# CLASS – VIII SUBJECT : SCIENCE

**SESSION : 2023-2024 GENERAL INSTRUCTIONS:-**

1. Teaching and learning process of Science

should be done with the help of activities (as given in NCERT book , Vidya Bharti Lab

Manual) And according to NEP.

1. Aims and objectives of the topic should be made clear to the students and also written in

diary of the teacher.

1. Practical and activity oriented teaching is desirable.
2. Following activities / campaigns need to be conducted during the session 2023-24 along with academics.
3. PT syllabus will be included in Terminal Examination.
4. Project work chapters will not be included in terminal examination.
5. Teachers should try to make teaching Interesting and joyful.

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| **S.No.** | **Months** | **Activities** |
| 1. | April | * Celebration of Earth Day 22nd April ( Painting, Slogan Writing Poster making etc.) * World Biodiversity Day and wild life (Quiz etc.) |
| 2. | May | \* Debate on topic 'My fabric is superior.' |
| 3 . | June | **Holiday Homework** |
| 4. | July | * Plantation Drive * Cleanliness Drive (Stagnant Water, Mosquito Breeding Prevention etc.) |
| 5 . | August | * Organisation of Health week * Presentation (PPT, models, Project Work) |
| 6. | September | Mid Term Exam |
| 7. | October | Any visit (science museum ,science centre ,Nehru Planetarium, mothers Dairy plant, biodiversity park or any other place) |

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| **S.No.** | **Months** | **Activities** |
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| 8. | November | \* Air and Noise pollution awareness activities.  \* Say no to crackers ( Rally /speech in Assembly )  \* Anti fires crackers campaign to reduce Noise pollution.  \* Essay competition on noise pollution  \* debate on Air Pollution ( Stop open burning garbage) |
| 9. | December | \* Minimization of plastic packages such as disposables like  thermocol plates, glass, plastic cups etc. |
| 10. | January | * Waste as resource (at school) * Awareness on Yamuna River / Water Conservation. |
| 11. | February | Contribution of Various Ancient Indian Scientists such as : Sushruta ,kanad,Nagarjun or  or any other Indian Scientist.   * Celebration of National Science day (28th February) |
| 12. | March | \* Final Exam |
|  |  | \* Khelo Holi Naturally. |

**Note :**-If any other activity / campaign is conducted by the teacher then it should be informed to subject incharge (Prant Pramukh)

**Examination Pattern (2023-24)**

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| 1. Subject Enrichment (10 Marks) : | * Holiday Homework * Lab Work,Research,Project Work,Concept Map * Art Inegration * Quiz,Group Discussion * Debate,Oral Test * Viva Voice (Lab Manual) * Science Fair Achievement |
| 2 Portfolio  (5 Marks) | * Notebook * Assignment * Class Work |
| 1. Periodic Assessment   Pen Paper Test  ( 5Marks ) | **2 PT of 20 Marks in Each Term**  **Weightage-5 marks** |
| 4 Mid-term Exam.  Annual Term Exam. | **80 Marks** |
|  | **Total = 100 Marks** |

**MID TERM EXAM. (2023 - 24)**

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| **S.N.** | **Month** | **Ch.**  **No.** | **Chapters Topic** | **Activities and Lab Manual** | **Marks** | **Suggested Teaching**  **learning material (TLM)** |
| 1. | April | 1 | Crop production & Management PT-1) | Seed Selection  Activity given in NCERT | 14 | Agricultural implements (tools) Cutouts/models/real  objects |
| 2. | April | 2 | Micro Organisms : Friends & Foe PT-1) | Exp no 7 ,page no 13 ,lab manual | 12 | Yeast, Bread (with mould), preservatives, etc. |
| 3. | May | 5 | Conservation of plants and animals | Study the biodiversity of a park nearby prepare a detailed report with the photographs and sketches of flora and fauna. | 14 | Charts of endangered animals/plants ,school garden |
| 4 | July | 8 | Force and Pressure PT-2 | Pressure exerted by liquid and gases | 12 | Ball,objects,Table,  Bottles, Rubber,Syringe etc |

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| **S.N.** | **Month** | **Ch.**  **No.** | **Chapters Topic** | **Activities and Lab Manual** | **Marks** | **Suggested Teaching**  **learning material (TLM)** |
| 5. | July | 9 | Friction | Activities given in  NCERT Textbook | 10 | Ball bearings, Wheels  (toys), shoe |
| 6. | August | 6 | Reproduction in Animals (PT-2) | Slide of Binary fission in Amoeba, budding in Hydra  Discussion/debate on IVF  technology and AIDS | 14 | Charts of Reproductive system, organs |
| 7. | – |  | Chemical formulae |  | 04 |  |
|  |  |  |  | **Total** | **80** | **Marks** |

# Term-II

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| **S.N.** | **Month** | **Ch.**  **No.** | **Chapters Topic** | **Activities and Lab Manual** | **Marks** | **Suggested Teaching**  **learning material (TLM)** |
| 1. | – | 1 | Crop production and  Management | Stated 1st term syllabus | 6 | – |
| 2. | - | 6 | Reproduction in Animals | Stated 1st term syllabus | 6 | - |
| 3. | October | 4 | Combustion and flame (PT-3) | Expt. no. 1, page 6  practical use of fire extinguisher. | 8 | Candle, magnesium ribbon, paper cups, fire extinguisher,  glass rod |
| 4. | October | 3 | Coal and Petroleum  .(PT-3) | Activity no 1 given in NCERT Textbook Textbook Page -63 | 7 | Coal, A piece of wood,Charcoal,chart etc |

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| **S.N.** | | **Month** | | **Ch.**  **No.** | | **Chapters Topic** | | **Activities and Lab Manual** | | **Marks** | | **Suggested Teaching**  **learning material (TLM)** | |
| 5 | | November | | 7 | | Reaching the age of Adolescence | | Debate on adolescent pregnancy, sex determination is good or bad/debate on early marriage  Myths and taboos | | 12 | | Chart of endocrine system | |
| 6. | | November | | 10 | | Sound | | Expt. no. 6 page 11 | | 10 | | Different musical  instruments, ektara rubber band | |
| 7. | | December | | 11 | | Chemical effects of electric current | | Expt. no. 5 page 10,  experiment no 9 page 16 | | 7 | | Different objects like lemon,  potato, cell, bulb, battery, LED | |
| 8. | | December | | 12 | | Some natural phenomenon | | Making electroscope, activities of book | | 8 | | Glass jar, foil paper, paper clip, wires etc. | |
| 9. | | January | | 13 | | Light (PT-4) | | Expt. 12 page 21, other  activities of book | | 12 | | Mirrors, torch,  kaleidoscope, periscope | |
| 10 | | – | |  | | Chemical formula | | – | | 4 | | – | |
|  | |  | |  | |  | | **Total** | | **80** | | **Marks** | |
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**Chemical Formulae (Class - 8 - Science)**

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| S.No. | Chemical Name | Formula |
| 1 | Iron oxide (Rust) | Fe2O3.xH2O |
| 2 | Water | H2O |
| 3 | Carbon dioxide | CO2 |
| 4 | Magnesium oxide | MgO |
| 5 | Calcium hydroxide (Lime water) | Ca(OH)2 |
| 6 | Magnesium hydroxide (Milk of magnesia) | Mg(OH)2 |
| 7 | Sodium chloride (Common salt) | NaCl |
| 8 | Copper sulphate (Blue Vitriol) | CuSO4 |
| 9 | Zinc sulphate | ZnSO4 |
| 10 | Iron sulphate | FeSO4 |
| 11 | Sodium carbonate | Na2CO3 |
| 12 | Sodium bicarbonate | NaHCO3 |
| 13 | Copper carbonate | CuCO3 |
| 14 | Copper hydroxide | Cu(OH)2 |
| 15 | Sulphur dioxide | SO2 |
| 16 | Sulphurous acid | H2SO3 |
| 17 | Hydrochloric acid | HCl |
| 18 | Sulfuric acid : | H2SO4 |
| 19 | Carbon monoxide | CO |
| 20 | Calcium oxide (Quicklime) | CaO |

**Value Addition to Science Learning**

**Note** : With the aim of inculcating interest in science, students should be encouraged to visit India science channel [www.indiascience.in](http://www.indiascience.in/)

Download India science mobile app. Engage with Science

Vigyan prasar

