



Roll No. \_\_\_\_\_ to be filled in by the candidate.

RWP-12-18

Paper Code	4	6	4	3
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Sessions:2015-2017&amp;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.  $\pi$  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)  $\frac{P_n}{P_c} \times 100$

(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&amp;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

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| i. Define Primary data.           | ii. Define Continuous Variable. |
| iii. Define Qualitative variable. | iv. Define Classification.      |
| v. Define Tabulation.             | vi. Define Histogram.           |
| vii. Define Class Interval.       | viii. Define Average.           |
| ix. Define Mode.                  |                                 |

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

2 x 6 =12

- |   |                                       |
|---|---------------------------------------|
| i. Write two demerits of Median.            | ii. Define Central tendency.          |
| iii. Find median from 3,17,12,8,25,9.       | iv. Define Quantity Index Number.     |
| v. Define base year in Index Number.        | vi. What is weighted Index Number?    |
| vii. What is compound event in probability? | viii. What are equally likely events? |
| ix. 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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- (i) Six. (ii) 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.**

- (i) Both are defective (ii) Both are not defective