World Biological Diversity: Diversity of plants and animals - basic issues in scientific naming, basis of classification. Hierarchy of categories / groups, Major groups of plants (salient features) (Bacteria, Thalophyta, Bryophyta, Pteridophyta, gymnosperms and Angiosperms)	3. To study the characteristic of Spirogyra/Agaricus, Moss/Fern, Pinus (either with male or female cone) and an Angiospermic plant. Draw and give two identifying features of groups they belong to. 4. To study the external features of root, stem, leaf and flower of monocot and dicot plants.			
		10	Matter Its Nature And Behaviour IS MATTER AROUND US PURE? Elements ,compounds and mixtures ,homogeneous/heterogeneous Mixture	Practical.2: to separate the components of a mixture of sand common salt and ammonium chloride by sublimation. Practical.3: To prepare a mixture and a compound using iron filings and sulphur powder and distinguish these on the basis of appearance i.e.a)homogeneity/heterogeneity b)behaviour towards a magnet c)behaviour towards carbon di sulphide d)effect of heat. Practical . :4 To carry out the following reactions and classify them as physical and chemical changes: a)reaction between iron and copper sulphate solution. b)burning of magnesium ribbon in air. c)zinc with dil.H ₂ SO ₄ d)Heating of CuSO ₄ . Na ₂ SO ₄ (aq) and BaCl ₂ (aq)		SEA/NBS	

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		10	Motion Force & Work Momentum, force and acceleration. Elementary idea of conservation of momentum, action and reaction forces.		
			Assessment of Practical Activities and Checking of Notebook		
September	13 days	6	Organisation in the Living World Biological Diversity: Major groups of animals (salient features) (Non-chordates upto phyla and chordates upto classes).	Observing the given pictures/charts/models of earthworm, cockroach, bony fish and bird. For each organism, drawing of their picture and recording: a. One specific feature a. its phylum. b. One adaptive feature with reference to its habitat.	
		6	Matter Its Nature And Behaviour Colloids and suspension	Practicals:5.To Prepare a)true solutions of common salt, sugar and alum in water. water and eggalbumin/milk in water c)suspensions of chalkpowder and fine sandin water anddistinguish these onthe basis of, transparency, filtration criteria and stability.	PWT-2
		7	Gravitation: Gravitation; universal law of gravitation, force of gravitation of the earth(gravity), acceleration due to gravity; mass and weight; free fall.		
			Assessment of practical Activities and Checking of notebooks		
October	7 days	3	Organisation in the Living World Health and Diseases: Health and its failure. Infectious and Non-infectious diseases, their causes and manifestation. Diseases caused by microbes (Virus, Bacteria and protozoans) and their prevention, Principles of treatment and prevention. Pulse polio programmes	To study the lifecycle of a mosquito	SEANBS
		3	MATTER ITS NATURE AND BEHAVIOUR; ATOMS AND MOLECULES; Particle nature, basic units; atoms and molecules.	6. Verification of the law of conservation of mass in a chemical reaction.	
		3	GRAVITATION Floatation: Thrust and pressure. Archimedes' principle, buoyancy, elementary idea of relative density.	PRACTICALS 1. To determine the density of solid(denser than water) by using a spring balance and a measuring cylinder	

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November	25 days	12	Our Environment Physical resources: Air, Water, Soil. Air for respiration, for Combustion, for moderating temperatures; movements of across India. Air, water and soil pollution (brief introduction). Holes in ozone layer and the probable damages. Bio-geo chemical cycles in nature : Water, oxygen, carbon and nitrogen			SE/AN/BS	
		10	Work, energy and power: Work done by a force, energy, power. Work, energy and power : kinetic and potential energy, law of conservation of energy.	2. To establish the relation between the loss in weight of a solid when fully immersed in a tap Water			
		11	MATTER ITS NATURE AND BEHAVIOUR; Law of constant proportion. Atomic and molecular masses. Mole concept; relationship of mole to mass of the particles and number of particles.	b. strongly salty water, with the weight of water displaced by it by taking at least two different solids.		SE/AN/BS	
December	22 days		Matter Its Nature And Behaviour STRUCTURE OF THE ATOM; electrons, protons and neutrons. Isotopes and isobars				
		6	Sound : propagation in various media, speed of sound Range of hearing in humans Improvement in Food Resources- Improvement of Crop Yields.	PRACTICALS 3. To determine the propagated through a stretched string/slinky.	PWT-3		
			Assessment of practical Activities and Checking of notebook				
January	25	7	Improvement in Food Resources. Crop Production Management, Crop Protection Management Animal Husbandry	To test (1)the presence of starch in given food sample(2)the presence of adulterant metanil yellow in dal.		SE/AN/BS	
		4	SOUND: ultrasound;. reflection of sound; echo and SONAR Structure of the human ear (auditory aspect only).	PRACTICALS 4.To verify laws of reflection of sound			
		3	Valency, Chemical fomulae of common compounds.				
February – Revision - Assessment of practical Activities and Checking of notebooks							

Class IX-X (2019-2020)

Time : 3 Hours

Max Marks:80

S.No.	Typology of Questions	Very Short Answer (VSA) 1 Mark	Short Answer -I (SA-I) 2 Marks	Short Answer -II (SA-II) 3 Marks	Long Answer (L.A) 5 Marks	Total Marks	Weight age
1	Remembering (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories, Identify, define or recite, information)	2	-	1	1	10	15%
2	Understanding (Comprehension - to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase, or interpret information)	-	1	4	2	24	35%
3	Application (Use abstract information in concrete situation, to apply knowledge to new situations, use given content to interpret a situation, provide an example, or solve a problem)	-	1	2	2	18	26%
4	High Order Thinking Skills (Analysis & Synthesis - Classify, compare, contrast, or differentiate between different pieces of information, Organize and/or integrate unique pieces of information from a variety of sources)	-	-	1	1	8	12%
5	Inferential and Evaluative (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values)	-	1	2	-	8	12%
	Total (Theory Based Questions)	2x1=2	3x2=6	10x3=30	6x5=30	68 (21)	100 %
	Practical Based Questions (PBQs)		6x2=12			12 (6)	
	Total	2x1=2	9x2=18	10x3=30	6x5=30	80 (27)	

1. Question paper will consist of 27 questions.
2. All questions would be compulsory. However, an internal choice will be provided in three questions of 3 marks each, two questions of 5 marks each and one question (for assessing the practical skills) of 2 marks.

Note: Any Changes in the syllabus, if announced by CBSE during the academic year 2019-20, has to be incorporated in the split-up syllabus by the concerned teachers and Principals accordingly. In this regard Principals and teachers will always remain in touch with CBSE and its website.

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SPLIT-UP SYLLABUS FOR THE ACADEMIC YEAR 2019-20

CLASS IX

SUBJECT: SOCIAL SCIENCE

COURSE STRUCTURE

NITS	UNIT NAME	MARKS	PERIODS
I	India and the contemporary world – 1 (HISTORY)	20	60
II	Contemporary India -1 (GEOGRAPHY)	20	55
III	DEMOCRATIC POLITICS	20	50
IV	ECONOMICS	20	50
	TOTAL	80	215

Month	Periods	Units	Sub-Units	PWT
April & June 2019	30	<p>India and Contemporary World – I. Events and Processes. (All the three themes are compulsory) The French Revolution. (compulsory) (chapter – 1)</p> <p>Contemporary India India Land and People. India: Size and Location, Physical features of India (chapter – 1 & 2)</p> <p>NOTE [To begin with either history or Geo in April]</p>	<p>a) The Ancient Regime and its Crisis. French Society in late 18th century b) The Social forces that lead to the revolution. c) The different revolutionary groups and ideas of the time. d) The Legacy.</p> <p>a) Size and Location, Relief, Structure, Major physiographic divisions of India.</p>	
		Assessment of Subject Enrichment Activities & Note book evaluation to be done at the end of the month (HOLIDAY HOMEWORKS/ASSIGNMENTS TO BE ADMINISTERED BEFORE PROCEEDING FOR VACATION IN APRIL).		
July 2019	24	<p>What is Democracy and Why Democracy? (text book chapter – 1 & 2)</p> <p>Understanding Economic</p>	<p>a) Democracy in the contemporary world. b) What are the different ways of defining Democracy? Why has Democracy become the most prevalent form of Government in our times? c) What are the alternatives to Democracy? Arguments for and against Democracy d) Must every Democracy have the same institutions and values?</p>	