

## Advanced Institute of Technology &amp; Management, Palwal

Subject Details and Lecture Plan  
(Teacher's copy)

|  |  |                                 |                   |
|--|--|---------------------------------|-------------------|
| Subject Title: BUSINESS STATISTICS AND ANALYTICS |  | Subject Code: MBA-111-V         |                   |
| Total Contact Hours: L + T + P = 42 + 0 + 0      |  | Duration of Exam: 03 Hrs        |                   |
| Total Internal Assessment Marks: 25              |  | End Semester Exam.<br>Marks: 75 | Total Marks = 100 |
| Date: 21/7/2014                                  |  |                                 |                   |
| Date:  |  |                                 |                   |

Pre-requisites: multivariable calculus (differentiation)

Outcomes: The Student will learn

1. How apply applications of quantitative techniques in business decision making.
2. Examine normality and apply its concepts in different sampling techniques.
3. Analysis data using statistical techniques.

Materials and Resources Required:

Reference Books:

1. Levin and Rubin statistics for business, printing hall of India, new delhi.
2. Nav B. Bajpai business statistics, Pearson Education, India.

STUDENT ASSESSMENT:

There will be two tests of 90 minutes duration of 24 marks each. The average of best two will be considered as Final Internal Assessment marks. There will not be any further test. However, the concerned faculty member's decision is final as regards assignment of Internal Assessment is concerned.



Assessment Plan:

Mid-Term Exams

|                                |                          |
|--------------------------------|--------------------------|
| Mid-term Exams                 | Examination Date         |
| 1 <sup>st</sup> Mid-term Exams | 24-9-2025 to 26-9-2025   |
| 2 <sup>nd</sup> Mid-term Exams | 17-11-2025 to 19-11-2025 |

FINAL EXAMINATION:

There will be one final examination of 3 hours duration at the end of the semester conducted by YMCA containing questions from the whole syllabus.

Scheme of End Semester Examination

Date: Faculty Member  
(Anita Sharma)

HOD  
(Signature & Name)

Lecture Plan

N.B. TWO AUDIO VISUAL PRESENTATIONS PER WEEK.

| Lecture No | Unit/Chapter No         | Topic                               | Scheduled Date | Actual Date | Remarks & sign. of HOD | Teaching Aids |
|------------|-------------------------|-------------------------------------|----------------|-------------|------------------------|---------------|
| 1.         | Unit-I central tendency | Basic of central tendency           | 14/7/2025      |             |                        |               |
| 2.         |                         | Arithmetic mean with theory         | 15/7/2025      |             |                        |               |
| 3.         |                         | Median with examples                | 16/7/2025      |             |                        |               |
| 4.         |                         | Mode for ungrouped and grouped data | 17/7/2025      |             |                        |               |
| 5.         |                         | Revision for mean, mode             | 18/7/2025      |             |                        |               |



|    |                         |  |           |  |  |     |
|----|-------------------------|--|-----------|--|--|-----|
| 6  |                         | Range, quartile range and deviation                    | 21/7/2025 |  |  |     |
| 7. |                         | Mean deviation about mean and median                   | 22/7/2025 |  |  |     |
| 8  |                         | Standard deviation theory with formula                 | 23/7/2025 |  |  |     |
| 9  |                         | Questions of standard deviation                        | 28/7/2025 |  |  |     |
| 10 |                         | Karl pearson's coefficient of correlation              | 29/7/2025 |  |  | PPT |
| 11 |                         | Spearman's Rank correlation                            | 30/7/2025 |  |  |     |
| 12 |                         | revision   | 30/7/2025 |  |  |     |
| 13 | UNIT-2,<br>Regression   | Basic of regression                                    | 31/7/2025 |  |  |     |
| 14 |                         | Least square method                                    | 1/8/2025  |  |  |     |
| 15 |                         | Find regression lines by using regression coefficients | 4/8/2025  |  |  |     |
| 16 |                         | Relation between correlation and regression            | 5/8/2025  |  |  |     |
| 17 |                         | Theory questions of correlation and regression         | 6/8/2025  |  |  |     |
| 18 |                         | Basic of time series analysis                          | 7/8/2025  |  |  |     |
| 19 |                         | Components of time series                              | 8/8/2025  |  |  |     |
| 20 |                         | Fit the trend values                                   | 11/8/2025 |  |  |     |
| 21 |                         | Fit the straight line by using least square method     | 12/8/2025 |  |  |     |
| 22 |                         | revision   | 13/8/2025 |  |  | PPT |
| 23 | UNIT -<br>3,probability | Basic of probbilty                                     | 14/8/2025 |  |  |     |
| 24 |                         | Questions of conditional probability                   | 18/8/2025 |  |  |     |



|    |   |   |           |  |  |     |
|----|---|---|-----------|--|--|-----|
| 25 |   | Baye's theorem                                    | 19/8/2025 |  |  |     |
| 26 |   | Binomial distribution                             | 20/8/2025 |  |  |     |
| 27 |   | Practice of Binomial distribution                 | 21/8/2025 |  |  |     |
| 28 |   | Normal distribution                               | 22/8/2025 |  |  |     |
| 29 |   | Properties of normal distribution                 | 25/8/2025 |  |  |     |
| 30 |   | Numerical of normal distribution                  | 26/8/2025 |  |  |     |
| 31 |   | Relation between Binomial and normal distribution | 27/8/2025 |  |  |     |
| 32 |   | Revision of unit two                              | 28/8/2025 |  |  |     |
| 33 | UNIT-4, hypothesis                              | Basic theory of hypothesis                        | 29/8/2025 |  |  |     |
| 34 |   | Formulas of large sample space                    | 1/9/2025  |  |  | PPT |
| 35 |   | Questions of large sample space                   | 2/9/2025  |  |  |     |
| 36 | UNIT-5, higher order differentiation l equation | Practice of large sample space                    | 3/9/2025  |  |  |     |
| 37 |   | Theory of small sample                            | 4/9/2025  |  |  |     |
| 38 |   | t-distribution of small sample                    | 5/9/2025  |  |  |     |
| 39 |   | Practice of t-distribution of small sample        | 8/9/2025  |  |  | PPT |
| 40 |   | Chi-square test of small sample                   | 9/9/2025  |  |  |     |
| 41 |   | Questions of Chi-square test of small sample      | 10/9/2025 |  |  |     |
| 42 |   | Revision  | 11/9/2025 |  |  |     |
| 43 |   | Analysis of variance                              | 12/9/2025 |  |  | PPT |

### Syllabus Coverage Report

Syllabus coverage before MST-1

Satisfactory/ Lagging by \_\_\_\_ lectures.

Syllabus coverage before MST-2

Syllabus coverage before MST-3

HoD Remarks

General Comments of the Class Teacher about the suitability of Lecture Plan

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|  |
|--|

Signature of Teacher & Date

Signature of HOD & Date



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