www.tntextbooks.in

۲

SYMBOLS

=	equal to	$ ^{ly}$	similarly
¥	not equal to	Δ	symmetric difference
<	less than	\mathbb{N}	natural numbers
\leq	less than or equal to	W	whole numbers
>	greater than	Z	integers
\geq	greater than or equal to	R	-
\approx	equivalent to		real numbers
U	union	\triangle	triangle
\cap	intersection	\angle	angle
U	universal Set	\perp	perpendicular to
\in	belongs to	II	parallel to
∉	does not belong to	\implies	implies
C	proper subset of	÷.	therefore
\subseteq	subset of or is contained in		since (or) because
¢	not a proper subset of		absolute value
⊈	not a subset of or is not contained in	\simeq	approximately equal to
A' (or) A^c	complement of A	(or) :	such that
Ø (or) { }	empty set or null set or void set	\equiv (or) \cong	congruent
n(A)	number of elements in the set A	≡	identically equal to
P(A)	power set of A	π	pi
Σ	summation	±	plus or minus

(iii)

10th_Maths_Preliminary_English.indd 3

۲

۲



۲

HAPTER	TITLE	PAGE No.	MONTH
1	Relations and Functions	1-35	
1.1	Introduction	1	
1.2	Ordered Pair	2	
1.3	Cartesian Product	2	
1.4	Relations	6	
1.5	Functions	10	
1.6	Representation of Functions	15	June
1.7	Types of Functions	17	
1.8	Special Cases of Functions	22	
1.9	Composition of Functions	26	
1.10	Identifying the Graphs of Linear, Quadratic,	29	
	Cubic and Reciprocal Functions	29	
2	Numbers and Sequences	36-84	
2.1	Introduction	37	
2.2	Euclid's Division Lemma	37	
2.3	Euclid's Division Algorithm	39	June
2.4	Fundamental Theorem of Arithmetic	43	
2.5	Modular Arithmetic	46	
2.6	Sequences	52	
2.7	Arithmetic Progression	55	
2.8	Series	62	
2.9	Geometric Progression	67	July
2.10	Sum to <i>n</i> terms of a Geometric Progression	73	
2.11	Special Series	76	
3	Algebra	85-160	
3.1	Introduction	85	July
3.2	Simultaneous Linear Equations in Three Variables	87	
3.3	GCD and LCM of Polynomials	93	
3.4	Rational Expressions	98	August
3.5	Square Root of Polynomials	103	
3.6	Quadratic Equations	106	
3.7	Graph of Variations	123	Septembe
3.8	Quadratic Graphs	130	

۲

۲

4.1 Introduction 161 July 4.2 Similarity 162 July 4.3 Thales Theorem and Angle Bisector Theorem 171 August 4.4 Pythagoras Theorem 183 October 4.5 Circles and Tangents 185 October 4.6 Concurrency Theorems 195 Introduction 203 5.1 Introduction 203 Area of a Triangle 205 5.3 Area of a Quadrilateral 207 August 5.4 Inclination of a Line 212 August 5.5 Straight Line 220 September 6.1 Introduction 239 September 6.2 Trigonometry 239-268 September 6.3 Heights and Distances 250 November 7.4 Introduction 269 August 7.3 Volume 282 November 7.4 Volume and Surface Area of Combined Solids 290 November 7.5 Conversion of Solids from one Shape to another with no change in Volume 295 Au	4	Geometry	161-202	
4.2 Similarity 162 4.3 Thales Theorem and Angle Bisector Theorem 171 August 4.4 Pythagoras Theorem 183	4.1		161	т 1
4.4Pythagoras Theorem1834.5Circles and Tangents1884.6Concurrency Theorems1955Coordinate Geometry203-2385.1Introduction2035.2Area of a Triangle2055.3Area of a Quadrilateral2075.4Inclination of a Line2125.5Straight Line2215.6General Form of a Straight Line239-2686.1Introduction2396.2Trigonometric Identities2426.3Heights and Distances2507Mensuration269-3007.1Introduction2697.2Surface Area2707.3Volume2827.4Volume and Surface Area of Combined Solids2907.5Conversion of Solids from one Shape to another with no change in Volume2958Statistics and Probability3018.1Introduction3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344	4.2	Similarity	162	July
4.5 Circles and Tangents 188 October 4.6 Concurrency Theorems 195 95 5 Coordinate Geometry 203 - 238 95 5.1 Introduction 203 95 5.2 Area of a Triangle 205 96 5.3 Area of a Quadrilateral 207 96 5.4 Inclination of a Line 212 96 5.5 Straight Line 230 90 6 Trigonometry 239 - 268 61 6.1 Introduction 239 September 6.2 Trigonometric Identities 250 November 6.3 Heights and Distances 250 November 7.4 Wolume and Surface Area of Combined Solids 290 7.1 7.5 Conversion of Solids from one Shape to another with no change in Volume 295 92 8 Statistics and Probability 301-333 93 8.1 Introduction 303 93 93 8.2 Measures of Dispersion 303 93 93 8.3	4.3	Thales Theorem and Angle Bisector Theorem	171	August
4.6 Concurrency Theorems 195 5 Coordinate Geometry 203-238 5.1 Introduction 203 5.2 Area of a Triangle 205 5.3 Area of a Quadrilateral 207 5.4 Inclination of a Line 212 5.5 Straight Line 230 6 Trigonometry 239-268 6.1 Introduction 239 6.2 Trigonometric Identities 242 6.3 Heights and Distances 250 7 Mensuration 269 7.1 Introduction 269 7.2 Surface Area 270 7.3 Volume 282 7.4 Volume and Surface Area of Combined Solids 290 7.5 Conversion of Solids from one Shape to another with no change in Volume 295 8 Statistics and Probability 301 8.1 Introduction 303 8.3 Coefficient of Variation 314 8.4 Probability 316 8.5 Algebra of Events 323	4.4	Pythagoras Theorem	183	
4.6 Concurrency Theorems 195 5 Coordinate Geometry 203-238 5.1 Introduction 203 5.2 Area of a Triangle 205 5.3 Area of a Quadrilateral 207 5.4 Inclination of a Line 212 5.5 Straight Line 230 6 Trigonometry 239-268 6.1 Introduction 239 6.2 Trigonometric Identities 242 6.3 Heights and Distances 250 7 Mensuration 269 7.1 Introduction 269 7.2 Surface Area 270 7.3 Volume 282 7.4 Volume and Surface Area of Combined Solids 290 7.5 Conversion of Solids from one Shape to another with no change in Volume 295 8 Statistics and Probability 301 8.1 Introduction 303 8.3 Coefficient of Variation 314 8.4 Probability 316 8.5 Algebra of Events 323	4.5	Circles and Tangents	188	October
5.1 Introduction 203 5.2 Area of a Triangle 205 5.3 Area of a Quadrilateral 207 5.4 Inclination of a Line 212 5.5 Straight Line 221 5.6 General Form of a Straight Line 230 6 Trigonometry 239-268 6.1 Introduction 239 6.2 Trigonometric Identities 242 6.3 Heights and Distances 250 7 Mensuration 269-300 7.1 Introduction 269 7.2 Surface Area 270 7.3 Volume 282 7.4 Volume and Surface Area of Combined Solids 290 7.5 Conversion of Solids from one Shape to another with no change in Volume 295 8 Statistics and Probability 301 8.1 Introduction 301 8.2 Measures of Dispersion 303 8.3 Coefficient of Variation 314 8.4 Probability 325 Answers 334-342 <td>4.6</td> <td></td> <td>195</td> <td></td>	4.6		195	
5.2Area of a Triangle2055.3Area of a Quadrilateral2075.4Inclination of a Line2125.5Straight Line2215.6General Form of a Straight Line2306Trigonometry239-2686.1Introduction2396.2Trigonometric Identities2426.3Heights and Distances2507Mensuration269-3007.1Introduction2697.2Surface Area2707.3Volume2827.4Volume and Surface Area of Combined Solids2907.5Conversion of Solids from one Shape to another with no change in Volume2958Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344	5	Coordinate Geometry	203-238	
5.3Area of a Quadrilateral207August5.4Inclination of a Line212August5.5Straight Line221305.6General Form of a Straight Line230September6Trigonometry239-268September6.1Introduction239September6.2Trigonometric Identities242November7Mensuration269-300Towers7.1Introduction2697.27.2Surface Area270November7.3Volume2827.47.4Volume and Surface Area of Combined Solids290November7.5Conversion of Solids from one Shape to another with no change in Volume295December8Statistics and Probability3013148.1Introduction303333Sa8.3Coefficient of Variation314December8.4Probability316323Sa8.5Algebra of Events323334-3428.6Addition Theorem of Probability325343-344Mathematical Terms343-344Statistics and Yenge Surface	5.1	Introduction	203	
5.4Inclination of a Line212August5.5Straight Line22115.6General Form of a Straight Line2302396Trigonometry239-2682396.1Introduction239September6.2Trigonometric Identities242November7Mensuration269-3002697.1Introduction26977.3Volume282November7.4Volume and Surface Area of Combined Solids290November7.5Conversion of Solids from one Shape to another with no change in Volume295November8Statistics and Probability301-3338.1Introduction8.2Measures of Dispersion3033038.38.4Probability316314December8.5Algebra of Events323334-342343-3448.6Addition Theorem of Probability32534-344Image Probability8.6Addition Theorem of Probability3259.7Mathematical Terms343-344	5.2	Area of a Triangle	205	
5.4Inclination of a Line2125.5Straight Line2215.6General Form of a Straight Line2306Trigonometry239-2686.1Introduction2396.2Trigonometric Identities2426.3Heights and Distances2507Mensuration269-3007.1Introduction2697.2Surface Area2707.3Volume2827.4Volume and Surface Area of Combined Solids2907.5Conversion of Solids from one Shape to another with no change in Volume2958Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344	5.3	-	207	
5.6General Form of a Straight Line2306Trigonometry239-2686.1Introduction2396.2Trigonometric Identities2426.3Heights and Distances250November7Mensuration269-3007.1Introduction2697.2Surface Area2707.3Volume2827.4Volume and Surface Area of Combined Solids2907.5Conversion of Solids from one Shape to another with no change in Volume2958Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344	5.4	Inclination of a Line	212	August
5.6General Form of a Straight Line2306Trigonometry239-2686.1Introduction2396.2Trigonometric Identities2426.3Heights and Distances2507Mensuration269-3007.1Introduction2697.2Surface Area2707.3Volume2827.4Volume and Surface Area of Combined Solids2907.5Conversion of Solids from one Shape to another with no change in Volume2958Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344	5.5	Straight Line	221	
6 Trigonometry 239-268 6.1 Introduction 239 6.2 Trigonometric Identities 242 6.3 Heights and Distances 250 November 7 Mensuration 269-300 1000000000000000000000000000000000000	5.6	-	230	
6.2Trigonometric Identities242September6.3Heights and Distances250November7Mensuration269-300707.1Introduction269707.2Surface Area270737.3Volume282747.4Volume and Surface Area of Combined Solids290November7.5Conversion of Solids from one Shape to another with no change in Volume295November8Statistics and Probability301-333295Pecember8.1Introduction3013143168.2Measures of Dispersion3033033348.1Introduction314316Pecember8.4Probability316314316343-3448.5Algebra of Events323334-3424Mathematical Terms343-344343-344343-344343-344	6		239-268	
6.2Trigonometric Identifies2422426.3Heights and Distances250November7Mensuration269-300269-3007.1Introduction2697.27.2Surface Area2707.37.3Volume2827.47.4Volume and Surface Area of Combined Solids290November7.5Conversion of Solids from one Shape to another with no change in Volume295November8Statistics and Probability301-3333018.1Introduction3013038.2Measures of Dispersion3033038.3Coefficient of Variation314December8.4Probability316325December8.5Algebra of Events323334-342December8.6Addition Theorem of Probability325343-344DecemberTUPER To The section of Solids from one Shape to another with no change in Volume8Statistics and Probability3013018.1Introduction3013148.4Probability3163238.6Addition Theorem of Probability3254Mathematical Terms343-344TUPER To The section of Solids from one Shape to another section of Soli	6.1	Introduction	239	0 1
6.3Heights and Distances250November7Mensuration269-300269-3007.1Introduction2692697.2Surface Area2702827.3Volume and Surface Area of Combined Solids290November7.5Conversion of Solids from one Shape to another with no change in Volume295November8Statistics and Probability301-3333018.1Introduction3013038.2Measures of Dispersion3033038.3Coefficient of Variation314December8.4Probability3163168.5Algebra of Events323334-3428.6Addition Theorem of Probability325343-344Image: Mathematical Terms343-344	6.2	Trigonometric Identities	242	September
7Mensuration269-3007.1Introduction2697.2Surface Area2707.3Volume2827.4Volume and Surface Area of Combined Solids2907.5Conversion of Solids from one Shape to another with no change in Volume2958Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3258.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344	6.3	-	250	November
7.2Surface Area2707.3Volume2827.4Volume and Surface Area of Combined Solids2907.5Conversion of Solids from one Shape to another with no change in Volume2958Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344	7		269-300	
7.3Volume2827.4Volume and Surface Area of Combined Solids2907.5Conversion of Solids from one Shape to another with no change in Volume2958Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344	7.1	Introduction	269	
7.4Volume and Surface Area of Combined Solids290November7.5Conversion of Solids from one Shape to another with no change in Volume2952958Statistics and Probability301-3332958.1Introduction3013038.2Measures of Dispersion3033038.3Coefficient of Variation3143168.4Probability3163238.6Addition Theorem of Probability325343-344Answers343-344343-344343-344	7.2	Surface Area	270	
7.4Volume and surface Area of Combined Solids2907.5Conversion of Solids from one Shape to another with no change in Volume2958Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers343-3449Answers343-344	7.3	Volume	282	
8Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Image: Statistical Terms343-344	7.4	Volume and Surface Area of Combined Solids	290	November
8Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344	7.5	Conversion of Solids from one Shape to another		
8Statistics and Probability301-3338.1Introduction3018.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344		-	295	
8.1 Introduction 301 8.2 Measures of Dispersion 303 8.3 Coefficient of Variation 314 8.4 Probability 316 8.5 Algebra of Events 323 8.6 Addition Theorem of Probability 325 Answers 334-342 Mathematical Terms 343-344	8		301_333	
8.2Measures of Dispersion3038.3Coefficient of Variation3148.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344				
8.3Coefficient of Variation314December8.4Probability3163168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344				
8.4Probability3168.5Algebra of Events3238.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344		*		December
 8.5 Algebra of Events 8.6 Addition Theorem of Probability 325 Answers 334-342 Mathematical Terms 343-344 				
8.6Addition Theorem of Probability325Answers334-342Mathematical Terms343-344		•		
Answers334-342Mathematical Terms343-344		-		
Mathematical Terms 343-344	0.0	· · ·		
E-book Evaluation			343-344	
E-book Evaluation		Image: state		
		E-book Evaluation		

۲

۲