

Lesson Plan : 1st January 2018 to 28 April 2018 (17 Weeks)

Name of Assistant/Associate Professor DR. QUASIM RAZI

Class & Section B.Sc. 1st year, IInd Sem

Subject Name and Code Vector calculus and BM-123

Jan 1, 2018 to Jan 6, 2018 (Week 1)

Jan 1, Monday	1.1 Review of study of vectors at plus two level. 1.1.1 Type of vectors, vector operation \cdot dot and cross product
Jan 2, Tuesday	Chapter 1, Multiple of Products of Vectors 1.1.2 Triple product
Jan 3, Wednesday	1.1.3 Properties of scalar triple product Geometrical interpretation of scalar triple product
Jan 4, Thursday	1.1.4 Theorem 1.5 1.1.5 Volume of Tetrahedron
Jan 5, Friday	1.1.6 Examples from 1 to 9 on page 1.9 to 1.14
Jan 6, Saturday	1.1.7 Problems of Exercise 1.1

Jan 8, 2018 to Jan 13, 2018 (Week 2)

Jan 8, Monday	1.2 Vector Triple Product 1.2.1 Expression formula for Triple Product
Jan 9, Tuesday	1.2.2 Examples 1 to 9 on page 1.19 to 1.27
Jan 10, Wednesday	1.2.3 Problems of Exercise 1.2
Jan 11, Thursday	1.2.4 Scalar Product of four vectors Vector product of four vectors
Jan 12, Friday	1.2.5 Some Examples and Problems of exercise 1.3
Jan 13, Saturday	1.2.6 Reciprocal System of vectors Properties of Reciprocal System of Vectors

Test :	Exercise of 1.4
Assignment:	Examples from 1 to 3

Jan 15, 2018 to Jan 20, 2018 (Week 3)	
Jan 14, Monday	2.3 2.3.1 Chapter 2 Differentiation of Vectors Scalar and Vector Function
Jan 15, Tuesday	2.3.1 Scalar and Vector fields Limit of a vector function
Jan 16, Wednesday	2.3.1 Continuity of a vector function 2.3.2 Theorem on Continuity
Jan 17, Thursday	2.3.3 Derivative of a vector function with respect to a scalar 2.3.4 Theorem 2.10
Jan 18, Friday	2.3.5 Successive Derivatives 2.3.6 Theorem 2.12
Jan 20, Saturday	2.3.7 Derivative of function of a function
Jan 22, 2018 to Jan 27, 2018 (Week 4)	
Jan 22, Monday	Holiday (Basant Panchmi)
Jan 23, Tuesday	2.4.1 Constant Vectors Theorem 2.15
Jan 24, Wednesday	Holiday (Sir Chhotu Ram Jayanti)
Jan 25, Thursday	2.4.2 Some Important Theorems Theorem 1 to 6
Jan 26, Friday	Holiday (Republic Day)
Jan 27, Saturday	
Jan 29, 2018 to Feb 3 2018 (Week 5)	
Jan 29, Monday	2.5.1 Examples and Problems of exercise 2.2
Jan 30, Tuesday	2.5.2 Curves in space Velocity and Acceleration
Jan 31, Wednesday	2.5.3 Examples and Problems of Exercise 2.2
Feb 1, Thursday	3.5.1 Chapter 3, Gradient, Divergence and Curl and Partial derivatives of vector functions
Feb 2, Friday	3.5.2 Higher order Partial Derivatives Rules for finding partial derivatives of Vectors
Feb 3, Saturday	3.5.3 Examples and Problems of Exercise 3.1

Test :	Exercise 2.1 & 2.2 Problem
Assignment:	Question of Exercise 3.1

Feb 5, 2018 to Feb 10, 2018 (Week 6)	
Feb 5, Monday	3.6.1 Vector Differential Operators Gradient of scalar field
Feb 6, Tuesday	3.6.2 Properties of Gradient Theorem 1 Theorem 2 on page 3.6 & 3.7
Feb 7, Wednesday	3.6.3 Gradient of the product of two scalar point functions Gradient of quotient of two scalar functions
Feb 8, Thursday	3.6.4 Examples 1 to 9 on page 3.9 to 3.17
Feb 9, Friday	3.6.5 Problems of exercise 3.2
Feb 10, Saturday	Holiday (Maharashi Dayanand Saraswati Jayanti)
Feb 12, 2018 to Feb 17, 2018 (Week 7)	
Feb 12, Monday	3.7.1 Level Surfaces Theorem 3.9.1 and Theorem 3.9.2
Feb 13, Tuesday	(Holiday) Mahashivratri
Feb 14, Wednesday	3.7.2 Directional derivatives of scalar point function Theorem 3.10.1 and Theorem 3.10.2 & 3.10.3
Feb 15, Thursday	3.7.3 Equation of tangent plane and normal to level surface
Feb 16, Friday	3.7.4 Examples from 1 to 10 on page 3.24 to 3.30
Feb 17, Saturday	3.7.5 Problems of exercise 3.3
Feb 19, 2018 to Feb 24, 2018 (Week 8)	
Feb 19, Monday	3.8.1 Divergence of a vector function Properties of Divergence i.e. Theorems 1, 2 & 3
Feb 20, Tuesday	3.8.2 Examples 1 to 9 on page 3.34 to 3.43
Feb 21, Wednesday	3.8.3 Problems of exercise 3.4
Feb 22, Thursday	3.8.4 Curl of a vector point function Theorem 3.14.1
Feb 23, Friday	3.8.5 Properties of Curl
Feb 24, Saturday	3.8.6 Examples from 1 to 9 on page from 3.51 to 3.57

Test :	Questions of Exercise 3.5
Assignment:	Problem of exercise 3.5

