**The City School**

**North Nazimabad Boys Campus**

**Syllabus Break Up,2nd Term 2017**

**Class: 9Subject: Mathematics 4024**

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| **Unit** | **Topic** | **Reference** |
| Personal and small business finance | * **Percentages** * • Discount * • Profit and loss * • Taxation * • Personal and Household finance * • Simple interest& Compound interest * • Hire purchase * • Commission * • Money | Book- 3  Ex: 6b  Ex: 6e  Ex: 6f  Ex: 6g  Ex: 6h |
| Solutions of equations and inequalities | * **Solution to quadratic equations** * • Factorization * • Completing the square * • Using the quadratic formula * • Problems involving quadratic equations * **Linear inequalities in one variable** | Book – 3  Ex: 1a  Ex: 1b  Ex: 1c  Ex: 1d  Ex: 1e  Ex: 1f |
| Coordinate geometry | * Length of segment * • Mid-point * • Gradient of a straight line * • Equation of a straight line * • Equation of parallel lines * • Gradient of parallel and perpendicular lines | Book – 3  Ex: 4a  Ex: 4b  Ex: 4c |
| Symmetry | * Plane and rotational Symmetry * Planes of symmetry * Axes of rotational symmetry * Order of rotational symmetry | Book – 1  Ex: 1e |
| Similarity and Congruence | * Congruent and similar triangles * Similarity tests * Area and volume of similar figures and solids | Book – 3  Ex: 8a& 8b  Ex: 8d & 8e  Ex: 9a& 9b |
| Geometrical constructions | * Scale drawings |  |
| Statistics | * Categorical * Numerical and * Grouped data | Book – 3 (Addendum)  Ex: III a  Ex: III b |
| Statistical diagrams | * Frequency Polygon * Histograms with equal and unequal intervals * scatter diagrams | Book – 4  Ex: 5a & 5b |