## NAVY EDUCATION SOCIETY

CONDUCT OF COMMON ANNUAL EXAMINATION FO AY 2024-25 FOR NAVY CHILDREN SCHOOLS

| MONTH | $\begin{array}{\|l} \hline \mathrm{CH} \\ \mathrm{AP} \\ \mathrm{TE} \\ \mathrm{R} \\ \mathrm{NO} \end{array}$ | CHAPTER NAME | NO.OF TEACHIN G PERIOD S | UNIT (MARK) | LAB ACTIVITIES |
| :---: | :---: | :---: | :---: | :---: | :---: |
| March - <br> May | 1 | Relations and Functions | 15 | UNIT I <br> (8) | 1. To verify that the relation $R$ in the set $L$ of all lines in a plane, defined by $R=\{(I, m): I \perp m\}$ is symmetric but neither reflexive nor transitive. <br> 2. To demonstrate a function which is not one -one but is onto. |
|  | 2 | Inverse <br> Trigonometric Functions | 15 |  |  |
|  | 3 | Matrices | 25 | UNIT II (10) |  |
| June | 4 | Determinants | 25 |  | 3. To explore the principal value of the function $\sin ^{-1} x$ using a unit circle. <br> 4. To find analytically the limit of a function $f(x)$ at $x=c$ and also to check the continuity of the function at that point. |
|  | 5 | Continuity \& Differentiability | 20 | UNIT III (35) |  |
| July | 6 | Application of Derivatives | 10 |  | 5. To verify that amongst all the rectangles of the same perimeter, the square has the maximum area. |
|  | 7 | Integrals | 20 |  |  |
| August | 8 | Application of Integrals | 15 |  | 6. To verify geometrically that $\vec{c} \times(\vec{a}+\vec{b})=\vec{c} \times \vec{a}+\vec{c} \times \vec{b}$ <br> 7. To locate the points to given coordinates in space, measure the distance between two points in space and then to verify the distance using distance formula. |
|  | 9 | Differential Equations | 15 |  |  |
|  | 10 | Vector Algebra | 15 |  |  |
| Septemb er | 11 | 3 D Geometry | 15 | UNIT IV (14) | 8. To understand the concepts of local maxima, local minima and point of inflection. <br> 9. To measure the shortest distance between two skew lines and verify it analytically. |


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