

SUMMARY OF GENERAL MATHEMATICS (9TH) MODEL PAPER

S. No	SLO	Item Type	Item Number	Ability Level			Difficulty Level		
				K	U	A	E	M	D
1	Know: A ratio has a relation in which one quantity bears to another quantity with regard to their magnitude	MCQ	Q1(i)		*			*	
2	Know the concept of compound proportion	MCQ	Q1(ii)		*			*	
3	Know the rate of zakat	MCQ	Q1(iii)	*			*		
4	Identify the relation between cost price and sale price	MCQ	Q1(iv)			*		*	
5	Identify the relationship between discount, mark price and sale price	MCQ	Q1(v)			*		*	
6	Calculate mark-up/profit	MCQ	Q1(vi)	*			*		
7	Know the cost price as the price an article is purchased for	MCQ	Q1(vii)		*		*		
8	Know: sales tax, excise duty, property tax, income tax and GST	MCQ	Q1(vii)	*			*		
9	Apply the laws of exponent to simplify expressions with real exponents	MCQ	Q1(ix)		*			*	
10	Define logarithm of a number to the base a as power to which a must be raised to give a number	MCQ	Q1(x)		*				*
11	Know the arithmetic mean between two numbers	MCQ	Q1(xi)		*			*	
12	Know the geometric mean between two numbers	MCQ	Q1(xii)		*			*	
13	Perform the following operations on sets: Union, intersection and complement	MCQ	Q1(xiii)		*			*	
14	Locate the ordered pair (a , b) as a point in rectangular plain	MCQ	Q1(xiv)		*		*		
15	Calculate mean, median and mode	MCQ	Q1(xv)		*			*	
16	Solve real life problems involving percentage	Sec B	Q1(i)			*		*	
17	Calculate the amount of zakat in respect of assets owned by a person	Sec B	Q1(ii)			*			*
18	Identify the following relations: Profit = Sale price – Cost price Loss = Cost price – Sale price	Sec B	Q1(iii)			*		*	
19	Know commercial bank deposits and type of bank accounts (PLS saving bank account, current deposit account, PLS term deposit account, foreign currency account)	Sec B	Q1(iv)			*			*
20	Calculate the amount of property tax imposed on a property	Sec B	Q1(v)			*		*	
21	Apply the laws of exponent to simplify expressions with real exponents	Sec B	Q1(vi)			*			*
22	Define logarithm of a number to the base a as power to which a must be raised to give a number $a^x=y$	Sec B	Q1(vii)		*				*
23	Find the nth or general term of an arithmetic sequence	Sec B	Q1(viii)		*			*	
24	Find the nth or general term of an geometric sequence	Sec B	Q1(ix)		*				*
25	Locate the ordered pair (a , b) as a point in rectangular plane.	Sec B	Q1(x)		*			*	
26	Calculate the amount of bill for Electricity, Gas, Telephone	Sec B	Q1(xi)			*			*
27	Define the function and identify its domain and range	Sec B	Q1(xii)		*				*

28	Solve real life problem involving ratios	Sec C	Q2			*			*
29	Draw the graph of equation $y = mx + c$	Sec C	Q3		*				*
30	Calculate (for grouped and ungrouped data) Arithmetic mean by definition and using deviations from assumed mean Median, mode, geometric mean and harmonic mean	Sec C	Q4			*			*
31	Use venn diagram to verify De Morgan's law	Sec C	Q5		*				*