Blue Print PTS Ganjil ICP Level 8

Unit	Learning Objective / Competency	Learning Content	Indicator of Question	Cognitive Level
Unit 1: Integers	Understand and use powers	Powers and indices	Express a number as a power and simplify expressions using powers	Low–Hot
	Calculate with integers	Operations with integers	Calculate the value of numerical expressions involving integers	Low
	Solve equations	Linear equations	Solve simple equations and identify equations with no solution	Medium
	Simplify expressions	Laws of indices	Simplify expressions and write the result as a single power	Medium–Hot
	Use factors and multiples	Factors, HCF and LCM	Find factors, HCF and LCM of given numbers	Low–Hot
	Use prime factorisation	Prime factorisation	Identify statements involving prime factorisation, HCF and LCM	Hot
Unit 2: Place Value and Rounding	Understand significant figures	Significant figures	Round numbers to a given number of significant figures	Low–Medium
	Apply rounding rules	Rounding	Determine the correct rounded value using significant figures	Low–Hot

	Understand rounding intervals	Range of values	Determine the possible range of an original number after rounding	Hot
	Compare equivalent calculations	Place value and decimal operations	Identify calculations that are equivalent or produce the same result	Low–Medium
	Explain rounding errors	Significant figures	Identify and explain why a rounded answer is correct	Hot
Unit 3: Decimals	Compare and order decimals	Decimal place value	Identify the smallest/largest decimal and order decimals	Low–Medium
	Compare decimal values	Inequalities	Select the correct inequality symbol between decimal numbers	Low–Medium
	Convert units	Metric units	Convert between litres and millilitres and metres and centimetres	Medium
	Calculate with decimals	Decimal operations	Perform calculations involving decimal numbers	Medium–Hot
	Interpret decimal calculations	Multiplication and division	Identify equivalent calculations and explain errors in decimal multiplication	Medium–Hot

	Calculate unit price	Unitary method	Calculate cost per metre/unit from a total cost	Hot
Unit 4: Fraction	Understand decimal representations of fractions	Terminating and recurring decimals	Identify fractions that produce terminating or recurring decimals	Low
	Calculate with fractions	Fraction operations	Calculate fraction expressions and give answers in simplest form	Medium–Hot
	Compare fractions	Fraction comparison	Compare and order fractions using appropriate methods	Medium–Hot
	Apply fractions to real-life contexts	Fractions in context	Solve problems involving recipes, books, juice and quantities	Medium–Hot
	Find an unknown quantity	Fractions and area	Use fractions to find a missing dimension from an area	Hot
	Estimate and calculate area	Fractions and area	Estimate and accurately calculate the area of a fractional section	Medium
	Simplify fractions	Equivalent and simplest form	Express a fractional answer in its simplest form	Medium–Hot