

SSR DEGREE COLLEGE (AUTONOMOUS) NIZAMABAD
SEM -II INTERNAL -II
BUSINESS STATS
QUESTION BANK

UNIT III: Correlation & Regression

A. Multiple Choice Questions (10 MCQs)

1. Correlation studies the relationship between
 - a) One variable
 - b) Two or more variables
 - c) Constants
 - d) Frequencies

Ans: b
2. When both variables move in the same direction, correlation is
 - a) Negative
 - b) Zero
 - c) Positive
 - d) Perfect

Ans: c
3. Scatter diagram is used to study
 - a) Trend
 - b) Dispersion
 - c) Correlation
 - d) Index numbers

Ans: c
4. Karl Pearson's coefficient ranges between
 - a) 0 and 1
 - b) -1 and +1
 - c) $-\infty$ and $+\infty$
 - d) 1 and 100

Ans: b
5. Spearman's rank correlation is used for
 - a) Qualitative data
 - b) Ranked data
 - c) Time series
 - d) Frequency data

Ans: b
6. Regression shows
 - a) Degree of relationship
 - b) Cause and effect relationship
 - c) Dispersion
 - d) Skewness

Ans: b
7. Line of best fit is obtained by

- a) Graphic method
- b) Least squares method
- c) Average method
- d) Trial method

Ans: b

8. Regression coefficient represents

- a) Intercept
- b) Slope
- c) Origin
- d) Mean

Ans: b

9. In simple regression, number of dependent variables is

- a) One
- b) Two
- c) Three
- d) Many

Ans: a

10. Correlation does not imply

- a) Association
- b) Dependence
- c) Causation
- d) Relationship

Ans: c

B. Fill in the Blanks (10)

1. Correlation measures the ____ of relationship.
2. Positive correlation means variables move in ____ direction.
3. Scatter diagram uses ____ points.
4. Karl Pearson's correlation is based on ____ deviations.
5. Spearman's method is also called ____ correlation.
6. Regression predicts ____ variable.
7. Least squares method minimizes ____ of squared errors.
8. Regression line is also called ____ line.
9. Correlation coefficient is denoted by ____.
10. Regression analysis helps in ____ making.

UNIT IV: Time Series & Index Numbers

A. Multiple Choice Questions (10 MCQs)

1. Time series data is arranged in

- a) Alphabetical order
- b) Numerical order
- c) Chronological order
- d) Random order

Ans: c

2. Long-term movement in time series is called

- a) Seasonal variation
- b) Trend

c) Cyclical variation

d) Irregular variation

Ans: b

3. Seasonal variations occur due to

a) Weather

b) Festivals

c) Habits

d) All of the above

Ans: d

4. Moving average method is used to measure

a) Seasonal variation

b) Trend

c) Cyclical variation

d) Irregular variation

Ans: b

5. Semi-average method divides data into

a) Three parts

b) Two equal parts

c) Four parts

d) Unequal parts

Ans: b

6. Index numbers measure

a) Absolute change

b) Relative change

c) Total change

d) Average change

Ans: b

7. Price index relates to

a) Quantity

b) Cost

c) Prices

d) Production

Ans: c

8. Laspeyres index uses

a) Current weights

b) Base year weights

c) Average weights

d) No weights

Ans: b

9. Paasche index uses

a) Base year weights

b) Current year weights

c) Fixed weights

d) No weights

Ans: b

10. Fisher's index is known as

a) Simple index

b) Ideal index

- c) Quantity index
- d) Value index

Ans: b

B. Fill in the Blanks (10)

1. Time series data relates to ____ over time.
2. Trend shows ____ movement.
3. Seasonal variations repeat after ____ intervals.
4. Cyclical variations relate to ____ cycles.
5. Irregular variations are ____ in nature.
6. Index numbers show ____ changes.
7. Laspeyres index is based on ____ year quantities.
8. Paasche index is based on ____ year quantities.
9. Fisher's index is the ____ mean of Laspeyres and Paasche.
10. Index numbers are useful in business ____.

UNIT V: Probability & Sampling (Conceptual)

A. Multiple Choice Questions (10 MCQs)

1. Probability measures

- a) Certainty
- b) Uncertainty
- c) Risk
- d) Chance of occurrence

Ans: d

2. Probability value always lies between

- a) -1 and +1
- b) 0 and 1
- c) 1 and 100
- d) $-\infty$ and $+\infty$

Ans: b

3. An event that cannot happen is called

- a) Sure event
- b) Possible event
- c) Impossible event
- d) Random event

Ans: c

4. Addition theorem is used when events are

- a) Independent
- b) Dependent
- c) Mutually exclusive
- d) Random

Ans: c

5. Multiplication theorem applies to

- a) Mutually exclusive events
- b) Independent events
- c) Impossible events
- d) Certain events

Ans: b

6. Conditional probability is denoted by

- a) $P(A+B)$
- b) $P(A \times B)$
- c) $P(A/B)$
- d) $P(A-B)$

Ans: c

7. Bayes' theorem is used for

- a) Prediction
- b) Revision of probability
- c) Addition rule
- d) Sampling

Ans: b

8. Population refers to

- a) Sample units
- b) Part of universe
- c) Entire group
- d) Selected items

Ans: c

9. Simple random sampling gives

- a) Equal chance
- b) Unequal chance
- c) No chance
- d) Fixed chance

Ans: a

10. Convenience sampling is a

- a) Probability sampling
- b) Non-probability sampling
- c) Stratified sampling
- d) Cluster sampling

Ans: b

B. Fill in the Blanks (10)

1. Probability is the measure of ____.
2. Sure event has probability ____.
3. Impossible event has probability ____.
4. Conditional probability depends on ____ event.
5. Bayes' theorem helps in ____ probabilities.
6. Population is the ____ of all items.
7. Sample is a ____ of population.
8. Stratified sampling divides population into ____.
9. Cluster sampling selects groups called ____.

10. Sampling helps in better business _____