G.D. Goenka Public School
info@gdgoenkajhajjar.com

Lab Activities of Mathematics (2024-25)
XI

Month	Practical/Activity to be conducted
April	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 2n, using color paper and pen. 2. To verify experimentally that for two sets A and B, n (A×B) = pq and the total number of relations from A to B is 2pq, where n(A) = p and n(B) = q.
May	3. To identify a relation and a function by trial and error method. 4. To distinguish between a relation and a function by theoretical method.
July	5. To verify the relation between the degree measure and the radian measure of an angle using conversion formula. 6. To obtain the formula for the sum of squares of the first n natural numbers using cutting and pasting method.
August	7. To interpret geometrically the meaning of i = –1 and its integral powers. 8. To obtain a quadratic function with the help of linear functions graphically.
October	9. To find the number of ways in which three cards can be selected from given five cards using permutations and combinations. 10. To construct a pascal's triangle and to write binomial expansion for a given positive integral exponent.
November	11. To plot the graphs of sin x, sin 2x, 2sinx, using same coordinate axes. 12. To build an ellipse when two fixed points are given, using cardboards and strings.
December	13. To construct a parabola graphically. 14. To construct a hyperbola graphically.
January	15. To find the number of ways in which three cards can be selected from given five cards using permutations and combinations. (Revision.) 16. To construct a pascal's triangle and to write binomial expansion for a given positive integral exponent. (Revision.)
February	17. To plot the graphs of sin x, sin 2x, 2sinx, using same coordinate axes. (Revision.) 18. To construct a parabola graphically. (Revision.)