

2016

(6th Semester)

COMMERCE

Paper No. : BC-603

(**Business Statistics**)

(PART : A—OBJECTIVE)

(Marks : 25)

The figures in the margin indicate full marks for the questions

Answer **all** questions

1. Indicate whether the following statements are *True* or *False* by putting a Tick (✓) mark in the brackets provided : 1×5=5

(a) Statistics is the study of quantitative facts.

True () False ()

(b) In case of cartogram, statistical facts are presented through maps.

True () False ()

(c) Median and Mode are called positional averages.

True () False ()

(d) When only two variables are studied to get an idea of the correlation, then the relationship is multiple correlation.

True () False ()

(e) Regression analysis is a method, introduced by Francis Galton.

True () False ()

2. Put a Tick (✓) mark against the correct answer in the brackets provided : 1×5=5

(a) Factor reversal test satisfies if $P_{01} \times Q_{01} =$

(i) $\frac{\Sigma p_0 q_0}{\Sigma p_1 q_1}$ ()

(ii) $\frac{\Sigma p_1 q_0}{\Sigma p_0 q_0}$ ()

(iii) $\frac{\Sigma p_0 q_1}{\Sigma p_1 q_1}$ ()

(iv) $\frac{\Sigma p_1 q_1}{\Sigma p_0 q_0}$ ()

(b) The sum of seasonal indices (using additive model) is equal to

- (i) zero ()
- (ii) less than zero ()
- (iii) more than zero ()
- (iv) one ()

(c) 5 articles can be drawn from a bag containing 8 articles in

- (i) 56 ways ()
- (ii) 85 ways ()
- (iii) 58 ways ()
- (iv) None of the above ()

(d) In case of mutually exclusive events, $P(A \cup B) =$

- (i) $P(A) + P(B) - P(A \cap B)$ ()
- (ii) $P(A) + P(B)$ ()
- (iii) $P(A \cap B) - P(A) + P(B)$ ()
- (iv) None of the above ()

(e) Data collected on literacy from the census report is

- (i) primary data ()
- (ii) secondary data ()
- (iii) sample data ()
- (iv) Both (i) and (ii) ()

3. Fill in the blanks : 1×5=5

(a) Statistics are statements of facts.

(b) is the ideal measure of dispersion.

(c) The cost of living index number is also known as

.....

(d) A business cycle is an example of

..... variation.

(e) Classical probability is also called

..... probability.

(5)

4. Write short notes on the following not exceeding
3 sentences each : 2×5

(a) Pie Diagrams

(b) Rank Correlation

4. Write short notes on the following topics in 3 sentences each.

(a) Pie Diagrams

are used to show the relative proportions of different parts of a whole.

The cost of living index number is a measure of the change in the price level of a basket of goods and services over time.

A business cycle is a period of expansion and contraction in the economy.

A business cycle is an example of cyclical variation.

variation.

Classical probability is called a priori probability.

probability.

(7)

(c) Base Shifting

(d) Short-term Forecasting

(9)

(e) Mutually Exclusive Events
