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	<p>predictor-corrector method - Finite difference method for second order boundary value problems</p> <p>Classification of second order linear partial differential equations – Finite difference method – Explicit and Implicit methods - Schmidt and Crank-Nicolson methods for 1-D heat equation – Explicit method for 1-D wave equation – Liebmann's iteration method for 2-D Laplace and Poisson equations</p>	
	Total Lecture: (1 Lecture = 1.5 Hrs.)	30
Text books:		
1. Numerical methods for scientific and Engineering by M. K. Jain, S. R. K. Iyengar and R. K. Jain,, New Age International Ltd., 5th Edition, 2010. 2. Applied Numerical Methods with MATLAB for Engineering and Scientists by Steven C. Chapra, Tata McGraw-Hill Companies, Second edition, 2008.		
Reference Books, Web reference:		
1	Introductory Methods of Numerical Analysis by S. S. Sastry, , PHI Pvt Ltd, 5th Edition, New Delhi, 2009.	
2	Applied Numerical Methods Using MATLAB by W.Y. Yang, W. Cao, T.S. Chung and J. Morris, Wiley India Edition, 2007.	
3	Numerical Methods for Scientists and Engineers by K. Sankara Rao, PHI Learning Pvt. Ltd., 3 rd Edition, New Delhi, 2012.	
4	Numerical methods in engineering and science: with programs in C, C++ and MATLAB by B.S. Grewal and J.S. Grewal, 10 th edition, Khanna Publishers, 2014.	
<i>Recommendation by the Board of Studies on</i>		22-04-2017
<i>Approval by Academic council on:</i>		
<i>Compiled by:</i>		Dr.V.Prabhakar & Dr.C.Vijayalakshmi

*KL – Revised Blooms Knowledge Level (Cognitive Domain)