SYLLABUS 2024-25
Class-10th
Science

Book Preferred- N.C.E.R.T and Reference book for Physics, Chemistry and Biology (published by Srijan)

Periodic Test- 1st

Subjects	Chapters/Topics
Physics	Ch-11 Electricity
Chemistry	Ch-1 Chemical Reaction and Equation
Biology	Ch- 5 Life Processes(up to Transportation)

Periodic Test- 2nd

Subjects	Chapters/Topics
Physics	Ch-9 Light Reflection and Refraction
Chemistry	Ch-2 Acids, Bases and Salts
Biology	Ch-6 Control and Coordination

Half-Yearly Term

Subjects	Chapters
Physics	Ch-9 Light Reflection and Refraction Ch-11Electricity
Chemistry	Ch-1 Chemical Reaction and Equations Ch-2 Acids, Bases and Salts Ch-3 Metals and Non-Metals
Biology	Ch-5 Life Processes Ch-6 Control and Coordination Ch-7 How do Organisms Reproduce

Practicals
Physics:-

1. Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plotting a graph between V and I.
2. Determination of the equivalent resistance of two resistors when connected in series and parallel.
3. Determination of the focal length of:
   i) Concave mirror
   ii) Convex lens
   by obtaining the image of a distant object.

Biology:-

1. Preparing a temporary mount of a leaf peel to show stomata.
2. Experimentally show that carbon dioxide is given out during respiration.

Chemistry:-

1.A. Finding the pH of the following samples by using pH paper/universal indicator:

(i) Dilute Hydrochloric Acid
(ii) Dilute NaOH solution
(iii) Dilute Ethanoic Acid solution
(iv) Lemon juice
(v) Water
(vi) Dilute Hydrogen Carbonate solution

B. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with: Unit-I

a) Litmus solution (Blue/Red)
b) Zinc metal
c) Solid sodium carbonate

2. Performing and observing the following reactions and classifying them into:

A. Combination reaction
B. Decomposition reaction
C. Displacement reaction
D. Double displacement reaction

(i) Action of water on quicklime
(ii) Action of heat on ferrous sulphate crystals
(iii) Iron nails kept in copper sulphate solution
(iv) Reaction between sodium sulphate and barium chloride solutions

3. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:

i) $ZnSO_4(aq)$
ii) $FeSO_4(aq)$
iii) $CuSO_4(aq)$
iv) $Al_2(SO_4)_3(aq)$

Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result

Periodic Test- 3rd

Subjects	Chapters/Topics
Physics	Ch-12 Magnetic Effect of Electric Current
Chemistry	Ch-4 Carbon and Its Compounds
Biology	Ch-9 Heredity and Evolution

Annual Term

Subjects	CHAPTERS	Activities	Periods
Chemistry	Ch-1 Chemical Reactions and Equations	1. To show the burning of magnesium ribbon. 2. Show the reaction on mixing lead nitrate and potassium iodide.	8
	Ch-2 Acids, Bases and Salts	1. Show the acidic, basic and neutral nature of the following; Hydrochloric acid, Sulphuric acid, acetic acid, caustic soda and milk of magnesia. 2. Show the reaction of baking soda/soda ash with HCl.	9
	Ch-3 Metals and Non-Metals	1. What happens when Sodium and potassium metal are dropped in cold water? 2. Take three salts and heat them in spatula, note down their flame colour.	10
	Ch-4 Carbon and Its Compounds	1. Take the carbon compound and heat it on spatula, note down the nature of flame. 2. Take three test tubes, take three sample of water from different locations and add 10 g of detergent in three test tubes, shake them and measure the strength of leather formed.	12
Biology	Ch5L-ife Processes	1.How will you show that chlorophyll is required for photosynthesis? 2.Show the indication of digested starch in mouth with iodine.	19
	Ch-6 Control and Coordination	1.Show the nastic movement by touch me not plant. 2. Make a modal of location, function and hormone of all the endocrine glands studied by you.	10
	Ch-7How do Oraganisms Reproduce	1. To show the presence of spirogyra in pond water 2. To study the dicotyledon seeds	9
	Ch-8Heredity and Evolution	1. To collect the different seeds of Pea, to study three contrasting character.	5

	Ch-13 Our environment		7
Physics	Ch-9 Light	1.To observe two surfaces of spoon for convex and concave mirror. 2.To find the rough focal length of concave mirror and convex lens.	18
	Ch-10 Human Eye and its Colourful World	1. To show the recombination of white light using prism.	12
	Ch-11 Electricity	1. To show the dependence of resistance on various factors	12
	Ch-12 Magnetic Effect of Electric Current	1.To show the pattern of magnetic field lines using bar magnetic and iron fillings.	10

Practicals

Physics:-

1. Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.
2. Tracing the path of the rays of light through a glass prism.

Biology

1. Studying (a) binary fission in Amoeba, and (b) budding in yeast and Hydra with the help of prepared slides.
2. Identification of the different parts of an embryo of a dicot seed (Pea, gram or red kidney bean).

Chemistry

1. Study of the following properties of acetic acid (ethanoic acid): Unit- I
   i) Odour
   ii) solubility in water
   iii) effect on litmus
   iv) reaction with Sodium Hydrogen Carbonate
2. Study of the comparative cleaning capacity of a sample of soap in soft and hard water.

Note:-

1. Both annual and half-yearly activities along with whole syllabus will come in annual examination.
2. Prepare question/answer from Reference book also.
3. In preboard exams, whole syllabus will come.

Syllabus For Class X Session: 2024 -25

Social Science

PERIODIC TEST-1

Ch-1 Resources and Development (Geography)

Ch-1 Power Sharing(PoliticalScience)

Ch-1 Development (Economics)

PERIODIC TEST-2

Ch-1 The Rise of Nationalism In Europe(History)

Ch-2 Federalism (Pol.Sci.)

Ch-2 Sectors of the Indian Economy(Economics)

HALF YEARLY EXAMINATION :(TERM-1)

Ch-1Nationalism In Europe

Ch-2 Nationalism in India

Ch-3 The making of the Global World

Geography:

Ch-1 Resources and Development

Ch-2 Forest and Wildlife

Ch-3 Water Resources

Ch-4 Agriculture

Political Science:

Ch-1 Power Sharing

Ch-2 Federalism

Ch-4 Gender Religion and Cast

Economics

: Ch-1 Development

Ch-2 Sectors of the Indian Economy

Ch-3 Money and Credit

PERIODIC TEST-3

Ch-5 Mineral and Energy Resources

Ch-6 Political Parties

Ch-4 Globalization and the Indian Economy

Remaining Chapters

Ch-4 The Age of Industrialisation(History)

Ch-5 Print Culture (History)

Ch-6 Manufacturing Industries (Geography)

Ch-7 Life Lines of Indian Economy (Geography) Only for map work.

Ch-7 Outcomes of Democracy (Pol.Science)

- **Map work will be done according to theGeography and History.**

Map Syllabus

- **Whole syllabus will be included in Pre Boards and Final Board Examinations.**

LIST OF MAP SYLLABUS CLASS X (2022-23)

A. HISTORY (Outline Political Map of India)

Chapter - 3 Nationalism in India – (1918 – 1930) for locating and labeling / Identification

1. Indian National Congress Sessions:

a. Calcutta (Sep. 1920) b. Nagpur (Dec. 1920) c. Madras (1927)

2. Important Centers of Indian National Movement a. Champaran (Bihar) - Movement of Indigo Planters b. Kheda (Gujarat) - Peasant Satyagraha c. Ahmedabad (Gujarat) - Cotton Mill Workers Satyagraha d. Amritsar (Punjab) - Jallianwala Bagh Incident e. Chauri Chaura (U.P.) - Calling off the Non-Cooperation Movement
Dandi (Gujarat) - Civil Disobedience Movement

B. GEOGRAPHY (Outline Political Map of India)

Chapter 1: Resources and Development (Identification only)

a. Major soil Types

Chapter 3: Water Resources (Locating and Labeling)

Dams: a. Salal b. Bhakra Nangal c. Tehri d. Rana Pratap Sagar e. Sardar Sarovar f. Hirakud g. Nagarjuna Sagar h. Tungabhadra

Chapter 4: Agriculture (Identification only)

a. Major areas of Rice and Wheat b. Largest / Major producer states of Sugarcane, Tea, Coffee, Rubber, Cotton and Jute

Chapter 5: Minerals and Energy Resources Minerals (Identification only)

a. Iron Ore mines Mayurbhanj Durg Bailadila Bellary Kudremukh b. Coal Mines Raniganj Bokaro Talcher Neyveli c. Oil Fields Digboi Naharkatia Mumbai High Bassein Kalol Ankleshwar Power Plants (Locating and Labeling only) a. Thermal Namrup Singrauli Ramagundam b. Nuclear
Narora Kakrapar Tarapur Kalpakkam

Chapter 6: Manufacturing Industries (Locating and Labeling Only)

Software Technology Parks:

a. Noida b. Gandhinagar c. Mumbai d. Pune e. Hyderabad f. Bengaluru g. Chennai h. h-Thiruvananthapuram

Chapter 7: Lifelines of National Economy

Major Ports: (Locating and Labeling)

a. Kandla b. Mumbai c. Marmagao d. New Mangalore e. Kochi f. Tuticorin g. Chennai h. Visakhapatnam i. Paradip j. Haldia

International Airports: a. Amritsar (Raja Sansi - Sri Guru Ram Dass jee) b. Delhi (Indira Gandhi) c. Mumbai (Chhatrapati Shivaji)
Chennai (MeenamBakkam) e. Kolkata (Netaji Subhash Chandra Bose) f. Hyderabad (Rajiv Gandhi)