



MBA 1<sup>ST</sup> Semester (Aug- Dec 2019)

Paper Code:- MBA-106

LECTURE PLAN  
**Statistics and Analytics for Decision Making**

Course coordinator- Mr. Manish Gulyani

Externals Marks: 70

Internal Marks: 30

**Introduction**

The objective of this course is to enable candidates to develop a knowledge and understanding of some basic statistical techniques and ability to apply this knowledge and understanding in solving business problems

**Teaching Plan**

(Each session of 55 mins)

**Introduction of the course**

In this introductory session the purpose of this is to make the students learn about the application of statistical tools and technique for decision-making and the subject “Business statistics” will be introduced.

**Teaching Modules:-**

Sr. No	Modules	No. of session
1.	Probability <ul style="list-style-type: none"><li>• Meaning, definition</li><li>• Concepts of Probability</li><li>• Theories of Probability:- Bayes’s theory, Addition Theorem, Multiplication Theorem</li></ul>	Seven
2.	Probability Distribution <ul style="list-style-type: none"><li>• Binomial Distribution</li><li>• Poison Distribution</li><li>• Normal Distribution</li></ul>	Seven



3.	Class Test:- <ul style="list-style-type: none"><li>• Probability</li></ul>	One
4.	Testing of Hypothesis <ul style="list-style-type: none"><li>• Meaning &amp; Types</li><li>• Type I &amp; Type II Error</li><li>• Degree of Freedom</li><li>• Large Sample Test</li></ul>	Four
5.	Small Sample Tests <ul style="list-style-type: none"><li>• Various types Like</li><li>• T-test</li><li>• F-test</li><li>• Z-Test</li></ul>	Five
6.	Class Test <ul style="list-style-type: none"><li>• Large Sample Test</li></ul>	One
7.	Non-Parametric Test <ul style="list-style-type: none"><li>• Signs Test</li><li>• Wilcoxon Test</li><li>• Krushal walis Test</li></ul>	Four
8.	Sampling Distribution <ul style="list-style-type: none"><li>• Sampling Methods</li><li>• Central Limit Theorem</li><li>• Law of Large Number</li></ul>	Three
9.	Class Test <ul style="list-style-type: none"><li>• Sampling Methods</li></ul>	One
10.	Statistical Estimation Theory	Three
11.	Statistical Quality Control <ul style="list-style-type: none"><li>• Quality Control Charts</li><li>• Attributes</li><li>• Acceptance Sampling</li></ul>	Four

Total Lecture Required = 40

**Recommended & Reference Text Books:-**

- T.R. Jain
- Gupta, S.P. & Gupta, M.P., Business Statistics, Sultan Chand & Sons, New Delhi
- Levin, R.I. & Rubin D.S., Statistics for Management, Prentice Hall of India (PHI), New Delhi.
- Davis & Pecar: Business Statistics using Excel, Oxford University Press.