

Course plan Jan 2020			
Research methodology (CC 801)			
Contents	Mode of Assessment	Assessment weightage	References (Not limited to)
Module 1: Introduction to research. (What does a research degree represent? Role of advisor and Role of student. Creativity in research. Ethics in research.)	Multiple choice question based on Reading comprehension and / or lecture content	Continuous Assessment (CA): 10%	Based on the following video lectures: [1] https://nptel.ac.in/courses/121106007/1/2,3,4,5 [2] https://nptel.ac.in/courses/121106007/21/22,23,24
	Written test	End semester:10%	
Module 2: Technical presentation and technical writing. Tutorial on using Bibtex and Latex. Tutorial on Microsoft word	Preparation of technical report and technical presentation using Latex or using Microsoft word. (Audio slide preparation and Peer assessment)	CA:10%	Based on the following video lectures: [1] https://nptel.ac.in/courses/121106007/10/11/12/ [2] https://nptel.ac.in/courses/121106007/19/20 [3] http://ieeauthorcenter.ieee.org/wp-content/uploads/How-to-Write-for-Technical-Periodicals-and-Conferences-1.pdf [4] V.O.K. Li , Hints on writing technical papers and making presentations, IEEE Transactions on Education, Volume:42, Issue 2
Module 3: Literature survey and indexing. SCI/SCIE/ Web of science/ Scopus/ and other indexing	Written test	End semester:10%	Based on the following video lectures: [1] https://nptel.ac.in/courses/121106007/6/7/8/9
Module 4: Intellectual property	Written test	End semester:10%	Based on the following video lectures [1] https://nptel.ac.in/courses/121106007/25/26
Module 5: Optimization techniques and statistical tests for research techniques	Programming exercise	CA: 10%	Based on the following video lectures [1] https://nptel.ac.in/courses/121106007/14/15,16,17,18 [2] https://nptel.ac.in/courses/121106007/27/28,29,30,31 [3] http://silver.nitt.edu/~esgopi/pdf/Statistical_test.pdf [4] "Tests of Hypotheses Using Statistics" Adam Massey* and Steven J. Miller*, * Mathematics Department Brown University
	Assignment	CA: 10%	
	Written test	End semester:20%	
Module 6: Brain storming session	Multiple choice question based on the reading comprehension and /or lecture content	CA: 10%	Handled by the Team of panel members.