## -:BUSIIESS STATISTICS SAMPLE PAPER: BEOM SEMESTER-III

## Section:-A

Q-1)What is statistics?
Q-2) Mention various functions of statistics?
Q-3) If the mean is 202 and the median is 221 , compute the value of Mode.
Q-4) Explain the various sources of collecting secondary data?
Q-5) What do you understand by a sample and census survey?
Q-6) Explain different types of index number?
Q-7) What is the Law of Regularity?
Q-8) What do you understand by the term collection of data?
Q-9) What do you understand by measures of dispersion?
Q-10) Briefly explain the term Standard deviation?
Q-11) What is Arithmetic mean?
$Q-12)$ If the mode is 16 , the value of the mean is 7 . Find the value of median.
Q-13) Define Regression analysis? Mention its features.
Q-14) What is the law of inertia of large numbers?
Q-15) What do you mean by the term Homogeneous?
Q-16) What do you mean by correlation?
$Q-17$ ) What do you mean by the line of regression of $X$ on Y ?
Q-18) The value of Mode is 76 and the value of mean is 68. Compute the value of median?

Q-19) Describe the tools of measures of dispersion?
Q-20) What is probability sampling?
$\qquad$
Section:-:

Q-1) Find the mean from the following data:-

| Marks <br> below | 10 | 20 | 30 | 40 | 50 | 60 | 70 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No. of <br> students | 18 | 35 | 58 | 73 | 80 | 96 | 100 |

Q-2) From the following data calculate median:-

| Mid value | 10 | 20 | 30 | 40 | 50 | 60 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Frequency | 5 | 10 | 25 | 20 | 15 | 5 |

Q-3) Compute the value of Standard deviation from the following data:-

| $X$ | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| F | 9 | 3 | 11 | 14 | 7 | 12 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Q-4) Calculate mode for the following data:-

| Class <br> interval | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Frequency | 9 | 7 | 10 | 4 | 5 |

Q-5) Compute fisher's Index number:2005.

2006

| Items | Price. | Qty. | Price. | Qty. |
| :--- | :--- | ---: | :--- | :--- |
| $A$ | 2. | 100 | 3. | 110 |
| B | 5. | 80 | 10. | 80 |
| C | 4. | 50 | 7. | 45 |
| D | 6. | 10 | 6. | 20 |
| E | 2. | 60 | 4. | 60 |

Q-6) Calculate the cost living index number by using family budget method:-

| Items | Price. | Price. | Qty |
| :--- | :--- | :--- | :---: |
| $A$ | 6. | 10. | 50 |
| $B$ | 2. | 4. | 100 |


| C | 4. | 6. | 60 |
| :--- | :--- | :--- | :--- |
| $D$ | 10. | 12. | 30 |
| $E$ | 8. | 12. | 40 |

Q-7) Compute the mean, median and mode from the following data:-

| X | 115 | 125 | 135 | 145 | 155 | 165 | 175 | 185 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| F | 9 | 25 | 48 | 72 | 116 | 60 | 38 | 22 |

Q-8) Calculate Quartile deviation and coefficient of quartile deviation for the following:-

| C-I | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| F | 12 | 30 | 10 | 13 | 12 | 25 | 18 |

Q-9) Calculate standard deviation and coefficient of variation for the following data:-

| C-I | $0-200$ | $200-400$ | $400-600$ | $600-800$ | $800-1000$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| F | 2 | 10 | 3 | 42 | 60 |

Q-10) Calculate skewness and coefficient of skewness from the following data by using Bowley's method:-

| Wages | $55-58$ | $58-61$ | $61-64$ | $65-67$ | $67-70$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| No. of <br> workers | 12 | 17 | 23 | 18 | 10 |

Q-11) Calculate Mean deviation and coefficient of Mean Deviation from the following data :-

| C-I | $15-30$ | $30-45$ | $45-60$ | $60-75$ | $75-90$ | $90-105$ | $105-120$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| F | 5 | 8 | 10 | 15 | 10 | 8 | 4 |

Q-12) Distinguish between primary and secondary data?
Q-13) Briefly explain the limitations of statistics?
Q-14) Define Standard deviation and distinguish between Standard Deviation and Mean Deviation?
Q-15) Distinguish between individual, discrete and continuous series?
Q-16) Explain Relationship of statistics with other sciences?
Q-17) Distinguish between sample and census survey?
Q-18) Write the various measures of dispersion?
Q-19) What do you understand by statistical survey and explain its importance?

Q-20) Compute the following from the data given in the table below :-
(i) Mean (ii) median (iii) Standard deviation (iv) Variance (v) Coefficient of standard deviation (vi) Coefficient of variation (vii) mean deviation
(viii) Quartile deviation

| C-I | $0-20$ | $20-40$ | $40-60$ | $60-80$ | $80-100$ | $100-120$ | $120-140$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| F | 3 | 7 | 10 | 20 | 10 | 7 | 3 |

