Competency statements

Sr. No	Area	Topic	Competency Statement
1	Partition Values	Partition Values	The student will be able to • calculate specified partition values for given ungrouped data • calculate specified partition values for grouped data (using formulae and graphs)
2	Measures of Dispersion	Measures of Dispersion	• calculate range, quartiles and quartile deviation for given data • calculate variance and standard deviation from given data • calculate measures of dispersion for grouped data
3	Skewness	Skewness	• decide if the given frequency distribution is symmetric • calculate Pearson's coefficient of skewness • calculate Bowley's coefficient of skewness
4	Bivariate Frquency Distribution	Bivariate Frequency Distribution	• construct a bivariate frequency distribution for given raw data • find marginal and conditional frequency distributions from given bivariate frequency distribution. • find χ^2 statistic.
5	Correlation	Correlation	• compute correlation coefficient for given bivariate data • compute correlation coefficient for a bivariate frequency table.
6	Permutation and combination	Permutation and combination	• count the number of arrangements of given objects satisfying specified conditions • count the number of possible selections of objects satisfying specified conditions

7	Probability	Probability	• calculate probabilities of events in a random experiment • calculate probability of an event using description of an experiment • calculate probabilities of events obtained using algebra of events.
8	Linear Inequations	Linear Inequations	• identify sets of numbers satisfying given in - equations • solve a given set of in equations graphically
9	Commercial Mathematics	Percentage	• calculate percentages from given information • compare quantities in terms of percentages
		Profit and Loss	• calculate profit/loss from descriptions of a commercial activity/transaction • express profit/loss in terms of percentages
		Interest	• calculate simple interest • calculate compound interest
		GST	• calculate CGST, SGST and UTGST • calculate input tax and output tax • calculate input tax credit at different stages of trade
		Shares	• calculate dividend on shares • understand concepts of face value, market value, nominal value and par value of shares • calculate brokerage in a given transaction
		Partnership	• understand types of partnerships • understand levels of involvement of partners in a specified business
		Depreciation	• calculate depreciation using the initial value, period and duration of use of an asset • calculate present value from initial value for a given rate of depreciation and a specified duration after purchase of an asset