# Lab Activities of Mathematics (2024-25) <br> IX 

| Month | Practical/Activity to be conducted |
| :---: | :---: |
| April | 1. To find a hidden picture by plotting and joining the various points with given coordinates in a plane. <br> 2. To verify experimentally that if two lines intersect, then <br> a) the vertically opposite angles are equal. <br> b) the sum of two adjacent angles is $180^{\circ}$. <br> c) the sum of all four angles is $360^{\circ}$. |
| May | 3. To verify experimentally that the sum of the angles of a given quadrilateral is $360^{\circ}$. <br> 4. To verify experimentally the different criteria for congruency of the triangles using triangle kit. |
| July | 5. To verify that the sum of the angles of a triangle is $180^{\circ}$ using triangle kit. <br> 6. To verify that the triangles on the same base and between the same parallels are equal in area using parallelogram and triangle kit. |
| August | 7. To verify that the angles subtended by an arc of a circle at the centre are double the angle subtended by it at any point on the remaining part of the circle using circle kit. <br> 8. To verify that the opposite angles of a cyclic quadrilateral are supplementary using quadrilateral cutouts. |
| October | 9. To find the formula for the area of a trapezium experimentally. <br> 10. To find the formula for the curved surface area of the right circular cylinder, experimentally. |
| November | 11. To find the experimental probability of each outcome of a die when it is thrown 50 times. <br> 12. To verify experimentally that the parallelograms on the same base and between the same parallels are equal in area. |
| December | 13. To find the experimental probability of Heads appearing on a coin when it is thrown 20 times. <br> 14. To form a cube using a net and to find the formula for its total surface area. |
| January | 15. To find the formula for the curved surface area of the right circular cylinder, experimentally. (Revision.) <br> 16. To find the experimental probability of each outcome of a die when it is thrown 50 times. (Revision.) |
| February | 17. To find the experimental probability of Heads appearing on a coin when it is thrown 20 times. (Revision.) <br> 18. To form a cube using a net and to find the formula for its total surface area. (Revision.) |

