**BAL BHARATI PUBLIC SCHOOL** 



## COMMON ANNUAL EXAMINATION (2024-2025) SYLLABUS

CLASS:

IX

SUBJECT: SCIENCE

**TEXTBOOKS:** 

1.Science Textbook for Class IX

2. NCERT EXEMPLAR

S.NO.	UNIT/CHAPTER /TOPIC	SUBTOPICS	WEIGHTAGE
1.	CH-1 MATTER IN OUR SURROUNDINGS	<ul> <li>1.1 Physical Nature of Matter</li> <li>1.2 Characteristics of Particles of Matter</li> <li>1.3 States of Matter</li> <li>1.4 Can Matter Change its State?</li> <li>1.5Evaporation</li> </ul>	05
2.	CH-2 Is matter around us pure?	<ul> <li>2.1 What is a Mixture?, Types</li> <li>2.2 What is a Solution?, Types</li> <li>2.3 Physical and Chemical Changes (excluding separating the components of a mixture).</li> <li>2.4 What are the Types of Pure Substances?</li> </ul>	04
3.	CH-3 ATOMS AND STRUCTURE	3.1 Laws of Chemical Combination 3.2 Atom, Symbols, Atomic mass 3.3 Molecule (Elements & Compounds), Ions 3.4 Formula writing 3.5 Molecular mass, Formula Unit mass	08
4.	CH-4 STRUCTURE OF THE ATOM	<ul> <li>4.1 Charged Particles in Matter- Electrons, protons and neutrons</li> <li>4.2 Structure of an Atom</li> <li>4.3Electrons Distribution in Orbits</li> <li>4.4 Valency</li> <li>4.5 Atomic number and Mass number</li> <li>4.6 Isotopes, Isobars</li> </ul>	08
5.	CH-5 THE FUNDAMENTAL UNIT OF LIFE	5.1 What are Living Organisms Made Up of?	09

		<ul> <li>5.2 What is a Cell Made Up of? What is the Structural Organization of a Cell?</li> <li>5.2.1 Plasma Membrane or Cell Membrane</li> <li>5.2.2 Cell Wall</li> <li>5.2.3 Nucleus</li> <li>5.2.4 Cytoplasm</li> <li>5.2.5 Cell Organelles</li> <li>5.2.5 (I) Endoplasmic Reticulum (Er)</li> <li>5.2.5 (Ii) Golgi Apparatu</li> <li>5.2.5 (Iv) Mitochondria</li> <li>5.2.5 (V) Plastids</li> <li>5.2.5 (Vi) Vacuoles</li> <li>Cell Division</li> </ul>	
6.	CH-6 TISSUES	<ul> <li>6.1 Are Plants and Animals Made of Same Types of Tissues?</li> <li>6.2 Plant Tissues</li> <li>6.2.1 Meristematic Tissue</li> <li>6.2.2 Permanent Tissue</li> <li>6.2.2 (I) Simple Permanent Tissue</li> <li>6.2.2 (Ii) Complex Permanent Tissue</li> <li>6.3 Animal Tissues</li> <li>6.3.1 Epithelial Tissue</li> <li>6.3.2 Connective Tissue</li> <li>6.3.3 Muscular Tissue</li> <li>6.3.4 Nervous Tissue</li> </ul>	09
7.	CH-12 IMPROVEMENT IN FOOD RESOURCES	<ul> <li>12.1 Improvement in Crop Yields</li> <li>12.1.1 Crop Variety Improvement</li> <li>12.1.2 Crop Production Management</li> <li>12.1.2 (I) Nutrient Management</li> <li>12.1.2 (Ii) Irrigation</li> <li>12.1.2 (Iii) Cropping Patterns</li> <li>12.1.3 Crop Protection Management</li> <li>12.2 Animal Husbandry</li> <li>12.2.1 Cattle Farming</li> <li>12.2.2 Poultry Farming</li> <li>12.2.3 Fish Production</li> <li>12.2.4 Bee-Keeping</li> </ul>	10
8.	CH-07 MOTION	<ul> <li>7.1 Describing motion</li> <li>7.2 Measuring rate of motion</li> <li>7.3 Rate of change of velocity</li> <li>7.4 Graphical representation of motion</li> <li>7.5 Equations of motion</li> <li>7.6 Uniform circular motion</li> </ul>	3

9.	CH-8 FORCE AND LAWS OF MOTION	<ul> <li>8.1 Balanced and Unbalanced forces</li> <li>8.2 First law of motion</li> <li>8.3 Inertia and Mass</li> <li>8.4 Second law of motion</li> <li>8.5 Third law of motion</li> </ul>	5
10.	CH-9 GRAVITATION	<ul> <li>9.1 Gravitation</li> <li>9.2 Free fall</li> <li>9.3 Mass</li> <li>9.4 Weight</li> <li>9.5 Thrust and Pressure</li> <li>9.6 Archimedes'Principle</li> </ul>	5
11.	CH-10 WORK AND ENERGY	10.1 Work 10.2 Energy 10.3 Rate of doing work (excluding commercial unit of energy)	7
12.	CH-11 SOUND	11.1 Production of sound 11.2Propagation of sound 11.3Reflection of sound 11.4Range of hearing 11.5Applications of ultrasound	7
			TOTAL MARKS= 80

FOR CLASS 9: THEORY (Pen and Paper Test):80 marks INTERNAL ASSESSMENT:20 marks