M.B.A. I Semester Supplementary Examinations June 2018

## Business Statistics

Max. Marks: 60
Time: 3 Hours
Answer all five units by choosing one question from each unit ( $5 \times 12=60$ Marks )
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## UNIT-I

1. Define statistics and discuss its nature.

## OR

2. Differentiate between the following:
a) Qualitative and quantitative variable
b) A sample and a population
c) Discrete and continuous variable

## UNIT-II

3. $X Y Z$ Manufacturing Inc. produced the following number of units in the last 16 days:

| 27 | 27 | 27 | 28 | 27 | 25 | 25 | 28 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 26 | 28 | 26 | 28 | 31 | 30 | 26 | 26 |

The information is to be organized into a frequency distribution.
a) How many classes would you recommend?
b) What class interval would you suggest?
c) Organize the information into a frequency distribution and determine the relative frequency distribution.
OR
4. The following data represents the responses of different respondents regarding a new product. Answer the questions that follow:

| Excellent | 102 |
| :---: | :---: |
| Good | 58 |
| Average | 30 |
| Poor | 10 |

a) What type of measurement scale has been used?
b) Draw a bar chart of the results.
c) Draw a pie chart of the results.

UNIT-III
5. Determine the mean and the standard deviation of the following frequency distribution

| Class | Frequency |
| :---: | :---: |
| 20 up to 30 | 7 |
| 30 up to 40 | 12 |
| 40 up to 50 | 21 |
| 50 up to 60 | 18 |
| 60 up to 70 | 12 |

OR
6. The following data are numbers of passengers on flights of Air India between Delhi and Mumbai over 33 days in April and early May.
$128,121,134,136,136,118,123,109,120,116,125,128,121,129,130,131$, $127,119,114,134,110,136,134,125,128,123,128,133,132,136,134,129$, 132
Find the lower, middle, and upper quartiles of this data set. What is the interquartile range? Also find the range, the variance, and the standard deviation of the data set.

## UNIT-IV

7. The sales manager of Copier Sales of America, which has a large sales force throughout the United States and Canada, wants to determine whether there is a relationship between the number of sales calls made in a month and the number of copiers sold that month. The manager selects a random sample of 10 representatives and determines the number of sales calls each representative made, as displayed in the table:

| Sales <br> Representatives | No. of sales calls | No. of copiers sold |
| :---: | :---: | :---: |
| Tom Keller | 20 | 30 |
| Jeff Hall | 40 | 60 |
| Brian Virost | 20 | 40 |
| Greg Fish | 30 | 60 |
| Susan Welch | 10 | 30 |
| Carlos Ramirez | 10 | 40 |
| Rich Niles | 20 | 40 |
| Mike Kiel | 20 | 50 |
| Mark Reynolds | 20 | 30 |
| Soni Jones | 30 | 70 |

(a) Which variable is the dependent variable? Which variable is the independent variable?
(b) Determine the Karl Pearson's correlation coefficient.
a) Interpret the strength of the correlation coefficient.

OR
8. The following sample observations were randomly selected:

| $\mathrm{X}:$ | 4 | 5 | 3 | 6 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathrm{Y}:$ | 4 | 6 | 5 | 7 | 7 |

a. Determine the regression equation.
b. Determine the value of when $X$ is 7 .

## UNIT-V

9. Explain clearly different components into which a time-series may be analyzed. Explain any method for calculating trend values in a time-series.

## OR

10. Estimate the trend values using the data given by taking a four-year moving average:

| Year | Production of <br> Steel (million tons) | Year | Production of <br> Steel (million tons) |
| :---: | :---: | :---: | :---: |
| 1990 | 12 | 1997 | 100 |
| 1991 | 25 | 1998 | 82 |
| 1992 | 39 | 1999 | 63 |
| 1993 | 54 | 2000 | 49 |
| 1994 | 70 | 2001 | 34 |
| 1995 | 87 | 2002 | 20 |
| 1996 | 105 | 2003 | 7 |

Hall Ticket Number :

## Code: 7P1C17

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## Managerial Communications

Max. Marks: 60
Time: 3 Hours
Answer all five units by choosing one question from each unit ( $5 \times 12=60$ Marks )

## UNIT-I

1. What are different methods of overcoming communication barriers? Give explanation and suitable examples.

## OR

2. Define communication. Explain the importance and objectives of effective communication?

## UNIT-II

3. a) Distinguish between the formal and the informal communication.
b) What are the advantages of intrapersonal communication with some examples?

OR
4. Discuss about Johari window and transactional analysis.

## UNIT-III

5. What is non verbal-communication? What are the various types of non-verbal communication?

## OR

6. a) What are the cross cultural dimensions of business communication?
b) Describe the process of listening in details.

UNIT-IV
7. What are the classifications of speech? Explain?

OR
8. List and explain the basic guidelines to be considered while designing and oral presentation.

> UNIT-V
9. Discuss the various forms of a business letter and state with reason which one of them is most desirable.

## OR

10. What is the objective of interviews? List out the various types of interviews relevant to a business organization.

| Hall Ticket Number : |  |  |  |  |  |  |  |  |  |  |
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## Code: 7P1A13

## R-17

M.B.A. I Semester Supplementary Examinations June 2018 Managerial Economics
Max. Marks: 60
Time: 3 Hours
Answer all five units by choosing one question from each unit ( $5 \times 12=60$ Marks )

## UNIT-I

1. What is Managerial Economics? Explain its reliance to business decision-making

## OR

2. Is it important to have an objective function for a firm? Explain the managerial and behavioral theories.

## UNIT-II

3. What is Demand? Explain the different determinants of demand with relevant examples.

## OR

4. What is Demand Forecasting? Explain different Demand Forecasting Methods

## UNIT-III

5. Define the Production Function. Discuss Cobb- Douglas Production Function

## OR

6. Explain the law of variable proportions with suitable examples.

## UNIT-IV

7. Discuss how the price and out put are determined under perfect competition.

## OR

8. How is profit measured? Discuss the dynamics of profit planning.

> UNIT-V
9. Explain the salient features of Unconstrained and Constrained Optimization

## OR

10. Explain different multivariable optimization functions.
