Smart Syllabus / Accelerated Learning Programme (ALP) of Mathematics Grade-12 for Academic Session 2026-27 & BISE Exam-2027

Unit No.	Name of the Unit	Excluded Content & Examples / Questions
1	**Graphical Representation of Functions**	• Example 3; Page 3. • Exercise 1.1, Q. 1 (v) and Q. 2; Page 4. • (iii) Exponential Function is Strictly Increasing or Strictly Decreasing (1.4 Exponential Functions); Page 7. • Horizontal Asymptote of Exponential Function; Page 8, examples 6 & 7. • 1.5.2 Graphs of Hyperbolic Functions; Pages 10 to 12. • Exercise 1.2, Q. 1, 2, 3, 4 & 6; Pages 14 to 15. • 1.6.1 Graphical behavior of logarithmic functions. • Exercise 1.3, Q. 1, 3, 5, 7, 8 & 9; Pages 23 to 24. • Example 20 (1.10 Solving Problems Involving Exponential and Logarithmic Equations and Inequalities); Pages 27 to 28. • Exercise 1.4, Q. 1 (iii & v), Q. 2 (v & vi); Page 28. • 1.11 Applications of Exponential and Logarithmic Functions in Real-Life Situations, Examples 21 to 27; Pages 28 to 32. • Exercise 1.5, Q. 4, 7, 8, 11 & 12; Page 33.
2	**Further Differentiation**	• Exercise 2.3, Q. 2 & 6; Pages 47 to 48. • Exercise 2.4, Q. 1 (iv), Q. 2 (iv & v), Q.3 & 5; Pages 55 to 56. • Exercise 2.5, Q. 2 (b), Q. 3 (ii), Q. 4 (i); Page 59. • Exercise 2.6, Q. 2 (ii), Q. 3 (i & iii), Q. 5; Page 64. • Exercise 2.7, Q. 1, 4, 5 & 7; Page 70.
3	**Integration**	• Examples 11 & 12; Pages 75 to 76. • Exercise 3.1, Q. 3 (viii, ix, x & xii); Pages 76 to 77. • Exercise 3.2, Q. 1 (iii, v & viii), Q.2 (v, ix, xi, xiii & xiv); Page 84. • Examples 35, 38 & 39 (3.4 Integration by Parts); Pages 86 to 89. • Exercise 3.3, Q.11, 15, 16, 20 & 23; Page 90. • Exercise 3.4, Q. 4, 5, 6, 9, 12, 13, 14 & 15; Page 94. • Examples 49 to 56 (3.6 The Definite Integral and its Properties); Pages 98 to 101. • Exercise 3.5, Q. 1 (vi, vii & ix), Q. 3, Q. 6 (iii), Q. 7, 10, 12, 14, Q. 15 (i & iv), Q. 16 (iv); Pages 101 to 103. • Exercise 3.6, Q. 2, Q. 3 (iii & iv), Q. 11, 12, 13, 14 & 15; Pages 114 to 115. • Exercise 3.7, Q. 1, 2, 7, 10, 11 & 12; Pages 121 to 123.

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4	**Differential Equations**	• Exercise 4.1, Q. 1 (v), Q. 2, 3, 4, 5 & 6 (4.2.4 Flow of Electricity in Series Circuits); Pages 128 to 129. • 4.5 Applications of First-Order Differential Equations in Real-Life Problems, Examples 8 to 12; Pages 138 to 142. • Exercise 4.3, Q. 5, 6, 7, 8, 9 & 10; Page 143.
5	**Analytical Geometry**	• Exercise 5.1, Q. 4, 5, Q. 7 (vi), Q.8 & 11; Page 158. • Exercise 5.2, Q. 6, 7 & 9; Page 162. • Exercise 5.3, Q. 11 & 12; Page 166.
6	**Conics**	• Examples 8 & 9 (6.1 Circle); Pages 175 to 176. • Exercise 6.1, Q. 4, 8, 10 & 12; Page 177. • Example 14 (6.2 Tangent and Normal to a Conic); Pages 183 to 184. • Exercise 6.2, Q. 5 & 6; Page 187. • Exercise 6.3, Q. 5, 6 & 7; Pages 192 to 193. • Exercise 6.4, Q. 5, 6, 7, 11, 12 & 13; Pages 202 to 203. • Exercise 6.5, Q.3, 6, 9, 11, 12, 14, 18, 19 & 20; Pages 215 to 216. • Exercise 6.6, Q. 6 to 11; Pages 221 to 222.
7	**Kinematics**	• Exercise 7, Q. 1 to 5; Page 235.
8	**Numerical Solutions of Nonlinear Equations**	• Exercise 8.2, Q. 1 (i & iii), Q. 2 (ii & iii), Q. 3 (iv & v); Pages 248 to 249. • Exercise 8.3, Q. 1, 2, 7 & 8; Page 253. • Exercise 8.4 (Complete); Page 258.
9	**Inverse Trigonometric Functions and Their Graphs**	• Graphs of Inverse Trigonometric Functions (Figures 9.1 to 9.15), Section 9.1; Pages 259 to 269. • Exercise 9.2, Q. 11, 12, 13, 17, 18, 20 & 21; Pages 277 to 278.
10	**Solution of Trigonometric Equations**	• Exercise 10.1, Q. 14, 19 to 24; Page 283. • Exercise 10.2, Q. 1 to 5; Page 288.
11	**Vector Valued Functions and Their Derivatives**	• Exercise 11.3 (Complete); Pages 297 to 298.

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