

First Terminal Examination

| Unit | Topics | Content | TP | Teaching Method | Teaching Material | Evaluation | R |
|------|----------------|--|----|--|-------------------|--|---|
| 1 | Set | <ul style="list-style-type: none"> ➤ Set review ➤ Notation of set ➤ Method of describing sets ➤ Cardinal number of sets ➤ Types of set ➤ Relationship between sets ➤ Representation of set in Venn-diagram ➤ Universal sets, sub-sets, proper sub-sets, Improper sub-sets and No.of subsets. | 7 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Analysis/synthesis ➤ Practical | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 2 | Arithmetic | <ul style="list-style-type: none"> ➤ Number System in different Bases <ul style="list-style-type: none"> • Conversion of numbers ➤ Real Numbers <ul style="list-style-type: none"> • Types of Numbers • Sign rule of addition, subtraction, multiplication and division | 12 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 3 | Mensuration | <ul style="list-style-type: none"> ➤ Area and Perimeter of plane figure (Triangle, Quadrilateral and Circle) | 12 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 4 | Geometry | <ul style="list-style-type: none"> ➤ Angle <ul style="list-style-type: none"> • Angles and parallel line • Types of angles (Vertically opposite angles, adjacent angle, complementary angle and supplementary angle) • Types of angles (Alternate angle, co-interior angle, corresponding angle) | 15 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research ➤ Practical | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 5 | Algebra | <ul style="list-style-type: none"> ➤ Algebraic terms and expression ➤ Polynomial and degree of polynomials ➤ Evaluation of algebraic expressions ➤ Special products and formulae | 8 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 6 | Statistics | <ul style="list-style-type: none"> ➤ Collection of data ➤ Frequency table ➤ Cumulative frequency table ➤ Graphical representation of data | 7 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 7 | Transformation | | | | | | |
| 8 | Co-ordinate | | | | | | |

Specification Grid

| Area | Content | Types of Question | | | | Total no.of items | total no.of questions | Total Marks | Total Time |
|-------------|---|-------------------|-----------|----------|----------|-------------------|-----------------------|-------------|---------------|
| | | K | C | A | HA | | | | |
| Set | Sets | 1 | 1 | 1 | 1 | 4 | 1 | 4 | 10min |
| Arithmetic | <ul style="list-style-type: none"> ➤ Number System in different Bases ➤ Real Numbers | 2 | 1 | 2 | 1 | 6 | 2 | 10 | 24min |
| Mensuration | <ul style="list-style-type: none"> ➤ Area and Perimeter of plane figure | 2 | 2 | 1 | 1 | 6 | 2 | 10 | 24min |
| Geometry | <ul style="list-style-type: none"> ➤ Angle | 1 | 2 | 2 | 1 | 6 | 3 | 10 | 24min |
| Algebra | <ul style="list-style-type: none"> ➤ Algebraic terms and expression ➤ Special products and formulae | 1 | 2 | 1 | 2 | 6 | 2 | 8 | 19min |
| Statistics | <ul style="list-style-type: none"> ➤ Collection of data ➤ Frequency table ➤ Cumulative frequency table ➤ Graphical representation of data | 2 | 2 | 1 | 1 | 6 | 2 | 8 | 19min |
| total | | 9 | 10 | 8 | 7 | 34 | 12 | 50 | 120min |

Mid Terminal Examination

| Unit | Topics | Content | TP | Teaching Method | Teaching Material | Evaluation | R |
|------|----------------|--|-----------|---|-------------------|--|---|
| 1 | Set | | | | | | |
| 2 | Arithmetic | <ul style="list-style-type: none"> ➤ Real Numbers <ul style="list-style-type: none"> • Terminating and non-terminating decimal • Comparison between rational and irrational number • Real Number • Scientific notation ➤ Ratio and proportion <ul style="list-style-type: none"> • comparison of quantities of same kind • compounded ratio • Proportion • types of proportion | 12 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 3 | Mensuration | <ul style="list-style-type: none"> ➤ Area and volume of solid | 8 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 4 | Geometry | <ul style="list-style-type: none"> ➤ Triangle <ul style="list-style-type: none"> • Experimental verification of properties of triangle • Congruent triangle • Experiment on condition of congruency • Similar triangle • Condition of similarity | 14 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 5 | Algebra | <ul style="list-style-type: none"> ➤ Factors and factorization ➤ H.C.F and L.C.M ➤ Laws of indices | 15 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 6 | Statistics | <ul style="list-style-type: none"> ➤ Measures of central tendency <ul style="list-style-type: none"> • Arithmetic mean • Median • Mode • Quartile • Range | 10 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 7 | Transformation | <ul style="list-style-type: none"> ➤ Reflection of Geometrical figure | 7 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 8 | Co-ordinate | | | | | | |

Specification Grid

| Area | Content | Types of Question | | | | total no.of items | total no.of questions | Total Marks | Total Time |
|----------------|--|-------------------|---|---|----|-------------------|-----------------------|-------------|------------|
| | | K | C | A | HA | | | | |
| Set | Set | 1 | 1 | 1 | | 3 | 1 | 3 | 7min |
| Arithmetic | <ul style="list-style-type: none"> ➤ Real Numbers ➤ Ratio and proportion ➤ Number System in different Bases | 2 | 2 | 1 | 1 | 6 | 2 | 10 | 24min |
| Mensuration | <ul style="list-style-type: none"> ➤ Area and volume of solid ➤ Area and Perimeter of plane figure | 1 | 1 | 1 | 1 | 4 | 1 | 6 | 14min |
| Geometry | <ul style="list-style-type: none"> ➤ Angle ➤ Triangle | 2 | 2 | 2 | 1 | 7 | 3 | 15 | 36min |
| Algebra | <ul style="list-style-type: none"> ➤ Factors and factorization ➤ H.C.F and L.C.M ➤ Laws of indices | 2 | 1 | 2 | 1 | 6 | 3 | 10 | 24min |
| Statistics | <ul style="list-style-type: none"> ➤ Measures of central tendency ➤ Collection of data | 1 | | 1 | | 4 | 1 | 3 | 7min |
| Transformation | <ul style="list-style-type: none"> ➤ Reflection of Geometrical figure | 1 | | | 1 | 2 | 1 | 3 | 8min |
| total | | 9 | 8 | 8 | 5 | 30 | 12 | 50 | 120min |

Second Terminal Examination

| Unit | Topics | Content | TP | Teaching Method | Teaching Material | Evaluation | R |
|------|-----------------------------------|--|----|--|-------------------|--|---|
| 1 | Set | | | | | | |
| 2 | Arithmetic | <ul style="list-style-type: none"> ➤ Profit and loss ➤ Unitary method | 10 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research ➤ Field visit | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 3 | Mensuration | <ul style="list-style-type: none"> ➤ Solid and their nets | 3 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work ➤ Exam | |
| 4 | Geometry | <ul style="list-style-type: none"> ➤ Quadrilateral and regular polygon | 8 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 5 | Algebra | <ul style="list-style-type: none"> ➤ Equation and Graph <ul style="list-style-type: none"> • Linear equation with one variable and their solution • Linear equation with two variable and their solution • Simultaneous equation, solving method and application • Quadratic equation, solving by factorization method | 12 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 6 | Statistics | | | | | | |
| 7 | Transformation | <ul style="list-style-type: none"> ➤ Rotation of geometrical figure | 4 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 8 | Co-ordinate | <ul style="list-style-type: none"> ➤ Pythagoras Theorem ➤ Pythagorean triples | 7 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 9 | Symmetry, Design and Tessellation | <ul style="list-style-type: none"> ➤ Symmetrical and asymmetrical shapes ➤ Line or axis of symmetry ➤ Tessellation and types of tessellation | 2 | <ul style="list-style-type: none"> ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | <ul style="list-style-type: none"> ➤ oral test ➤ practical ➤ Project work ➤ Exam | |

Specification Grid

| Area | Content | Types of Question | | | | total no.of items | total no.of questions | Total Marks | Total Time |
|--------------------------------|---|-------------------|---|---|----|-------------------|-----------------------|-------------|------------|
| | | K | C | A | HA | | | | |
| Set | Set | 1 | 1 | 1 | | 3 | 1 | 3 | 7min |
| Arithmetic | <ul style="list-style-type: none"> ➤ Real Numbers ➤ Ratio and proportion ➤ Number System in different Bases ➤ Profit and loss ➤ Unitary method | 2 | 2 | 1 | 1 | 6 | 2 | 10 | 24min |
| Mensuration | <ul style="list-style-type: none"> ➤ Area and volume of solid ➤ Area and Perimeter of plane figure ➤ Solid and their nets | 1 | 1 | 1 | 1 | 4 | 1 | 6 | 14min |
| Geometry | <ul style="list-style-type: none"> ➤ Angle ➤ Triangle ➤ Quadrilateral and regular polygon | 2 | 2 | 2 | 1 | 7 | 3 | 12 | 30min |
| Algebra | <ul style="list-style-type: none"> ➤ Factors and factorization ➤ H.C.F and L.C.M ➤ Laws of indices ➤ Equation and Graph | 2 | 1 | 2 | 1 | 6 | 3 | 10 | 24min |
| Statistics | <ul style="list-style-type: none"> ➤ Measures of central tendency ➤ Collection of data | 1 | | 1 | | 2 | 1 | 3 | 7min |
| Transformation and Co-ordinate | <ul style="list-style-type: none"> ➤ Rotation of geometrical figure ➤ Reflection of Geometrical figure ➤ Pythagoras Theorem | 2 | 1 | | 1 | 4 | 1 | 6 | 14min |
| total | | 9 | 8 | 8 | 5 | 30 | 12 | 50 | 120min |

Annual Examination

| Unit | Topics | Content | TP | Teaching Method | Teaching Material | Evaluation | R |
|------|-----------------------------------|---|----|---|-------------------|--|---|
| 1 | Set | | | | | | |
| 2 | Arithmetic | ➤ Simple Interest | 7 | ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 3 | Mensuration | ➤ Revision | | | | | |
| 4 | Geometry | ➤ Revision | | | | | |
| 5 | Algebra | ➤ Rational Expression <ul style="list-style-type: none"> • Reduction of rational expression to their lowest term • Multiplication, division, Addition and subtraction of rational expression. | 10 | ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 6 | Statistics | | | | | | |
| 7 | Transformation | ➤ Displacement of geometrical shapes | 4 | ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 8 | Co-ordinate | ➤ Distance between two points | 5 | ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 9 | Symmetry, Design and Tessellation | | | | | | |
| 10 | Bearing and Scale drawing | ➤ Scale Drawing -Review | 4 | ➤ Question answer ➤ Demonstration ➤ Problem solving ➤ Research | | ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |

Specification Grid

| Area | Content | Types of Question | | | | total no.of items | total no.of questions | Total Marks | Total Time |
|--------------------------------|--|-------------------|---|---|----|-------------------|-----------------------|-------------|------------|
| | | K | C | A | HA | | | | |
| Set | Set | 1 | 1 | 1 | | 3 | 1 | 3 | 8min |
| Arithmetic | <ul style="list-style-type: none"> ➤ Real Numbers ➤ Ratio and proportion ➤ Number System in different Bases ➤ Profit and loss ➤ Unitary method ➤ Simple Interest | 2 | 3 | 3 | 2 | 10 | 3 | 12 | 28min |
| Mensuration | <ul style="list-style-type: none"> ➤ Area and volume of solid ➤ Area and Perimeter of plane figure ➤ Solid and their nets | 1 | 1 | 1 | 1 | 4 | 1 | 5 | 12min |
| Geometry | <ul style="list-style-type: none"> ➤ Angle ➤ Triangle ➤ Quadrilateral and regular polygon | 1 | 2 | 1 | 1 | 5 | 2 | 10 | 24min |
| Algebra | <ul style="list-style-type: none"> ➤ Factors and factorization ➤ H.C.F and L.C.M ➤ Laws of indices ➤ Equation and Graph ➤ Rational Expression | 2 | 1 | 2 | 1 | 6 | 3 | 10 | 24min |
| Statistics | <ul style="list-style-type: none"> ➤ Measures of central tendency ➤ Collection of data | 1 | | 1 | | 2 | 1 | 3 | 7min |
| Transformation and Co-ordinate | <ul style="list-style-type: none"> ➤ Rotation of geometrical figure ➤ Reflection of Geometrical figure | 1 | 2 | 1 | 1 | 5 | 2 | 7 | 17min |
| total | | 9 | 8 | 8 | 5 | 30 | 12 | 50 | 120min |

First Terminal Examination

| Unit | Topics | Content | T P | Teaching Method | Teaching Material | Evaluation | R |
|------|--------------|---|--------|---|-------------------|---|---|
| 1 | Set | <ul style="list-style-type: none"> ➤ Word problems related to two sets , three sets and Venn-diagram | 8 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical work ➤ Project work/field work ➤ Exam | |
| 2 | Arithmetic | <ul style="list-style-type: none"> ➤ Compound interest(Maximum 2 years for C.I half yearly 3 for yearly) ➤ Population growth and compound depreciation | 14 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Visit bank/village ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical work ➤ Project work/field work ➤ Exam | |
| 3 | Mensuration | <ul style="list-style-type: none"> ➤ Pyramid- Introduction, Surface area and Volume of square based pyramid. | 8 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical work ➤ Project work/field work ➤ Exam | |
| 4 | Algebra | <ul style="list-style-type: none"> ➤ Sequence and Series (Arithmetic Sequence , Arithmetic means, Sum of n terms of an Arithmetic Series) ➤ Rational Expression | 10 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical work ➤ Project work/field work ➤ Exam | |
| 5 | Geometry | <ul style="list-style-type: none"> ➤ Area of Triangle and quadrilateral <ul style="list-style-type: none"> • Diagonal divides the parallelogram into two equal halves (Theorem 1) • Parallelograms standing on same base and between same parallels are equal in area. (Theorem 2) | 5 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical work ➤ Project work/field work ➤ Exam | |
| 6 | Statistics | <ul style="list-style-type: none"> ➤ Arithmetic Mean | 3 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical work ➤ Project work/field work ➤ Exam | |
| 7 | Trigonometry | <ul style="list-style-type: none"> ➤ Height and Distance | 5 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical work ➤ Project work/field work ➤ Exam | |

Specification Grid

| Area | Content | Types of Question | | | | total no.of items | total no.of question | Total Marks | Total Time |
|--------------|--|-------------------|----|----|----|-------------------|----------------------|-------------|------------|
| | | K | C | A | HA | | | | |
| Set | ➤ Word problems related to two sets , three sets and Venn-diagram | 1 | 1 | 1 | 1 | 4 | 1 | 6 | 14min |
| Arithmetic | ➤ Compound interest(Maximum 2 years for C.I half yearly 3 for yearly) ➤ Population growth and compound depreciation | 2 | 2 | 3 | 2 | 9 | 3 | 15 | 36min |
| Mensuration | ➤ Pyramid- Introduction, Surface area and Volume of square based pyramid. | 2 | 2 | 2 | 2 | 8 | 3 | 13 | 32min |
| Algebra | ➤ Sequence and Series (Arithmetic Sequence , Arithmetic means, Sum of n terms of an Arithmetic Series) ➤ Rational Expression | 2 | 3 | 3 | 2 | 10 | 4 | 20 | 48min |
| Geometry | ➤ Area of Triangle and quadrilateral | 2 | 2 | 2 | 2 | 8 | 3 | 15 | 36min |
| Trigonometry | ➤ Height and Distance | 1 | 1 | 1 | 1 | 4 | 1 | 6 | 14min |
| Total | | 10 | 11 | 12 | 10 | 33 | 15 | 75 | 180min |

Mid-Terminal Examination

| Unit | Topics | Content | TP | Teaching Method | Teaching Material | Evaluation | R |
|------|-------------|---|----|---|-------------------|--|---|
| 1 | Set | | | | | | |
| 2 | Arithmetic | ➤ Money and Money Exchange | 8 | ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 3 | Mensuration | ➤ Cone- Introduction, Surface area and Volume ➤ Surface area and volume of some 3-D shapes review ➤ Combination of prism and pyramid ➤ Combination of Squared based Pyramids | 10 | ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 4 | Algebra | ➤ Geometric Sequence, Means, sum of n terms of geometric series and relation between A.M and G.M ➤ Exponential Equations | 10 | ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 5 | Geometry | ➤ Area of triangle and quadrilateral <ul style="list-style-type: none"> • Area of triangle is half of the area of parallelogram standing on the same base and between the same parallels (Theorem-3) • Triangles on the same base and between the same parallels are equal in area. (Theorem-4) ➤ Circle <ul style="list-style-type: none"> • Definition of terms related to circle. • Theorem related to arcs and the angles subtended by them • Theorem based on the angles subtended by the same arc. | 20 | ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 6 | Statistics | ➤ Median and Quartiles | 8 | ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 7 | | | | | | | |

Specification Grid

| Area | Content | Types of Question | | | | total no.of items | total no.of question | Total Marks | Total Time |
|--------------|--|-------------------|----|----|----|-------------------|----------------------|-------------|------------|
| | | K | C | A | HA | | | | |
| Set | ➤ Word problems related to two sets , three sets and Venn-diagram | 1 | 1 | 1 | 1 | 4 | 1 | 6 | 14min |
| Arithmetic | ➤ Compound interest(Maximum 2 years for C.I half yearly 3 for yearly) ➤ Population growth and compound depreciation ➤ Money and Money Exchange | 2 | 2 | 3 | 2 | 9 | 3 | 15 | 36min |
| Mensuration | ➤ Pyramid- Introduction, Surface area and Volume of square based pyramid. ➤ Cone- Introduction, Surface area and Volume ➤ Surface area and volume of some 3-D shapes review ➤ Combination of prism and pyramid ➤ Combination of Squared based Pyramids | 2 | 2 | 2 | 2 | 8 | 3 | 13 | 32min |
| Algebra | ➤ Sequence and Series (Arithmetic Sequence , Arithmetic means, Sum of n terms of an Arithmetic Series) ➤ Rational Expression Geometric Sequence, Means, sum of n terms of geometric series and relation between A.M and G.M ➤ Exponential Equations | 2 | 2 | 2 | 2 | 8 | 3 | 14 | 34min |
| Geometry | ➤ Area of Triangle and quadrilateral ➤ Circle | 2 | 2 | 2 | 2 | 8 | 3 | 15 | 36min |
| Trigonometry | ➤ Height and Distance | 1 | 1 | 1 | 1 | 4 | 1 | 6 | 14min |
| Statistics | ➤ Median and Quartiles | 1 | 1 | 1 | 1 | 4 | 1 | 6 | 14min |
| Total | | 11 | 11 | 12 | 11 | 45 | 15 | 75 | 180min |

Pre- Qualifying Examination

| Unit | Topics | Content | TP | Teaching Method | Teaching Material | Evaluation | R |
|------|--------------|---|----|---|-------------------|--|---|
| 1 | Set | | | | | | |
| 2 | Arithmetic | | | | | | |
| 3 | Mensuration | <ul style="list-style-type: none"> ➤ Combination of hemi-sphere and cylinder ➤ Combination of Cylinder and cone ➤ Combination of cones ➤ Mensuration in household activities | 10 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 4 | Algebra | <ul style="list-style-type: none"> ➤ Quadratic Equations <ul style="list-style-type: none"> • Solution of Quadratic equation • Application of quadratic equation | 8 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 5 | Geometry | <ul style="list-style-type: none"> ➤ Circle <ul style="list-style-type: none"> • Theorems based on cyclic quadrilateral ➤ Construction of triangle and quadrilaterals having equal areas | 15 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 6 | Statistics | <ul style="list-style-type: none"> ➤ Mode of continuous data ➤ Range of continuous data ➤ Relationship between Mean, Median and Mode | 7 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 7 | Probability | <ul style="list-style-type: none"> ➤ Definition of basic terms on probability ➤ Mutually exclusive and Non-mutually exclusive events ➤ Law of addition of mutually exclusive events ➤ Dependent and independent events ➤ Multiplication law of probability ➤ Probability tree diagram | 8 | <ul style="list-style-type: none"> ➤ Question/Answer ➤ Demonstration ➤ Practical work ➤ Analysis/Synthesis ➤ Problem solving | | <ul style="list-style-type: none"> ➤ oral test ➤ Unit test ➤ practical ➤ Project work/field work ➤ Exam | |
| 8 | Trigonometry | | | | | | |

Specification Grid

| SN | Area | knowledge | | Understanding | | Application | | Higher ability | | Total no.of items | Total no.of question | Total marks | Total time (min) |
|--------------|----------------------------|------------|-----------|---------------|-----------|-------------|-----------|----------------|-----------|-------------------|----------------------|-------------|------------------|
| | | No.of item | Marks | No.of item | Marks | No.of item | Marks | No.of item | Marks | | | | |
| 1 | Set | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 4 | 1 | 6 | 14 |
| 2 | Arithmetic | 2 | 2 | 2 | 3 | 3 | 5 | 2 | 3 | 9 | 3 | 13 | 31 |
| 3 | Mensuration | 2 | 2 | 2 | 3 | 2 | 5 | 2 | 3 | 8 | 3 | 13 | 31 |
| 4 | Algebra | 2 | 2 | 2 | 4 | 3 | 7 | 1 | 2 | 8 | 3 | 15 | 36 |
| 5 | Geometry | 2 | 2 | 2 | 3 | 2 | 5 | 2 | 3 | 8 | 3 | 13 | 31 |
| 6 | Statistics and probability | 2 | 2 | 2 | 3 | 2 | 4 | 2 | 2 | 8 | 2 | 11 | 27 |
| 7 | Trigonometry | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 1 | 4 | 10 |
| Total | | 12 | 12 | 12 | 18 | 14 | 30 | 11 | 15 | 49 | 16 | 75 | 180 |