Content wise 'Blue-print' Applied Maths –I (FEC101)

Progr. Name and Code: F.E (R – 2012 syllabus), Max marks:80
Course Name and Code: Applied MathsI and C101,Time:3 hrs

Topic No.	Unit No	Unit Title**	Unitwise Marks	Topicwise Marks
01	1.1	Complex Numbers- Powers &Roots	06	
	1.2	Complex Numbers- Circular Functions	09	29
	1.3	Separation of real &imaginary parts	08	
	1.4	Expansion of sine and cosine, etc	06	
02	2.1	Types of Matrices	16	30
	2.2	Matrices-Linear algebraic equations	14	
03	3.1	Successive Differentiation	12	29
	3.2	Partial Differentiation	09	
	3.3	Euler's Theorem	08	
04	4.1	Partial Differentiation:Maxima &Minima	15	32
	4.2	Taylor's Theorem	09	
	4.3	Fitting of Curves	08	
	Total			120

(**Unit titles are written in brief)

Blue print of question paper AM I (R- 2012 syllabus)

1	a	1.2 (03 marks) Relation between circular and hyperbolic function
	b	3.2 (03 marks) Problems on basic partial derivatives
	c	4.1 (03 marks) Jacobians
	d	4.2 (03 marks) Expansion standard series
	e	2.1 (04 marks) properties of matrices
	f	3.1 (04 marks)problems on std formula of successive derivatives
2	a	1.1 (06 marks)
	b	2.1 (06 marks) matrices PAQ/normal form
	c	3.3 (08 marks) Euler's theorem with deduction
3	a	2.1 (06 marks) linear homo and non homogenous equations.
	b	4.1 (06 marks) maxima and minima/Lagranges method
	c	1.3 (08 marks)
4	a	4.1(06 marks) Jacobian of implicit functions/partial derivative of implicit functions using jacobian.
	b	1.2 (06 marks) logarithm of complex numbers
	c	2.2 (08 marks)
5	a	1.4 (06 marks)
	b	4.2(06 marks) expansion of series/indeterminate forms
	c	3.1 (08 marks) problems on Leibnitz's theorem
6	a	2.1/2.2 (06 marks) linear independent,dependent/from 2.2
	b	3.2(06 marks) composite/implicit functions
	c	4.3 (08 marks) fitting of curves/Regression

NOTE:(1)Each Question of 8 marks may be converted into two questions of 4 marks each
(2)**NO** question on correlation coefficient is expected.
(3) Programmable calculators are **NOT** allowed.

Weightagewise 'Blue-print'Applied Maths – I (FEC101)

Progr. Name and Code: F.E (R- 2012 syllabus)   **Max marks:80**
Course Name and Code: Applied Maths I and FEC101, Time:3 hrs

Topic No.	Unit No	Weightage	Q1 Comp	Q2 Op	Q3 Op	Q4 Op	Q5 Op	Q6 Op
01	1.1	06		06				
	1.2	09	03			06		
	1.3	08			08			
	1.4	06					06	
02	2.1	16	04	06	06			
	2.2	14				08		06
03	3.1	12	04				08	
	3.2	09	03					06
	3.3	08		08				
04	4.1	15	03		06	06		
	4.2	09	03				06	
	4.3	08						08
	Total	120	20	20	20	20	20	20