DPG DEGREE COLLEGE GURGAON

LESSON PLANNER FOR THE SEMESTER II/IV/VI (A.Y. -2017-18)

**NAME OF THE TEACHER: Ms.*Nisha (Assistant Professor)***

|  |  |  |
| --- | --- | --- |
|  | **CLASS** | **B.Com- 1st Year Semester-II (Section A,B & C)** |
|  | **SUBJECT** | **Business Mathematics** |
|  |  | **TOPICS COVERED** |
| **CHAPTER 1**  **WEEK 1**  **1/1/18** | **WEEK 1 Day 1**  **1.1.1** | **Unit I Matrix**  Introduction to Matrix |
| **2/1/18** | **WEEK 1 Day 2**  **1.2.1**  **1.2.2** | Definition of matrix.  Types of matrix. |
| **3/1/18** | **WEEK 1 Day3**  **1.3.1** | Order of matrix and diagonal elements of a matrix |
| **4/1/18** | **WEEK 1 Day 4**  **1.4.1** | Basic operations on matrices |
| **5/1/18** | **WEEK 1 Day 5**  **1.5.1** | Multiplication of matrices and it’s properties |
| **6/1/18** | **WEEK 1 Day 6**  **1.6.1**  **1.6.2** | Transpose of matrix  Rules on symmetric and skew symmetric matrices |
| **CHAPTER 2**  **WEEK 2**  **8/1/18** | **WEEK 2 Day 1**  **2.1.1** | **Determinants**  Introduction to determinants |
| **9/1/18** | **WEEK 2 Day 2**  **2.2.1** | Minors and co-factors |
| **10/1/18** | **WEEK 2 Day 3**  **2.3.1** | Singular and non singular matrices |
| **11/1/18** | **WEEK 2 Day 4**  **2.4.1** | Properties of determinants |
| **12/1/18** | **WEEK 2 Day 5**  **2.5.1** | Evaluation of determinant without expanding |
| **13/1/18** | **WEEK 2 Day 6**  **2.6.1** | Elementary operations (transformation) |
| **CHAPTER 3**  **WEEK 3**  **15/1/18** | **WEEK 3 Day 1**  **3.1.1** | **Adjoint and Inverse of a Matrix**  Introduction to Adjoint of a Matrix |
| **16/1/18** | **WEEK 3 Day 2**  **3.2.1** | How to find inverse of a matrix. |
| **17/1/18** | **WEEK 3 Day 3**  **3.3.1** | Inverse of a square matrix |
| **18/1/18** | **WEEK 3 Day 4**  **3.4.1** | * Inverse of a matrix by using elementary operations |
| **19/1/18** | **WEEK 3 Day 5** | Revision of chapter 1 |
| **20/1/18** | **WEEK 3 Day 6** | Revision of chapter 2 |
| **WEEK 4**  **22/1/18** | **WEEK 4 Day 1**  **3.5.1** | Introduction to system of equations |
| **23/1/18** | **WEEK 4 Day 2**  **3.6.1** | Consistent and inconsistent equations |
| **24/1/18** | **WEEK 4 Day 3**  **3.7.1** | Solution of system of linear equations by using determinants  (Cramer’s rule) |
| **25/1/18** | **WEEK 4 Day 4**  **3.8.1** | Consistent and in-consistent |
| **27/1/18** | **WEEK 4 Day 6**  **3.9.1** | Solution of system of linear equations using matrices |
| **CHAPTER 4**  **WEEK 5**  **29/1/18** | **WEEK 5 Day 1**  **4.1.1** | **Unit II Differentiation**  Introduction to differentiation |
| **30/1/18** | **WEEK 5 Day 2**  **4.2.1** | Limit of a function |
| **31/2/18** | **WEEK 5 Day 3**  **4.3.1** | The derivative of a function |
| **1/2/18** | **WEEK 5 Day 4**  **4.4.1** | Method to find derivative of a function from first principle or AB-Initio |
| **2/2/18** | **WEEK 5 Day 5**  **4.5.1** | General theorems on differentiation |
| **3/2/18** | **WEEK 5 Day 6**  **4.6.1** | Differentiation of product of two functions |
| **WEEK 6**  **5/2/18** | **WEEK 6 Day 1**  **4.7.1** | Differentiation of Quotient of two functions |
| **6/2/18** | **WEEK 6 Day 2**  **4.8.1** | Derivative of function of a function (chain rule) |
| **7/2/18** | **WEEK 6 Day 3**  **4.9.1** | Differentiation of logarithmic and exponential functions |
| **8/2/18** | **WEEK 6 Day 4**  **4.10.1** | Differentiation of implicit functions |
| **9/2/18** | **WEEK 6 Day 5**  **4.11.1** | Logarithmic differentiation |
| **10/2/18** | **WEEK 6 Day 6**  **4.12.1** | Derivative of a function with respect to another function |
| **WEEK 7**  **12/2/18** | **WEEK 7 Day 1** | Revision of Unit-II |
| **13/2/18** | **WEEK 7 Day 2** | Assignment Checking of unit I |
| **CHAPTER 5**  **14/2/18** | **WEEK 7 Day 3**  **5.1.1** | **Applications of derivatives**  Introduction to derivatives |
| **15/2/18** | **WEEK 7 Day 4**  **5.2.1** | Rate of change of quantities |
| **16/2/18** | **WEEK 7 Day 5**  **5.3.1** | Maxima and Minima |
| **17/2/18** | **WEEK 7 Day 6**  **5.4.1** | First and second derivative test for finding local maxima and minima |
| **WEEK 8**  **19/2/18** | **WEEK 8 Day 1**  **5.5.1** | Absolute maxima and absolute minima |
| **20/2/18** | **WEEK 8 Day 2**  **5.6.1** | Problems on maxima and minima |
| **21/2/18** | **WEEK 8 Day 3**  **5.7.1** | Optimization of economic functions |
| **22/2/18** | **WEEK 8 Day 4**  **5.8.1** | Minimization of average cost and marginal cost |
| **CHAPTER 6**  **23/2/18** | **WEEK 8 Day 5**  **6.1.1** | **Unit III** **Simple interest and** **Compound Interest**  Introduction to compound interest |
| **24/2/18** | **WEEK 8 Day 6**  **6.2.1** | Determination of Simple interest |
| **WEEK 9**  **26/2/18** | **WEEK 9 Day 1**  **6.3.1** | Determination of compound interest without using formula |
| **27/2/18** | **WEEK 9 Day 2**  **6.4.1** | General formula for determination of compound interest |
| **28/2/18** | **WEEK 9 Day 3**  **6.5.1** | Continue compounding of interest |
| **1/3/18** | **WEEK 9 Day 4**  **6.6.1** | Problems on effective rate of interest ,depreciation and population |
| **3/3/18** | **WEEK 9 Day 6** | Revision of chapter 4 |
| **CHAPTER 7**  **5/3/18** | **WEEK 10 Day 1**  **7.1.1** | **Annuities**  Introduction to annuities |
| **6/3/18** | **WEEK 10 Day 2**  **7.2.1** | Types of Annuities |
| **7/3/18** | **WEEK 10 Day 3**  **7.3.1** | Sinking fund and amount of an annuity |
| **8/3/18** | **WEEK 10 Day 4**  **7.4.1** | Present value of an annuity |
| **9/3/18** | **WEEK 10 Day 5**  **7.5.1** | Solutions of practical problems related to annuities |
| **10/3/18** | **WEEK 10 Day 6**  **7.6.1** | Present value and amount of annuity when the interest is compounded continuously |
| **WEEK 11**  **12/3/18** | **WEEK 11 Day 1** | Revision Unit-III |
| **13/3/18** | **WEEK 11 Day 2** | Revision and assignment of unit-III |
| **14/3/18** | **WEEK 11 Day 3** | Revision and assignment of unit-III |
| **CHAPTER 8**  **15/3/18** | **WEEK 11 Day 4**  **8.1.1** | **Ratio and Proportion**  Introduction to ratio |
| **16/3/18** | **WEEK 11 Day 5**  **8.2.1** | Commensurable and incommensurable quantities |
| **17/3/18** | **WEEK 11 Day 6**  **8.3.1** | Comparison and composition of ratios |
| **WEEK 12**  **19/3/18** | **WEEK 12 Day 1**  **8.4.1** | **Introduction to proportion** |
| **20/3/18** | **WEEK 12 Day 2**  **8.5.1** | Continued proportion |
| **21/3/18** | **WEEK 12 Day 3**  **8.6.1** | Properties of proportion |
| **22/3/18** | **WEEK 12 Day 4**  **8.7.1** | Addendo theorem or theorem on equal ratios |
| **23/3/18** | **WEEK 12 Day 5**  **8.8.1** | Solution of problem on proportion by using K- Method |
| **CHAPTER 9**  **24/3/18** | **WEEK 12 Day 6**  **8.9.1** | **Unit IV Percentage, Profit & Loss**  Introduction to percentage |
| **WEEK 13**  **26/3/18** | **WEEK 13 Day 1**  **9.1.1** | Conversion of a percentage into fraction and vice-versa |
| **27/3/18** | **WEEK 13 Day 2**  **9.2.1** | Profit and Loss |
| **28/3/18** | **WEEK 13 Day 3**  **9.3.1** | Profit and Loss percentage |
| **29/3/18** | **WEEK 13 Day 4**  **9.4.1** | Properties of percentage |
| **30/3/18** | **WEEK 13 Day 5**  **9.5.1** | Properties of profit |
| **31/3/18** | **WEEK 13 Day 6**  **9.6.1** | Problems related to percentage |
| **WEEK 14**  **2/4/18** | **WEEK 14 Day 1** | Revision of percentage |
| **3/4/18** | **WEEK 14 Day 2**  **9.7.1** | Problems related to profit |
| **4/4/18** | **WEEK 14 Day 3**  **9.8.1** | Problems on loss |
| **5/4/18** | **WEEK 14 Day 4** | Revision of profit and loss |
| **6/4/18** | **WEEK 14 Day 5** | Assignment on unit IV |
| **7/4/18** | **WEEK 14 Day 6** | Class test |
| **WEEK 15**  **9/4/18** | **WEEK 15 Day 1** | Revision of Unit-IV |
| **10/4/18** | **WEEK 15 Day 2** | Revision of Unit-IV |
| **11/4/18** | **WEEK 15 Day 3** | Assignment checking |
| **12/4/18** | **WEEK 15 Day 4** | Assignment checking |
| **13/4/18** | **WEEK 15 Day 5** | Examination guidance lecture cont. |
| **14/4/18** | **WEEK 15 Day 6** | Examination guidance lecture cont. |
| **WEEK 16**  **16/4/18** | **WEEK 16 Day 1** | Examination guidance lecture cont. |
| **17/4/18** | **WEEK 16 Day 2** | Examination guidance lecture cont. |
| **18/4/18** | **WEEK 16 Day 3** | Examination guidance lecture cont. |

**REMARKS:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**SIGN OF TEACHER:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ . SIGN OF THE PRINCIPAL: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .**