

Contents

| | |
|--|--|
| Arithmetic and Algebra | 1 |
| Session 1 | Revision of Arithmetic. Real Numbers. Percentages. Fractions. Ratios.....2 |
| Session 2 | Revision of Arithmetic. Practice 1.....14 |
| Session 3 | Algebra. Rules. Concepts and Examples.....22 |
| Session 4 | Algebra. Practice 1.....30 |
| Session 5 | Algebra. Practice 2.....36 |
| Session 6 | Algebra. Practice 3.....41 |
| | |
| Linear Equations and Graphs | 49 |
| Session 7 | Linear Equations. Concepts and Examples.....50 |
| Session 8 | Linear Simultaneous Equations. Concepts and Examples.....57 |
| Session 9 | Linear Equations. Practice 1.....67 |
| Session 10 | Linear Equations. Practice 2.....75 |
| Session 11 | Linear Equations. Practice 3.....85 |
| Session 12 | Linear Graph. Concepts and Examples.....97 |
| Session 13 | Linear Graph. Practice 1.....110 |
| Session 14 | Linear Graph. Practice 2.....124 |
| Session 15 | Application of Linear Relations. Practice 1.....138 |
| Session 16 | Application of Linear Relations. Practice 2.....148 |
| | |
| Quadratic Expressions, Equations and Graphs | 161 |
| Session 17 | Factorising Quadratic Expressions. Concepts and Examples.....162 |
| Session 18 | Quadratic Equation. Concepts and Examples.....170 |
| Session 19 | Quadratic Graph (Parabola). Features, Concepts and Examples.....176 |
| Session 20 | Quadratics. Practice 1.....183 |
| Session 21 | Quadratics. Practice 2.....187 |
| Session 22 | Quadratics. Practice 3.....196 |
| Session 23 | Quadratics. Practice 4.....209 |
| Session 24 | Quadratics. Practice 5.....216 |
| Session 25 | Algebra Involving Quadratics. Practice 1.....225 |
| Session 26 | Algebra Involving Quadratics. Practice 2.....234 |

Index & Logarithm Laws.

Exponential & Logarithmic Equations.....246

| | | |
|------------|---|-----|
| Session 27 | Index Laws. Rules. Concepts and Practice 1..... | 247 |
| Session 28 | Index Laws. Practice 2..... | 256 |
| Session 29 | Index Laws. Practice 3..... | 261 |
| Session 30 | Surds. Rules. Concepts and Practice1..... | 265 |
| Session 31 | Surds. Practice 2..... | 273 |
| Session 32 | Surds. Practice 3..... | 277 |
| Session 33 | Logarithm Laws. Rules. Concepts and Examples..... | 281 |
| Session 34 | Exponential and Logarithmic Equations. Concepts and Examples..... | 286 |
| Session 35 | Exponential and Logarithmic Equations. Practice..... | 292 |

Pythagoras Theorem and Trigonometry297

| | | |
|------------|---|-----|
| Session 36 | Pythagoras Theorem. Definition, Concepts and Examples..... | 298 |
| Session 37 | Trigonometry. Definitions, Rules and Examples..... | 311 |
| Session 38 | Trigonometry. Further Definitions, Terminology and Concepts..... | 321 |
| Session 39 | Trigonometry. Unit Circle. Exact Values. Functions and Equations..... | 329 |
| Session 40 | Trigonometry. Practice 1..... | 342 |
| Session 41 | Trigonometry. Practice 2..... | 353 |