

**Planner**  
**B.Sc. (H) Computer Science**  
**(Numerical Optimization)**

Unit	Topic	Reference	Month wise schedule to be followed	Test/ Assignment / Revision
1	Chapter1	[1]	August 2023	Assignment
	Solution by graphical method	[1]	1 <sup>st</sup> week of Sept 2023	Assignment
	Simplex Method with all special cases chapter 5 till 5.6	[3]	2 <sup>nd</sup> week – 3 <sup>rd</sup> week of Sept 2023	Test
	<b>Revision and doubt session</b>			
2	2.1 without proof of theorems	[1]	Till end of Sept 2023	
	9.1-9.6	[2]	1 <sup>st</sup> -3 <sup>rd</sup> week of October 2023	
	<b>Revision and doubt session</b>			
3	9.7 till pg 350	[2]	Till end of Oct 2023	
	<b>Revision and doubt session</b>			
4	8.1	[1]	1 <sup>st</sup> week of Nov 2023	Assignment

5	12.1 till pg 313	[1]	Till 2 <sup>nd</sup> week of Nov 2023	
	Langrangian Method Numerical Approach	Any book	Till 3 <sup>rd</sup> week of Nov 2023	Test
	Revision and doubt session for whole syllabus in 1 <sup>st</sup> week of December			

**Note: Proof of all theorems and Lemmas can be skipped**

### Essential/recommended readings

1. J. Nocedal and S.J. Wright, *Numerical Optimization*, 2nd edition, Springer Series in Operations Research, 2006.
2. A, Mehra, S Chandra, Jayadeva, *Numerical Optimization with Applications*, Narosa Publishing House, New Delhi, 2009,
3. J. Matousek and Bernd Gartner, *Understanding and using Linear programming*, Springer