



Roll No. _____ to be filled in by the candidate.

Rwp-12-18

Paper Code

4

6

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Sessions: 2015-2017 & 2016-2018

Statistics (Commerce Group) (Objective Type)

Time: 15 Minutes

Marks: 10

NOTE: Write answers to the questions on objective answer sheet provided. Four possible answers A, B, C & D to each question are given. Which answer you consider correct, fill the corresponding circle A, B, C or D given in front of each question with Marker or pen ink on the answer sheet provided.

1.1. A balance dice is rolled probability of an even number is:

(A) $\frac{1}{6}$

(B) $\frac{1}{2}$

(C) $\frac{1}{3}$

(D) $\frac{1}{4}$

2. If a coin is tossed twice, then the probability of getting one head and one tail is:

(A) $\frac{1}{4}$

(B) $\frac{2}{4}$

(C) $\frac{3}{4}$

(D) $\frac{2}{3}$

3. π is a:

(A) Constant

(B) Variable

(C) Statistic

(D) Co-efficient

4. Questionnaire method is used in collecting:

(A) Primary data

(B) Secondary data

(C) Fictitious data

(D) Private data

5. The upper and lower class limits are 20 and 30, the mid point of the class is:

(A) 20

(B) 25

(C) 30

(D) 50

6. The sum of the deviations from arithmetic mean is:

(A) one

(B) <0 (C) $=0$ (D) >0

7. The model letter of the word "Statistics" is:

(A) S

(B) T

(C) I

(D) S and T

8. We must arrange the data before calculating:

(A) Mean

(B) Median

(C) Mode

(D) None of these

9. Link Relative is equal to:

(A) $\frac{P_n}{P_o} \times 100$

(B) $\frac{P_{n-1}}{P_n} \times 100$

(C) $\frac{P_n}{P_{n-1}} \times 100$

(D) $\frac{P_o}{P_n} \times 100$

10. Simple index number involves commodities:

(A) one

(B) two

(C) three

(D) four

Roll No. _____ to be filled in by the candidate.

Rwp-12-13

Sessions: 2015-2017 & 2016-2018

Statistics (Commerce group) (Essay type)

Time: 1:45 Hours

SECTION-I

Marks: 40

2- Write short answers of any six parts from the following.

2 x 6 = 12

- Define Primary data.
- Define Continuous Variable.
- Define Qualitative variable.
- Define Classification.
- Define Tabulation.
- Define Histogram.
- Define Class Interval.
- Define Average.
- Define Mode.

3- Write short answers of any six parts from the following.

2 x 6 = 12

- Write two demerits of Median.
- Define Central tendency.
- Find median from 3, 17, 12, 8, 25, 9.
- Define Quantity Index Number.
- Define base year in Index Number.
- What is weighted Index Number?
- What is compound event in probability?
- What are equally likely events?
- Define dependent Events.

SECTION-II**Note: Attempt any two questions from the following.**

8x2=16

4. (a) The grades in Statistics of 50 students are as under.

| | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|---|
| 68 | 76 | 71 | 60 | 82 | 96 | 83 | 76 | 78 | 73 | 4 |
| 93 | 59 | 75 | 71 | 65 | 78 | 81 | 78 | 73 | 95 | |
| 74 | 71 | 88 | 82 | 62 | 75 | 97 | 74 | 68 | 75 | |
| 94 | 53 | 90 | 73 | 65 | 72 | 76 | 63 | 88 | 61 | |
| 66 | 75 | 85 | 88 | 60 | 69 | 85 | 57 | 67 | 77 | |

Make a frequency distribution taking classes as: 50-54, 55-59, 60-64, etc

(b) Calculate the Arithmetic Mean from the following data.

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| Hourly wages | No of Employees |
|--------------|-----------------|
| 40-59 | 13 |
| 60-79 | 23 |
| 80-99 | 101 |
| 100-119 | 182 |
| 120-139 | 105 |
| 140-159 | 19 |
| 160-179 | 7 |

5. (a) Find Mode for continuous distribution.

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| Group | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 |
|-------|-------|-------|-------|-------|-------|
| f | 3 | 8 | 12 | 9 | 4 |

(b) Calculate Fisher's Price Index Number for 2006 taking 2005 as Base year.

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| Items | Price | | Quantity | |
|-------|-------|------|----------|------|
| | 2005 | 2006 | 2005 | 2006 |
| A | 2 | 10 | 50 | 40 |
| B | 3 | 8 | 10 | 50 |
| C | 4 | 4 | 60 | 80 |

6. (a) A fair die is rolled once, what is the probability of obtaining.

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- Six.
- an odd number.

(b) A bag contains 10 light bulbs out of which 3 are defective. If two bulbs are selected at random from the bag, what is the probability that.

- Both are defective
- Both are not defective