

## MODEL PAPER INTER PART-II

### Business Statistics (Objective Type)

Time:

Marks: 10

**Note:** Four possible answers A,B,C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with pen or marker in the answer book. Cutting or filling two or more circles will result in zero mark in that question.

1. To find out the size of shoes, the best average is:  
(a) W. Mean                      (b) Mean                      (c) Mode                      (d) Geometric Mean
2.  $\frac{P_n}{P_o} \times 100$  is equal to:  
(a) Link relative                      (b) Chain indices                      (c) Price relative                      (d) Fisher index
3. Index numbers are basically classified into:  
(a) 2 categories                      (b) 3 categories                      (c) 4 categories                      (d) 5 categories
4. Mid-point is also called  
(a) Class mark                      (b) Population                      (c) Class boundaries                      (d) Class limits
5. Parameters are related to  
(a) Sample                      (b) Population                      (c) Mean                      (d) Statistic
6. Fisher index number of Laspeyres's and Paasche's index numbers.  
(a) A.M                      (b) G.M                      (c) Median                      (d) Mode
7. The probability of appearing a tail, when a fair coin is tossed  
(a) 0                      (b)  $\frac{1}{2}$                       (c)  $\frac{1}{4}$                       (d) 1
8. Statistics are always  
(a) Aggregate of facts (b) True and Figure                      (c) continuous                      (d) New
9. Averages are also called measures of  
(a) Variation                      (b) Location                      (c) Skewness                      (d) Median
10. Title should be in  
(a) Small letters                      (b) Capital letters                      (c) Italic letters                      (d) Roman letters

## MODEL PAPER INTER PART-II

### Business Statistics (Essay Type)

Time:

Marks: 40

#### Section – I

**Q.2. Write short answers to any six (6) questions. 12**

- i. Define statistics in plural sense.
- ii. Give any two important characteristics of statistics.
- iii. Write any two limitations of statistics.
- iv. What is continuous variables.
- v. Give the advantages of arithmetic mean.
- vi. Define Median.
- vii. If  $\sum x = 450$ , and  $n=20$ , find arithmetic mean.
- viii. If  $L=19.5$ ,  $h=5$ ,  $f_m = 25$ ,  $f=15$  and  $f_2 = 20$ , then find mode.
- iv. Give the formula of coding methods to compute arithmetic mean.

**Q3. Write short answers to any six (6) questions. 12**

- i. Define data.
- ii. Explain the term primary data.
- iii. Define simple index number.
- iv. Define continuous data.
- v. Explain fixed base method.
- vi. Write any two uses of index numbers.
- vii. Define price index.
- viii. Define classification.
- ix. Write sample pace for toss of a fair cubical die.

## Section – II

**Note: Attempt any three questions.**

Q.4. (a) If an experiment measuring percentage of shortage on dying plastic clay test specimens gave the following results.

19.3,          16.9,          17.8,          17.3,          15.8,          18.5,  
 17.1,          19.5,          20.4,          18.7,          22.3,          17.5,  
 18.4,          13.9,          18.8,          16.8,          14.9,          19.5,  
 19.4,          16.3,          17.8,          23.4,          17.4,          19.4,  
 21.8,          21.2,          18.2,          16.1,          18.3,          17.5,  
 16.5,          18.3,          17.5,          16.5,          18.6,          16.9,  
 16.5,          18.2,          20.2,          20.1,          17.5,          19.1,  
 17.4

Make the frequency distribution taking 1.0 as the size of class interval.

Draw a cumulative frequency curve for the following frequency distribution.

| Class | 10-11 | 12-13 | 14-15 | 16-17 | 18-19 | 20-21 | 22-23 |
|-------|-------|-------|-------|-------|-------|-------|-------|
| F     | 4     | 9     | 16    | 22    | 12    | 6     | 01    |

Q.5. (a) Following is the distribution of marks obtained by 60 student in economics tests calculate the arithmetic mean.

| Marks | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
|-------|------|-------|-------|-------|-------|-------|
| F     | 60   | 56    | 40    | 20    | 10    | 03    |

(b) Calculate median of following data.

| Class | 5.0-5.4 | 5.5-5.9 | 6.0-6.4 | 6.5-6.9 | 7.0-7.4 | 7.5-7.9 | 8.0-8.4 |
|-------|---------|---------|---------|---------|---------|---------|---------|
| F     | 4       | 08      | 12      | 20      | 16      | 10      | 05      |

Q.6. (a) Annual average price of four commodities for the years 1980-82 are given below.

Construct index numbers for 1981 and 1982 taking 1980 as base by simple aggregative method.

| Item   | Year |      |      |
|--------|------|------|------|
|        | 1980 | 1981 | 1982 |
| Wheat  | 60   | 65   | 72   |
| Rice   | 130  | 150  | 160  |
| Cotton | 420  | 480  | 540  |
| Sugar  | 260  | 280  | 300  |

Q.6. (b) From a well shuffled pack of 52 cards a card is drawn at random, what is the probability that is (i) a card of diamond. (ii) An ace.