| SYLLABUS FOR THE SESSION 2023-24 |   |  |   |  |  |
|----------------------------------|---|--|---|--|--|
| CLASS - IX SUBJECT - Science     |   |  |   |  |  |
| MONTH                            | TEXT BOOK -   | DIGITAL RESOURCES                              | SUBJECT ENRICHMENT ACTIVITIES   |  |  |
| April                            | CH-1 (CHEMICAL<br>REACTION AND<br>EQUATIONS)<br>CH-10 (LIGHT-<br>REFLECTION AND<br>REFRACTION)        | Explanation from E-<br>Library                 | 1. PERFORMING AND OBSERVING THE FOLLOWING REACTION AND CLASSIFY THEM INTO: (a) COMBINATION REACTION (b) DECOMPOSITION REACTION ( C) DISPLACEMENT REACTION (D) DOUBLE DISPLACEMENT RECTION. 2. DETERMINATION OF FOCAL LENGTH: (a) CONCAVE MIRROR (b) CONVEX LENS 3. TRACING THE PATH OF RAY OF LIGHT PASSING THROUGH A RECTANGULAR GLASS SLAB FOR DIFFERENT ANGLES OF INCIDENCE. MEASURE THE ANGLE IF INCIDENCE, ANGLE OF REFRACTION, ANGLE OF EMERGENCE AND INTERPRET THE RESULT. |  |  |
| May                              | CH-6(LIFE<br>PROCESS) CH-15<br>(OUR<br>ENVIRONMENT)   | Animated videos                                | 4. PREPARING A TEMPORARY MOUNT OF A LEAF PEEL TO SHOW STOMATA. 5. EXPERIMENTALLY SHOW THAT CARBON DIOXIDE IS GIVEN OUT DURING RESPIRATION.  |  |  |
| July                             | CH-2 (ACID, BASE<br>AND SALT) CH-11<br>(HUMAN EYE AND<br>COLOURFUL<br>WORLD)                          | Mind map and online<br>quiz from back exercise | 6. FINDING THE PH OF FOLLOWING SAMPLES BY USING PH PAPER AND UNIVERSAL INDICATOR: (a) DILUTE HYDROCHLORIC ACID, (b) DILUTE NAOH SOLUTION (c) DILUTE ETHANOIC ACID SOLUTION (d) LEMON JUICE (e) WATER (f) DILUTE HYDROGEN CARBONATE SOLUTION 7. TRACING THE PATH OF THE RAYS OF LIGHT THROUGH A GLASS PRISM  |  |  |
| August                           | CH- 7 (CONTROL<br>AND<br>COORDINATION<br>IN PLANTS AND<br>ANIMALS) CH-3<br>(METALS AND<br>NON METALS) | Demonstration by<br>video                      | 8. OBSERVING THE ACTION OF Zn, Fe, Cu, AL METALS ON THE FOLLOWING SALT SOLUTIONS: ZNSO4, FeSO4, CuSO4, Al2(SO4) ARRANGING Zn, Fe, Cu, Al IN DECREASING ORDER OF REACTIVITY BASED ON THE ABOVE RESULTS   |  |  |

| September | CH-12<br>(ELECTRICITY)  |                               | 9. 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. 10. DETERMINATION OF THE EQUIVALENT RESISTANCE OF TWO RESISTORS WHEN CONNECTED IN SERIES AND PARALLEL.  |
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| October   | CH-8 (HOW DO<br>WE REPRODUCE)<br>CH-4 (CARBON<br>AND<br>COMPOUNDS)    | Flow chart from E-<br>library | STUDYING (A) BINARY FISSION IN AMOEBA, AND (B) BUDDING IN YEAST AND HYDRA WITH THE HELP OF PREPARED SLIDES. 12. IDENTIFICATION OF THE DIFFERENT PARTS OF AN EMBRYO OF A DICOT SEED (PEA, GRAM OR RED KIDNEY BEAN). 13. STUDY OF THE FOLLOWING PROPERTIES OF ACETIC ACID (ETHANOIC ACID): i) ODOUR ii) SOLUBILITY IN WATER iii) EFECT ON LITMUS iv) REACTION WITH SODIUM HYDROGEN CARBONATE 14. STUDY OF THE COMPARATIVE CLEANING CAPACITY OF A SAMPLE OF SOAP IN SOFT AND HARD WATER. |
| November  | CH-13 (MAGNETIC<br>EFFECT OF<br>ELECTRIC<br>CURRENT) CH-9<br>HEREDITY | Animated videos               | Case study based activities   |
| December  | PREBOARD  | Online quiz and               |   |
| January   | PREBOARD  | Online quiz and               |   |
|           | BOARD EXAM  |                               |   |