



WEST BENGAL BOARD (WBBSE) · CLASS 10

Mathematics (Ganit)

Official WBBSE Madhyamik Pariksha Mathematics syllabus. Covers Commercial Arithmetic (Simple & Compound Interest, Partnership Business), Algebra (Quadratic Equations, Ratio & Proportion, Surds, Variation), Geometry (Theorems, Constructions, Riders), Mensuration of Solids, Trigonometry (Heights & Distances), and Statistics.

Board: West Bengal Board of Secondary Education (Madhyamik Pariksha)**Theory:** 90 Marks**Internal/Practical:** 10 Marks (Project)**Exam Duration:** 3 Hours 15 Mins

UNIT-WISE SYLLABUS & MARKS BREAKDOWN

UNIT	CHAPTERS & PRESCRIBED TOPICS	MARKS
Arithmetic (Pati Ganit)	Commercial & Financial Arithmetic Simple Interest (Concepts, formulas, problem solving); Compound Interest and Uniform Rate of Increase or Decrease (Depreciation and Population growth problems); Partnership Business (Direct and mixed partnership, division of profits/losses)	10
Algebra (Beej Ganit)	Equations, Variations & Surds Quadratic Equations in one variable (Concepts, solution by factorisation, Sreedhar Acharya's formula, nature of roots, formation of quadratic equation from given roots); Ratio and Proportion (Properties, mean proportion, componendo and dividendo theorems); Quadratic Surds (Operations, rationalisation); Variation (Bhed: Direct, inverse and joint variation theorems)	16
Geometry (Jyamiti)	Theorems, Riders & Constructions Theorems related to circle: Angle subtended at centre and arc, angles in same circle segment, cyclic quadrilaterals, tangents from external point, alternate segment theorem; Constructions: Drawing circumcircle and incircle of a triangle, drawing tangents to a circle from an external point; Riders / Applications of theorems in unseen geometric riders	22
Mensuration (Parimiti)	Solid Geometry of 3D Objects Rectangular Parallelepiped / Cuboid (Diagonal, surface area, volume); Right Circular Cylinder (Curved surface area, total surface area, volume); Sphere and Hemisphere (Surface area, volume); Right Circular Cone (Slant height, curved and total surface area, volume); Problems related to combination and melting of various solid shapes	15
Trigonometry	Ratios, Identities & Heights/Distances Concept of measurement of angle (Sexagesimal and Circular systems, relation between radian and degree); Trigonometric Ratios of acute angles (sin, cos, tan, cot, sec, cosec) and standard angles (0° , 30° , 45° , 60° , 90°); Trigonometric Ratios of complementary angles; Applications of trigonometric ratios: Heights and Distances (Problems with one and two right-angled triangles)	18
Statistics (Rashi Bigyan)	Measures of Central Tendency Mean of grouped and ungrouped data (Direct Method, Assumed Mean Method, Step Deviation Method); Median of grouped data; Ogives (Less than and more than type);	09

UNIT	CHAPTERS & PRESCRIBED TOPICS	MARKS
	Mode of grouped frequency data	

INTERNAL / PRACTICAL ASSESSMENT SCHEME (10 MARKS (PROJECT))

EVALUATION COMPONENT	MARKS WEIGHTAGE
Internal Formative Evaluation (IFE) Surveys, nature study, chart and model preparation, math laboratory assignments	10 Marks

RECOMMENDED REFERENCE LITERATURE

Prescribed Textbooks: WBBSE Ganit Prakash Class X, Keshab Chandra Nag, Excellence Madhyamik Test Paper Compendium

The Excellence Tuition Edge

Every unit in this curriculum is taught with structured conceptual lectures, followed by weekly speed-testing, detailed mistake analysis, and dedicated 1:1 doubt-clearing sessions to build board exam confidence.

Excellence Tuition Centres: Sarsuna (Opp. High School) · Joka · Chatterjee Para (Behala)

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