LCCI Level 2 in Business Statistics February 2025

Qu 1	MCQ Which type of sampling gives the truest picture of a population?	
A	Random	✔
B	Systematic	
C	Quota	
D	Stratified	

Qu 2	DROP DOWN There is usually too much details in (raw) data. Data (reduction) summarises the data and highlights any underlying patterns.	
A	raw simple, secondary, edited	✔
B	reduction removal, limitation, simplification	

Qu 3	MCQ Which of the following is the gradient of the straight line, whose equation is given below? y = 4x + 7 ?	
A	+4	✔
B	-4	
C	+7	
D	-7	

Qu 4	INSERT VALUE Calculate the mean value of the following: 25, 10, 45, 26	
A	26.5	✔

Qu 5	MCQ Which type of measure indicates the centre of a set of data?	
A	Measure of location	✔
B	Measure of spread	
C	Measure of length	
D	Measure of time	

Qu 6	INSERT VALUE What is the median value of the following data: 27, 32, 34, 28, 35, 30	
A	31	✔

Qu 7	INSERT VALUE The commission earned by six sales staff during January was found to be $50, $150, $25, $80, $25, $175 What is the standard deviation? (Give your answer to 2 decimal places.)	
A	$54.12	✔

<table>
<tr><td>Qu 8</td><td colspan="2">MCQ

The following data shows the expected demand for a particular dish in a restaurant over eight days.

<table><tr><td>Day number (independent variable)</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr><tr><td>Demand for dish (dependent variable)</td><td>17</td><td>23</td><td>41</td><td>38</td><td>42</td><td>47</td><td>51</td><td>56</td></tr></table>

Which of the equations would show the relationship between expected demand and day number?</td></tr>
<tr><td>A</td><td>Demand = (5.18 x day number) + 16.07</td><td>✔</td></tr>
<tr><td>B</td><td>Demand = (16.07 x day number) + 5.18</td><td></td></tr>
<tr><td>C</td><td>Demand = (4.78 x day number) + 16.24</td><td></td></tr>
<tr><td>D</td><td>Demand = (16.24 x day number) + 4.78</td><td></td></tr>
</table>

<table>
<tr><td>Qu 9</td><td colspan="2">DROP DOWN

Projective (forecasts) use historical observations to predict (future) values, using time series.</td></tr>
<tr><td>A</td><td>forecasts

variables, data, methods</td><td></td></tr>
<tr><td>B</td><td>future

present, missing, outlying</td><td></td></tr>
</table>

Qu 10	INSERT VALUE A police force has recorded 127 incidents involving theft in Year 1, 142 in Year 2 and 116 in Year 3. Using the first year as the base year, calculate the index value for year three. (Give your answer to 2 decimal places.)	
A	0.91	✔
B	1.12	
C	1.10	
D	0.89	

Qu 11	DROP DOWN A trend value is an underlying upward or downward movement over (time), whilst a seasonal factor is a (regular) variation around the trend.	
A	time average, distance, normal	
B	regular small, occasions, predictable	

Qu 12	DROP DOWN When working with weighted aggregate indices, (Paasche's) Index requires quanitities for each year but (Laspeyre's) Index can make direct comparison between years	
A	Paasche's Laspeyre's	
B	Laspeyre's Paasche's	

Qu 13	MCQ Of 200 employees in an organisation, 30 of them are males working in administration. What is the probability of selecting an employee at random who is a male administrator?	
A	0.15	✔
B	0.30	
C	0.60	
D	0.75	

Qu 14	DROP DOWN The probability of an event is calculated by (dividing) the number of ways an event can occur (by) the number of possible outcomes.	
A	dividing multiplying, adding	
B	by to	

Qu 15	MCQ Which type of diagram can be used to show events that are non-mutually exclusive?	
A	Venn diagrams	✔
B	Bar charts	
C	Pie charts	
D	Histograms	

Qu 16	INSERT VALUE A company makes domestic freezers. Each year 10,000 are for the home market, 8,000 are exported to the USA, 7,000 to Eastern Europe, 4,000 to South America, 5,000 to China, 3,000 to Australia and 3,000 to other markets. If a freezer is selected at random, what is the probability that it will NOT be going to the USA or South American markets? (Give your answer as a decimal to one decimal place.)	
A	0.7	

Qu 17	MCQ Two employees are to be selected from a team of 5 male and 4 female members. Calculate the probability that one male and one female will be chosen.	
A	0.28	✔
B	0.25	
C	0.31	
D	0.32	

Qu 18	MCQ A light bulb manufacturer produces bulbs in batches of 50 and it is know that 5 bulbs in each batch are likely to be faulty. If two bulbs are selected, without replacement, from a batch, what is the probability that both will be defective?	
A	0.008	✔
B	0.08	

C	0.006	
D	0.01	

Qu 19	DROP DOWN The Paasche's index is an example of a (current) weighted index, whilst the Laspeyres' index is an example of a base weighted index. The Laspeyres' index requires quantities as well as (prices) to be obtained each year.	
A	current base	
B	prices dates, times, quantities	

Qu 20	MCQ If a researcher wishes to collect data relating to the number of cars owned each year by a company, which type of data are they gathering?	
A	Discrete data	✔
B	Interval data	
C	Ordinal data	
D	Continual data	

Qu 21	TRUE or FALSE a) Continuous data can take any value and is not restricted to integer values. b) Ordinal data is often used to categorise different categories of observations.	
A	True	
B	True	

Qu 22	MRQ Which of the following are advantages of the use of data reduction?	
A	Highlighting overall patterns	✔
B	Giving objective measures	✔
C	Irreversible	
D	Editing original data	

Qu 23	MCQ Which of the following finds the line of best fit through a set of data plotted on a graph?	
A	Linear regression	✔
B	Coefficient of determination	
C	Standard deviation	
D	Linear programming	

Qu 24	TRUE or FALSE a) For a 12-pont moving average, it is necessary to centre the moving averages. b) To seasonally adjust a time series, it is necessary to multiply by the seasonal factor.	
A	True	
B	False	

Qu 25	MCQ A simple index is used when there is how many items or variables to monitor?	
A	One	✔
B	Two	
C	Three	
D	Four	

Qu 26	MCQ A probability of 1 indicates which of the following?	
A	An event will always occur	✔
B	An event will never occur	
C	An event is unlikely to occur	
D	An event has not happened yet	

Qu 27	TRUE or FALSE a) Probabilities that are obtained by measurement are called subjective probabilities. b) Probabilities that are obtained from guesses are called empirical probabilities.	
A	False	
B	False	

Qu 28	MRQ Two tosses of the same coin is an example of which type of event?	
A	Independent	✔
B	Mutually exhaustive	✔
C	Mutually exclusive	
D	Dependent	

Qu 29	MCQ A graph of a cumulative frequency distribution is known as which of the following?	
A	An ogive	✔
B	A histogram	
C	A line graph	
D	A Venn diagram	

Qu 30	MCQ Which of the following methods of gathering data is likely to be the most expensive?	
A	Telephone interviewing	✔
B	Postal questionnaires	
C	Face-to-face interviews	
D	Online surveys	