

## Lesson Plan

**Name of the Faculty** : DR. MANJU PAPREJA(PROFESSOR)

**Discipline** : BCA

**Semester** : 2ND

**Subject** :MATHEMATICS-II(BCA-106 B)

**Lesson Plan Duration** :15 weeks(from January, 2018 to April, 2018)

**Work Load (Lecture/Practical) per week(in hours): Lecture:4**

Week	Theory	
	Lecture Day	Topic(including Assignment/Test)
1st	1 <sup>st</sup>	Set Theory
	2 <sup>nd</sup>	Sets and their representations
	3 <sup>rd</sup>	Types of sets: Empty set. Finite and Infinite sets. Equal sets etc.
	T1	Types of sets: Empty set. Finite and Infinite sets. Equal sets etc.
2nd	4 <sup>th</sup>	Types of sets: Empty set. Finite and Infinite sets. Equal sets etc.
	5 <sup>th</sup>	Subsets. Subsets of the set of real numbers
	6 <sup>th</sup>	Subsets. Subsets of the set of real numbers
	T2	Operations on sets
3rd	7 <sup>th</sup>	Operations on sets
	8 <sup>th</sup>	Operations on sets
	9 <sup>th</sup>	Venn diagrams
	T3	Problems on above topics
4th	10 <sup>th</sup>	Relation and Functions: Ordered pairs,
	11 <sup>th</sup>	Cartesian product of sets.
	12 <sup>th</sup>	Number of elements in the Cartesian product of two finite sets
	T4	Definition of relation, pictorial diagrams
5th	13 <sup>th</sup>	Domain, co-domain and range of a relation.
	14 <sup>th</sup>	Domain, co-domain and range of a relation
	15 <sup>th</sup>	Function as a special kind of relation from one set to another.
	T5	Problem session
6th	16 <sup>th</sup>	Pictorial representation of a function,
	17 <sup>th</sup>	Domain, co-domain and range of a function
	18 <sup>th</sup>	Real valued function of the real variable, domain

		and range of these functions
	T6	Problem session
7th	19 <sup>th</sup>	Limits and continuity
	20 <sup>th</sup>	Limits and continuity
	21 <sup>st</sup>	Limits and continuity
	T7	Limits and continuity
8th	22 <sup>nd</sup>	Limits and continuity
	23 <sup>rd</sup>	Limits and continuity
	24 <sup>th</sup>	Limits and continuity
	T7	Problem/assignment
9th	25 <sup>th</sup>	Differentiation
	26 <sup>th</sup>	Differentiation
	27 <sup>th</sup>	Differentiation
	T8	Differentiation
10th	28 <sup>th</sup>	Differentiation
	29 <sup>th</sup>	Differentiation
	30 <sup>th</sup>	Differentiation
	T9	Differentiation
11th	31 <sup>st</sup>	Integration
	32 <sup>nd</sup>	Integration
	33 <sup>rd</sup>	Integration
	T10	Integration
12th	34 <sup>th</sup>	Integration
	35 <sup>th</sup>	Integration
	36 <sup>th</sup>	Integration
	T11	Problems/assignment
13th	37 <sup>th</sup>	Complex Numbers: Definition, Representation of Complex Numbers
	38 <sup>th</sup>	Argand plane
	39 <sup>th</sup>	Sum, subtraction, product and division of complex numbers,
	T12	problems
14th	40 <sup>th</sup>	Magnitude, argument and square root of complex numbers
	41 <sup>st</sup>	Statistics: Measure of dispersion; mean deviation
	42 <sup>nd</sup>	Variance and standard deviation of ungrouped/grouped data.
15th	43 <sup>rd</sup>	Variance and standard deviation of ungrouped/grouped data.
	44 <sup>th</sup>	Analysis of frequency distributions with equal means but different variances.
	45 <sup>th</sup>	Analysis of frequency distributions with equal means but different variances

IMPORTANT DATES (KEY DATES)

\* 14 to 16 February, 2018 (Wednesday -Friday)----- SESSIONAL I

\* 4 - 6 April, 2018 (Wednesday - Friday) ----- SESSIONAL II

\* 27 April, 2018 (Friday) ----- LAST DAY OF SESSION

\* 1 May to 8 May, 2018 (Tuesday-Tuesday)----- PRACTICAL EXAMINATION

Start of End semester examinations (Even Semester)-----11 May, 2018 (Friday ) to 10 June, 2018 (Sunday)