Name of the post <u>TGT-MATHEMATICS</u>

SYLLABUS

- 1. Number system
- 2. Algebra
- 3. Polynomials
- 4. Linear Equations in two variable and solution of pair of Linear equations
- 5. Complex number and quadratic equations(brief description of algebraic properties of complex numbers, square root of complex numbers, solution of quadratic equations
- 6. Sequence and series(Arithmetic progression and geometric progression)
- 7. Matrices and determinants (Application of determinants in finding areas of triangle, consistency of system of equations inverse of square matrix
- 8. Mensuration
- 9. Geometry
- 10.Two-dimensional geometry (equations of line, section of cone, circle, ellipse, parabola and hyperbola)
- 11. Vectors and three-dimensional geometry
- 12.Sets
- 13. Relations and functions
- 14. Permutations and combinations
- 15. Differential calculus and its simple applications
- 16.Integral calculus and its simple applications in finding area under simple curves
- 17. Binomial theorem for positive integral indices
- 18. Linear inequalities and linear programming
- 19. Trigonometric functions.
- 20. Statistics and Probability
- 21. Commercial Mathematics (Ratio & Proportion, Comparing Quantities)