

**Two Week Global Online FDP on Advanced Optimization Techniques and Hands-on with MATLAB/SCILAB**

**Time Table**

**Date :13th July to 24th July 2020**

Date	Session I (5PM-6PM)		Session II (6.10PM-7.10PM)	Session III(7.20PM-8.20PM)
13-07-2020 (Monday)	5PM-5.10 PM	5.10PM-6.10PM	Module I : Dr. S. J. Nanda	Lab I : Dr. Prashant K. Jain
	Introduction	Module I : Prof. G. Panda	Fundamentals of Optimization	Introduction to MATLAB for Optimization Techniques
	Optimization-an important tool of Intelligent Data Analytics			
14-07-2020 (Tuesday)	Module II : Prof. G. Panda		Module II : Dr. S. J. Nanda	Lab II : Dr. ILA Sharma
	Nature Inspired Optimization, Binary and Real coded Genetic Algorithm		Artificial Immune System & Symbiotic Organism Search	MATLAB for Fundamental Optimization
15-07-2020 (Wednesday)	Module II : Prof. G. Panda		Module II : Dr. S. J. Nanda	Lab III : Dr. S. J. Nanda
	Particle Swarm Optimization (PSO) & Ant Colony Optimization		Colliding Bodies Optimization & Social Spider Optimization	MATLAB for Binary Genetic Algorithm
16-07-2020 (Thursday)	Module II : Dr. J. C. Bansal		Module II : Prof. Rajesh Kumar	Lab IV : Dr. S. J. Nanda
	Artificial Bee Colony		Differential Evolution (DE)	MATLAB for PSO & DE
17-07-2020 (Friday)	Module II : Dr. J. C. Bansal		Module II : Prof. Rajesh Kumar	Module II : Dr. S. S. Sahu
	Spider Monkey Optimization		Grey Wolf Optimization	Teaching-Learning Based Opt.
18-07-2020 (Saturday)	Module II : Dr. J. C. Bansal		Module II : Prof. Rajesh Kumar	Module II : Dr. S. S. Sahu
	Biogeography-based optimization		Whale Optimization	Bacterial Foraging Optimiz.
19-07-2020 (Sunday)	Module III : Dr. Sriparna Saha		Module III : Dr. P. M. Pradhan	Lab V : Dr. Urvashi P. Shukla
	NSGA-II and it's application to Multi objective Clustering		Multi Objective Particle Swarm Optimization & Cat Swarm Opt	MATLAB for Social Spider Optimization
20-07-2020 (Monday)	Module III : Dr. Sriparna Saha		Module III : Dr. P. M. Pradhan	Lab VI : Ms. Rachana Gupta
	Simulated Annealing based Approach for Multi Objective Optimization		Application of MOO to Cognitive Radio	Multi-objecive NSGA-II programing with MATLAB
21-07-2020 (Tuesday)	Module IV : Dr. Sriparna Saha		Module IV : Dr. P. M. Pradhan	Lab VII : Ms. Rachana Gupta
	Many & Multi Objective Optimization for Solving feature Selection Problem		Application of MOO to Wireless Sensor Networks	Many Objective NSGA-III programing with MATLAB
22-07-2020 (Wednesday)	Module IV : Dr. N. V. George		Module IV : Dr. S. J. Nanda	Lab VIII : Dr. S. J. Nanda
	Application of Multi-agent System for Nonlinear System Identification		Application to Channel Equalization	Application to System Identification & Equalization
23-07-2020 (Thursday)	Module IV : Prof. G. Panda		Module IV : Dr. N. V. George	Lab IX : Mr. Dinesh Kotary
	Application to Forecasting / Prediction of Stock Markets		Application for Active Noise Control	Application to Clustering & Classification
24-07-2020 (Friday)	Module IV : Prof. G. Panda		Module IV : Dr. S. S. Sahu	Lab X : Dr. Rahul K. Vijay
	Application to Intelligent Instrumentation		Application to Genomic Signal Processing	MATLAB for Grey Wolf Optimization
Speakers Details :		Two Online Quiz	8.20PM-8.45PM Feedback and Validation	

- 1) Prof. Ganapati Panda, Fellow INAE, Fellow NSAI, Former Dy. Director and Prof. Emeritus, IIT Bhubaneswar
- 2) Dr. Pyari M. Pradhan, Dept. of Electronics and Communication Engg., IIT Roorkee
- 3) Dr. Sriparna Saha, Dept. of Computer Science and Engineering, IIT Patna
- 4) Dr. Nithin V. George, Dept. of Electrical Engineering, IIT Gandhinagar
- 5) Dr. Jagdish Chand Bansal, Dept. of Mathematics, South Asian University, New Delhi
- 6) Dr. Sitanshu Sekhar Sahu, Dept. of Electronics & Communication Engg., Birla Institute of Technology, Mesra
- 7) Dr Prashant K. Jain, Dept. of Mechanical Engg., IIITDM Jabalpur (Coordinator)
- 8) Dr. Rahul Kumar Vijay, Dept. of Computer Science, Banasthali Vidyapith
- 9) Prof. Rajesh Kumar, Dept. of Electrical Engg., MNIT Jaipur
- 10) Dr. Satyasai J. Nanda, Dept. of Electronics & Communication Engineering, MNIT Jaipur (Coordinator)
- 11) Dr. Ila Sharma, Dept. of Electronics & Communication Engineering, MNIT Jaipur
- 12) Dr. Urvashi Prakash Shukla, PhD from Dept. of Electronics & Communication Engineering, MNIT Jaipur
- 13) Ms. Rachana Gupta, Submitted PhD at Dept. of Electronics & Communication Engineering, MNIT Jaipur
- 14) Mr. Dinesh Kumar Kotary, PhD from Dept. of Electronics & Communication Engineering, MNIT Jaipur