Saraswati Mahila Mahavidyalaya, Palwal

**Lesson Plan :**

**Name of the Assistant/Associate Professor: MS. Amrita Aggarwal Sec (B)**

 **Ms. Bijendri Sec (C), Ms. Amrita Rawat, Sec (A)**

**Class and Section: BCOM Ist Sem II**

**Name of subject: Business Mathematics**

**Subject Lesson Plan : 18 weeks(from January 2018 to April 2018)**

**(Note: Prepare as per list of holidays declared by Haryana govt.)**

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| **WEEK 1** |
| **ASSIGNMENT:** |
| **WEEK 1,DAY1 ,DATE :01/01/2018(MONDAY)** |
| **Introduction of Matrix** |
| **WEEK 1 ,DAY 2 ,DATE :02/01/2018(TUESDAY)** |
| **Order of a matrix,diagonal element of a matrix.** |
| **WEEK 1,DAY 3 ,DATE :03/01/2018(WEDNESDAY)** |
| **Types of matrices, triangular matrices,examples based on matrix.** |
| **WEEK 1 ,DAY 4 ,DATE :04/01/2018(THURSDAY)** |
| **Basic operations on matrix.** |
| **WEEK 1,DAY 5 ,DATE :05/01/2018(FRIDAY)** |
|  **Holiday on account of Guru Govind Singh’s Birthday** |
| **WEEK 1 ,DAY 6 ,DATE :06/01/2018(SATURDAY)** |
| **Properties of matrix addition examples.** |
| **WEEK 2** |
| **ASSIGNMENT: basic operations on matrices.** |
| **WEEK 2,DAY1 ,DATE :08/01/2018(MONDAY)** |
| **Problem discussion.** |
| **WEEK 2 ,DAY 2 ,DATE :09/01/2018(TUESDAY)** |
| **Multiplication of matrices, properties of matrix multiplication.** |
| **WEEK 2,DAY 3 ,DATE :10/01/2018(WEDNESDAY)** |
| **Examples based on multiplication of matrix.** |
| **WEEK 2 ,DAY 4 ,DATE :11/01/2018(THURSDAY)** |
| **Transpose of a matrix(symmetric and skew symmetric matrices)** |
| **WEEK 2,DAY 5 ,DATE :12/01/2018(FRIDAY)** |
| **Examples based on symmetric and skew symmetric matrices.** |
| **WEEK 2 ,DAY 6 ,DATE :13/01/2018(SATURDAY)** |
| **Problem discussion.** |
| **WEEK 3** |
| **ASSIGNMENT: transpose of matrix** |
| **WEEK 3,DAY1 ,DATE :15/01/2018(MONDAY)** |
| **Introduction of determinant of third order**  |
| **WEEK 3 ,DAY 2 ,DATE :16/01/2018(TUESDAY)** |
| **Determinant of second order and third order** |
| **WEEK 3,DAY 3 ,DATE :17/01/2018(WEDNESDAY)** |
| **Minors and co-factors** |
| **WEEK 3 ,DAY 4 ,DATE :18/01/2018(THURSDAY)** |
| **Singular and non singular matrices** |
| **WEEK 3,DAY 5 ,DATE :19/01/2018(FRIDAY)** |
| **Examples on singular and non singular matrices** |
| **WEEK 3 ,DAY 6 ,DATE :20/01/2018(SATURDAY)****Properties of determinants and examples** |
| **WEEK 4** |
| **ASSIGNMENT: minors and co-factors** |
| **WEEK 3,DAY1 ,DATE :22/01/2018(MONDAY)** |
|  **Holiday on account of Basant Panchmi.** |
| **WEEK 4 ,DAY 2 ,DATE :23/01/2018(TUESDAY)** |
| **Adjoint of a matrix** |
| **WEEK 4,DAY 3 ,DATE :24/01/2018(WEDNESDAY)** |
|  **Holiday on account of Sir Chotu Ram Jayanti.** |
| **WEEK 4 ,DAY 4 ,DATE :25/01/2018(THURSDAY)** |
| **Examples of adjoint of a matrix** |
| **WEEK 4,DAY 5 ,DATE :26/01/2018(FRIDAY)** |
|  **Holiday on account of Republic Day.** |
| **WEEK 4 ,DAY 6 ,DATE :27/01/2018(SATURDAY)** |
| **Inverse of a square matrix** |
| **WEEK 5** |
| **ASSIGNMENT:adjoint of a matrix** |
| **WEEK 5,DAY1 ,DATE :29/01/2018(MONDAY)** |
| **Examples based on inverse of square matrix** |
| **WEEK 5 ,DAY 2 ,DATE :30/01/2018(TUESDAY)** |
| **Solution of system of linear equations by using determinants** |
| **WEEK 5,DAY 3 ,DATE :31/01/2018(WEDNESDAY)** |
|  **Holiday on account of Guru Ravi Dass Jayanti** |
| **WEEK 5 ,DAY 4 ,DATE :01/02/2018(THURSDAY)** |
| **Examples based on solution of matrix** |
| **WEEK 5,DAY 5 ,DATE :02/02/2018(FRIDAY)** |
| **Application of matrix, invension mathod for solution for solution of system of linear equations** |
| **WEEK 5 ,DAY 6 ,DATE :03/02/2018(SATURDAY)****Practical problems** **Examples and discussion** |
| **WEEK 6** |
| **ASSIGNMENT: solution of system of linear equations** |
| **WEEK 6,DAY1 ,DATE :05/02/2018(MONDAY)** |
| **Limit of a function, the derivative of a function** |
| **WEEK 6 ,DAY 2 ,DATE :06/02/2018(TUESDAY)** |
| **Method to find derivative of a function from first principle on AB-INTIOS** |
| **WEEK 6,DAY 3 ,DATE :07/02/2018(WEDNESDAY)** |
| **Derivative of pow(x,n) from first principle** |
| **WEEK 6 ,DAY 4 ,DATE :08/02/2018(THURSDAY)** |
| **Examples based on derivatives** |
| **WEEK 6,DAY 5 ,DATE :09/02/2018(FRIDAY)** |
| **General theorems on differentiation and example** |
| **WEEK 6 ,DAY 6 ,DATE :10/02/2018(SATURDAY)** |
|  **Holiday on account of Maharshi Dayanand Saraswati Jayanti.** |
| **WEEK 7** |
| **ASSIGNMENT: derivative of pow(x,n) from first principal** |
| **WEEK 7,DAY1 ,DATE :12/02/2018(MONDAY)** |
| **Problem discussion** |
| **WEEK 7 ,DAY 2 ,DATE :13/02/2018(TUESDAY)** |
| **Holiday on account of Maha Shivaratri.** |
| **WEEK 7,DAY 3 ,DATE :14/02/2018(WEDNESDAY)** |
| **Differentiation of product of two functions** |
| **WEEK 7 ,DAY 4 ,DATE :15/02/2018(THURSDAY)** |
| **Differentiation of quoient of two functions** |
| **WEEK 7,DAY 5 ,DATE :16/02/2018(FRIDAY)** |
| **Examples based on differentiation** |
| **WEEK 7 ,DAY 6 ,DATE :17/01/2018(SATURDAY)** |
| **Derivative of function of a function** |
| **WEEK 8** |
| **ASSIGNMENT: differentiation of product of two function** |
| **WEEK 8,DAY1 ,DATE :19/02/2018(MONDAY)** |
| **Application of derivatives** |
| **WEEK 8 ,DAY 2 ,DATE :20/02/2018(TUESDAY)** |
| **Maxima and minima, first derivative test for finding local maxima and minima** |
| **WEEK 8,DAY 3 ,DATE :21/02/2018(WEDNESDAY)** |
| **Examples and second derivative test** |
| **WEEK 8 ,DAY 4 ,DATE :22/02/2018(THURSDAY)** |
| **Problems on maxima and minima** |
| **WEEK 8,DAY 5 ,DATE :23/02/2018(FRIDAY)** |
| **Optimization of economic functions** |
| **WEEK 8 ,DAY 6 ,DATE :24/02/2018(SATURDAY)** |
| **Examples based on maximization** |
| **WEEK 9** |
| **ASSIGNMENT:** |
| **WEEK 9,DAY1 ,DATE :26/02/2018(MONDAY)** |
| **Remaining examples based on maximization** |
| **WEEK 9 ,DAY 2 ,DATE :27/02/2018(TUESDAY)** |
| **Class-test** |
| **WEEK 9,DAY 3 ,DATE :28/02/2018(WEDNESDAY)** |
|  **VACATION -II** |
| **WEEK 9 ,DAY 4 ,DATE :01/03/2018(THURSDAY)** |
|  **VACATION -II** |
| **WEEK 9,DAY 5 ,DATE :02/03/2018(FRIDAY)** |
|  **VACATION -II** |
| **WEEK 9 ,DAY 6 ,DATE :03/03/2018(SATURDAY)** |
|  **VACATION -II** |
| **WEEK 10** |
| **ASSIGNMENT:** |
| **WEEK 10,DAY1 ,DATE :05/03/2018(MONDAY)** |
| **Introduction and determination of simple interest** |
| **WEEK 10,DAY 2 ,DATE :06/03/2018(TUESDAY)** |
| **Examples based on simple interest** |
| **WEEK 10,DAY 3 ,DATE :07/03/2018(WEDNESDAY)** |
| **Formula of compound interest** |
| **WEEK 10,DAY 4 ,DATE :08/03/2018(THURSDAY)** |
| **Examples based on C.I** |
| **WEEK 10,DAY 5 ,DATE :09/03/2018(FRIDAY)** |
| **Continue examples** |
| **WEEK 10 ,DAY 6 ,DATE :10/03/2018(SATURDAY)** |
| **Continuous compounding of interest and examples** |
| **WEEK 11** |
| **ASSIGNMENT:** |
| **WEEK 11,DAY1 ,DATE :12/03/2018(MONDAY)** |
| **Class test/board test** |
| **WEEK 11,DAY 2 ,DATE :13/03/2018(TUESDAY)** |
| **Types of annuities, amount of an annuity** |
| **WEEK 11,DAY 3 ,DATE :14/03/2018(WEDNESDAY)** |
| **Examples based on annuities** |
| **WEEK 11,DAY 4 ,DATE :15/03/2018(THURSDAY)** |
| **Present value of an annuity** |
| **WEEK 11,DAY 5 ,DATE :16/03/2018(FRIDAY)** |
| **Examples of present value of an annuity** |
| **WEEK 11 ,DAY 6 ,DATE :17/03/2018(SATURDAY)** |
| **Solution of practical problems related to annuities** |
| **WEEK 12** |
| **ASSIGNMENT:present value of an anniuity** |
| **WEEK 12,DAY1 ,DATE :19/03/2018(MONDAY)** |
| **Continuing examples** |
| **WEEK 12,DAY 2 ,DATE :20/03/2018(TUESDAY)** |
| **Problem discussion** |
| **WEEK 12,DAY 3 ,DATE :21/03/2018(WEDNESDAY)** |
| **Ratio and proportion introduction** |
| **WEEK 12,DAY 4 ,DATE :22/03/2018(THURSDAY)** |
| **Comparison of ratios** |
| **WEEK 12,DAY 5 ,DATE :23/03/2018(FRIDAY)** |
|  **Holiday on account of Shahidi diwas.** |
| **WEEK 12 ,DAY 6 ,DATE :24/03/2018(SATURDAY)** |
| **Examples based on ratios** |
| **WEEK 13** |
| **ASSIGNMENT:comparison of ratios** |
| **WEEK 13,DAY1 ,DATE :26/03/2018(MONDAY)** |
| **Introduction of proportion** |
| **WEEK 13,DAY 2 ,DATE :27/03/2018(TUESDAY)** |
| **Continued proportion** |
| **WEEK 13,DAY 3 ,DATE :28/03/2018(WEDNESDAY)** |
| **Examples based on proportion** |
| **WEEK 13,DAY 4 ,DATE :29/03/2018(THURSDAY)** |
|  **Holiday on account of Mahavir jayanti.** |
| **WEEK 13,DAY 5 ,DATE :30/03/2018(FRIDAY)** |
| **Properties of proportion** |
| **WEEK 13 ,DAY 6 ,DATE :31/03/2018(SATURDAY)** |
| **Examples based on properties** |
| **WEEK 14** |
| **ASSIGNMENT:proportion** |
| **WEEK 14,DAY1 ,DATE :02/04/2018(MONDAY)** |
| **Addendo theorem or theorem on equal ratios** |
| **WEEK 14,DAY 2 ,DATE :03/04/2018(TUESDAY)** |
| **Examples of Addendo theorem** |
| **WEEK 14,DAY 3 ,DATE :04/04/2018(WEDNESDAY)** |
| **Introduction of percentage** |
| **WEEK 14,DAY 4 ,DATE :05/04/2018(THURSDAY)** |
| **Conversion of a percentage into fraction and vice-versa** |
| **WEEK 14,DAY 5 ,DATE :06/04/2018(FRIDAY)** |
| **Examples of percentage** |
| **WEEK 14 ,DAY 6 ,DATE :07/04/2018(SATURDAY)** |
| **Continuing examples** |
| **WEEK 15** |
| **ASSIGNMENT:** |
| **WEEK 15,DAY1 ,DATE :09/04/2018(MONDAY)** |
| **Introduction to profit and loss** |
| **WEEK 15,DAY 2 ,DATE :10/04/2018(TUESDAY)** |
| **Examples based on profit and loss percentage** |
| **WEEK 15,DAY 3 ,DATE :11/04/2018(WEDNESDAY)** |
| **Continue examples** |
| **WEEK 15,DAY 4 ,DATE :12/04/2018(THURSDAY)** |
| **Miscellaneous problems** |
| **WEEK 15,DAY 5 ,DATE :13/04/2018(FRIDAY)** |
|  **Class test** |
| **WEEK 15 ,DAY 6 ,DATE :14/04/2018(SATURDAY)** |
| **Holiday on account of Vaisakhi & Dr B.R. Ambedkar’s Jayanti.** |
| **WEEK 16** |
| **ASSIGNMENT:** |
| **WEEK 16,DAY1 ,DATE :16/04/2018(MONDAY)** |
| **Revision****Revision** |
| **WEEK 16,DAY 2 ,DATE :17/04/2018(TUESDAY)** |
| **Revision** |
| **WEEK 16,DAY 3 ,DATE :18/04/2018(WEDNESDAY)** |
| **Holiday on account of Maharshi Pasuram Jayanti** |
| **WEEK 16,DAY 4 ,DATE :19/04/2018(THURSDAY)** |
| **Revision** |
| **WEEK 16,DAY 5 ,DATE :20/04/2018(FRIDAY)** |
|  **Revision** |
| **WEEK 16 ,DAY 6 ,DATE :21/04/2018(SATURDAY)** |
|  **Revision** |
| **WEEK 17** |
| **ASSIGNMENT:** |
| **WEEK 17,DAY1 ,DATE :23/04/2018(MONDAY)** |
| **Revision** |
| **WEEK 17,DAY 2 ,DATE :24/04/2018(TUESDAY)** |
| **Revision** |
| **WEEK 17,DAY 3 ,DATE :25/04/2018(WEDNESDAY)** |
| **Revision** |
| **WEEK 17,DAY 4 ,DATE :26/04/2018(THURSDAY)** |
| **Revision** |
| **WEEK 17,DAY 5 ,DATE :27/04/2018(FRIDAY)** |
|  **Revision** |
| **WEEK 17 ,DAY 6 ,DATE :28/04/2018(SATURDAY)** |
|  **Revision** |
| **WEEK 18** |
| **ASSIGNMENT:** |
| **WEEK 18,DAY1 ,DATE :30/04/2018(MONDAY)** |
| **Revision** |