**CLASS – VII**

**SUBJECT: SYLLABUS OF 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 and Vidya Bharti Lab Manual).

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

3. Practical and activity oriented teaching is desirable.

4. Following activities/ campaigns need to be conducted during the session 2023-24 along with academics.

5. PT syllabus will be included in Terminal Examination.

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| S.NO. | MONTH | ACTIVITIES |
| 1 | APRIL | \* Celebration of Earth Day 22nd April (T-Shirts, Painting, Slogan Writing Poster making etc.)\*Adolescence education program  |
| 2 | MAY | Nukkad Natak on save water |
| 3 | JULY | \* Plantation Drive, Celebration of sc. Week |
| 4 | AUG. | \*Sehbhoj, preparation of science fair(Models, Quiz, Exp. , Paper Reading) |
| 5 | SEP. | MID TERM EXAMS |
| 6 | OCT. | Air and Noise Pollution awareness activities. \* Say No to Crackers (Rally / Speech in Assembly), Nukkad Natak on air and water pollution |
| 7 | NOV. | \* Any Visit (Science Museum / Science Centre. Nehru Planetarium, Mother Dairy Plant, Biodiversity Park or any other Place. |
| 8 | DEC | \* Minimization of plastic packages such as disposables like thermocol plates, glass, plastic cups etc. \* Best out of waste activity and toy making activity. |
| 9 | JAN. | \* Waste as resource (at school)\* Documentary watch. |
| 10 | FEB. | \* Revision through activities, \* Celebration of National Science day (28th February) |
| 11 | March | \* Khelo Holi Naturally |

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

**Examination Pattern (2023-24)**

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| 1. **Periodic Test**

**(Pen paper test) (5Marks)**  | **2 PTs of 20 marks each in both half yearly and annual exam.** **Weightage – 5 marks**  |
|  **2. Subject Enrichment**  **(Activity File) (10 Marks)** |  **Short test, oral test, quiz, concept maps, survey project, Research, lab experiments, art integration, discussion with teacher/ class discussion, group discussion, doing with hands, chart or model making, holiday h.w.**  |
| 1. **Portfolio**

**( Notebook-c.w. & h.w.)** **(5 Marks)** | **Class work notebook, home work** |
| 1. **Mid-term Exam.**

 **Annual Term Exam.** **80 marks** | **Examination conducted at Samiti level.** |
| **Total = 100 Marks** |  |

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

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| **S.NO.** | **MONTH** | **CHAPTERS**  | **ACTIVITIES**  | **MARKS** | **SUGGESTED TEACHING LEARNING MATERIAL** |
| **1.** | **APRIL** | **Ch -1 NUTRITION IN PLANTS (PT-1)** | * **Prepare a chart on photosynthesis.**
* **Showing the slides of stomata**
* **Prepare bread mould.**
 | **12** | **Slides, microscope, leaf, bread.**  |
| **2.** | **APRIL** | **CH-2 NUTRITION IN ANIMALS (PT-1)** | * **Effect of saliva on starch**
* **Regions of tongue for different tastes.**
* **Chart/model / cut outs based on digestion.**
 | **12** | **Charts and models of digestive system, test tube, different food items, iodine solution.** |
| **3.** | **MAY** | **CH- 3 HEAT** **(PT2)** | * **Measuring temperature using clinical & lab. thermometer.**
* **Reading digital thermometer.**
 | **12** | **Cinical, lab. And digital thermometer.** **Role play activity.** |
| **4.** | **JULY** | **CH- 6 RESPIRATION IN ORGANISMS (PT-2)** | * **Making chart / cut outs based on human respiratory system.**
 | **14** | **Model of respiratory system.** |
| **5.**  | **JULY AND AUG** | **CH-4 ACID, BASES AND SALTS**  | * **Identification of acid and base using different indicators,**
 | **12**  | **Test tube, indicators, acids and bases** |
| **6.**  | **AUG** | **CH- 5 PHYSICAL AND CHEMICAL CHANGES** | * **Act. 6.6, 6.7 and 6.8**
 | **12** | **Magnesium ribbon, spirit lamp, tongs, copper sulphate, iron blade, vinegar, baking soda.**  |
| **7** | **AUG** | **SYMBOLS** |  | **6** |  |

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

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| **S.NO.** | **MONTH** | **CHAPTERS** | **ACTIVITIES**  | **MARKS** | **SUGGESTED TEACHING LEARNING MATERIAL** |
| **1.** | **OCT.** | **CH- 7 TRANSPORTATION IN ANIMALS AND PLANTS (PT-3)** | * **Making a chart on structure of heart and excretory system**
 | **12** | **Model of heart.** |
| **2.** | **OCT.** | **CH- 12 FOREST OUR LIFELINE.** **(PT3)** | * **Making list of forest products.**
* **Making project**
 | **8** | **Story telling method.** |
| **2.**  | **NOV.** | **CH-9 MOTION AND TIME** **(PT4)** | * **Measurement of time period of a simple pendulum**
* **Prepare model of sand clock**
* **Plotting D-T graph.**
 | **10** | **Bob, stop watch, thread, iron stand .** |
| **3.**  | **NOV.** | **CH-8 REPRODUCTION IN PLANTS (PT-4)** | * **Dissection of flower, identify parts and draw .**
 | **12** | **Flower, forceps, watch glass.** |
| **5.**  | **DEC.** | **CH-11 LIGHT** | * **Images formed by mirrors and lenses.**
* **Make Newton’s disc.**
* **Observe spectrum through prism**
 | **12** | **Lenses, mirrors, prism, steel spoon etc.**  |
| **7.** | **DEC. AND JAN.** | **CH-10 ELECTRIC CURRENT AND ITS EFFECTS** | * **Making electric circuit and electromagnet**
 | **8** | **Electrical components, used MCBs and fuses** |
| **10.**  | **JAN** | **CH-13 WASTE WATER STORY** | * **Project making activity**
 | **7** | **--** |
| **11.** | **FEB.(REPEATED)** | **CH-5 ACID, BASES AND SALTS**  | * **Identification of acid and base using different indicators,**
 | **5** | **Test tube, indicators, acids and bases** |
| **12.**  | **FEB** | **SYMBOLS** | * **Make flash cards**
 | **6** | **Flash cards** |
|  |  |  | **TOTAL**  | **80** |  |

**SYMBOLS**

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| **S.NO.** | **ELEMENT** | **SYMBOL** | **METAL / NON-METAL** |
| **1** | **SODIUM** | **Na** | **METAL** |
| **2** | **MAGNESIUM** | **Mg** | **METAL** |
| **3** | **POTASSIUM** | **K** | **METAL** |
| **4** | **CALCIUM** | **Ca** | **METAL** |
| **5** | **IRON** | **Fe** | **METAL** |
| **6** | **COBALT** | **CO** | **METAL** |
| **7** | **COPPER** | **Cu** | **METAL** |
| **8** | **SILVER** | **Ag** | **METAL** |
| **9** | **GOLD** | **Au** | **METAL** |
| **10** | **ZINC** | **Zn** | **METAL** |
| **11** | **MERCURY** | **Hg** | **METAL** |
| **12** | **ALUMINIUM** | **Al** | **METAL** |
| **13** | **LEAD** | **Pb** | **METAL** |
| **14** | **CARBON** | **C** | **NON-METAL**  |
| **15** | **NITROGEN** | **N** | **NON-METAL** |
| **16** | **OXYGEN** | **O** | **NON-METAL** |
| **17** | **FLOURINE** | **F** | **NON-METAL** |
| **18** | **PHOSPHOROUS** | **P** | **NON-METAL** |
| **19** | **SULPHUR** | **S** | **NON-METAL** |
| **20**  | **CHLORINE** | **Cl** | **NON-METAL** |
| **21** | **BROMINE** | **Br** | **NON-METAL** |
| **22** | **IODINE** | **I** | **NON-METAL** |