SYLLABUS FOR THE SESSION 2023-24

| SUBJECT-Maths |  |  |  |
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| MONTH | CHAPTERS | DIGITAL RESOURCES | SUBJECT ENRICHMENT ACTIVITIES |
| May | chapter-1 Sets chapter-2 Relations and functions | E-library notes,smart class | 1.To find the number of subsets of a given set and verify that if a set has $n$ number of elements then the total number of subsets is $\mathbf{2}^{\wedge} \mathbf{n}$. <br> 2. To verify distributive law for the three given non-empty sets $A, B$ and $C . A \cup(B \cap C)=(A \cup B) \cap(A \cup C)$. <br> 3.To verify that for two sets $A$ and $B, n(A \times B)=m n$ and the total number of relations from $A$ to $B$ is $2^{\wedge} m n$, where $n(A)=m$ and $n(B)=n$. |
| July | chapter-3 Trigonometric functions chapter-4 Complex numbers and quadratic equations | E-library notes,smart class | 1. To verify the realtion between the degree measure and the radian measure of an angle. <br> 2. To find the values of sine and cosine functions in second, third and fourth quadrants using their given values in first quadrant. <br> 3.To interpret geometrically the meaning of $\mathrm{i}=\mathrm{V}-1$ and its integral powers. |
| August | chapter-5 linear inequalities chapter-6 permutations and combinations chapter-7 binomial theorem | E-library notes,smart class |  |
| September | chapter-8 Sequence and series | E-library notes,smart class | To demonstrate that the arithmetic mean of two different positive numbers is always greater than or equal to the geometric mean. |
| October | chapter-9 Straight lines chapter-10 Conic sections | E-library notes,smart class |  |


| November | chapter-11 Introduction to 3-D <br> geometry <br> chapter-12 Limits and <br> derivatives | E-library notes,smart class <br> $\operatorname{Lim} f(x)=x^{\wedge} \mathbf{2 - c \wedge 2 / x}-\mathbf{c}$ <br> $x \rightarrow c$ |  |
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| December | chapter-13 Statistics <br> chapter-14 Probability | E-library notes,smart class | T o verify the addition theorem on probabilities i.e. <br> $P(A \cup B)=P(A)+P(B)-P(A \cap B)$. |
| January | Revision |  |  |

