**Doc No…….** **Review No……..** **Date……..**

**Advanced institute of Technology &Management,Palwal**

**Subject Details and Lecture Plan**
**(Teacher's copy)**

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|---|---|---|
| Subject Title**: BUSINESS MATHEMATICS** | Subject Code: **BBA/GNL/105** | |
| Total Contact Hours: L + T + P = 50 + 0 + 0 | Duration of Exam: 03 Hrs | |
| Total Internal Assessment Marks: 25 | End Semester Exam. Marks: 75 | Total Marks = 100 |
| Date:21/7/2025 | | |
| Date: | | |

**Pre-requisites**: Basic fundamentals of ANALOG ELECTRONICS**.**

**Outcomes:**The Student will learn the

1. Understand the basic concepts of business mathematics.
2. Develop basic skills for quantitative application in business situations.
3. Interpret and solve real -life business problems.
4. Understand matrices and other various mathematical concepts useful in daily life.

**Materials and Resources Required:** .

**Reference Books:**


1. Sancheti, D.C., Malhotra,A.M.&KapoorV.K., BusinessMathematics, Sultan Chand &Sons, New Delhi.
2. Zameerudin, Qazi, KhannaV.K.& Bhambri,S.K.,Business Mathematics,Vikas Publishing House Pvt. Ltd, New Delhi.

Reddy,R.JayaPrakash,Y.MallikarjunaReddy,ATextbookofBusinessMathematics,AshishPublishing


**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:**

| Internal Theory Marks Distribution | | | |
|---|---|---|---|
| Mid-Term Test | Attendance | Assignment | Total |
| 10 marks | 10 marks | 5 marks | 25 marks |

***Mid-Term Exams***

| Mid-term Exams | Examination Date |
|---|---|
| 1st Mid-term Exams | 24-9-2025 to 26-9-2025 |
| 2nd Mid-term Exams | 17-11-2025to 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***: Max. Marks: 75

Date: Faculty Member (Sign.& Name) HOD (Signature & Name)

## Lecture Plan

**N.B. TWO AUDIO-VISUAL PRESENATIONS PER WEEK.**

| Lecture No. | Unit / Chapter No. | Topic | Scheduled Date | Actual Date | Remarks & sign. of HOD | Teaching Aids |
|---|---|---|---|---|---|---|
| 1. | **UNIT I** Theory of Sets | Meaning, elements | 21/7/2025 | | | |
| 2. | | types, presentation | 22/7/2025 | | | |
| 3. | | equality of sets; union | 23/7/2025 | | | |
| 4. | | equality of sets , intersection | 28/7/2025 | | | |

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|---|---|---|---|---|---|---|
| 5. | | compliment& difference of sets | 29/7/2025 | | | |
| 6 | | Venn diagrams | 30/7/2025 | | | |
| 7. | | Cartesian product of two sets | 31/7/2025 | | | |
| 8 | | Applications of set theory. | 1/8/2025 | | | |
| | | Applications of set theory. | 4/8/2025 | | | |
| | | PROBLEMS | 5/8/2025 | | | |
| | | PROBLEMS | 6/8/2025 | | | |
| | **UNITII** | Indices | 7/8/2025 | | | |
| | | logarithms | 8/8/2025 | | | |
| | | arithmetic progressions | 11/8/2025 | | | |
| | | geometric progressions | 12/8/2025 | | | |
| | | PROBLEMS | 13/8/2025 | | | |
| | | PROBLEMS | 14/8/2025 | | | |
| | | geometric progressions and their business applications | 18/8/2025 | | | |
| | | sum of first n natural numbers | 19/8/2025 | | | |
| | | sum of squares | 20/8/2025 | | | |
| | | sum of cubes of first n natural numbers | 21/8/2025 | | | |
| | | PROBLEMS | 22/8/2025 | | | |
| | | PROBLEMS | 25/8/2025 | | | |
| | | PROBLEMS | 26/8/2025 | | | |
| 25 | **UNITIII** | Permutations. | 27/8/2025 | | | |
| 26 | | combinations | 28/8/2025 | | | |
| 27 | | combinations | 29/8/2025 | | | |

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|---|---|---|---|---|---|---|
| 28 | | PROBLEMS | 1/9/2025 | | | |
| 29 | | PROBLEMS | 2/9/2025 | | | |
| 30 | | Binomial theorem | 3/9/2025 | | | |
| 31 | | Binomial theorem with positive index | 4/9/2025 | | | |
| 32 | | Quadraticequations | 5/9/2025 | | | |
| 33 | | Quadraticequations | 5/9/2025 | | | |
| 34 | | Permutations | 8/9/2025 | | | |
| 35 | | PROBLEMS | 9/9/2025 | | | |
| 36 | | PROBLEMS | 10/9/2025 | | | |
| 37 | | PROBLEMS | 11/9/2025 | | | |
| 38 | **UNITIV** | Matrices | 12/9/2025 | | | |
| 39 | | Matrices | 15/9/2025 | | | |
| 40 | | Types of matrices properties | 17/9/2025 | | | |
| 41 | | Properties of matrices | 18/9/2025 | | | |
| 42 | | Revision of sessional exam | 19/9/2025 | | | |
| 43 | | Revision of sessional exam | 23/9/2025 | | | |
| 44 | | Addition and scaler multiplication of matrices | 29/9/2025 | | | |
| 45 | | Transpose and adjoint of matrices | 30/9/2025 | | | |
| 46 | | differentiation | 3/10/2025 | | | |
| 47 | | differentiation | 6/10/2025 | | | |
| 48 | | inverse of matrix | 8/10/2025 | | | |
| 49 | | properties of determinants | 9/10/2025 | | | |
| 50 | | solution of simultaneous Linear Equations | 13/10/2025 | | | |
| 51 | | integration of standard algebraic functions | 14/10/2025 | | | |
| 52 | | integration of standard algebraic functions | 15/10/2025 | | | |

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| 53 | | PROBLEMS | 16/10/2025 | | | |
| 54 | | PROBLEMS | 27/10/2025 | | | |
| 55 | | Business applications of , differentiation, | 28/10/2025 | | | |
| 56 | | Business applications of , differentiation, | 30/10/2025 | | | |
| 57 | | Business applications of Integration | 31/10/2025 | | | |
| 58 | | Business applications of Integration | 3/11/2025 | | | |
| 59 | | Revision & Class test | 4/11/2025 to 14/11/2025 | | | |

**Syllabus Coverage Report**

Syllabus coverage before MST-1 Satisfactory/ Lagging by _____ lectures.

Syllabus coverage before MST-2

Syllabus coverage before MST-3

HoD Remarks

Syllabus coverage before MST-2 Satisfactory/ Lagging by _____ lectures.

HoD Remarks

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

Signature of Teacher & Date

Signature of HOD & Date