

Training on High Performance Computing (HPC) Technologies

Venue: Silver Jubilee Hall, S.N Bose Centre Kolkata

Duration: 3 days (18-20 June 2025)

D A Y 1	Time (Hrs.)	Lecture / Lab Session
	10:00-10:10	Welcome Address: Director, SNBNCBS, Kolkata
	10:10 – 10:20	Welcome Address and Overview of Training: CDAC Team, Pune
	10:20 – 11:20	Session: Introduction to HPC and Computer Architecture
	11:20 – 11:35	Tea Break
	11:35– 12:35	Session: Introduction to HPC and Computer Architecture (<i>contd..</i>)
	12:35 – 13:30	Session: System Organization and Administration
	🍴 Lunch Break - 1 hour	
	14:30 – 15:45	Lab Session: Basic Linux commands
	15:45 – 16:00	Tea Break
	16:00 – 17:30	Session: HPC Software Stack and Management Tools

D A Y 2	Time (Hrs.)	Lecture / Lab Session
	09:30 – 11:00	Session: Introduction to SLURM & Application Installation and Management using SPACK
	11:00 – 11:15	Tea Break
	11:15 – 12:00	Session: HPC Application demonstration
	12:00 – 13:00	Session: Profiling tools demonstration
	🍴 Lunch Break - 1 hour	
	14:00 – 15:45	Session: Shared Memory Parallelism with OpenMP
	15:45 – 16:00	Tea Break
	16:00 – 17:30	Lab Session: Shared Memory Parallelism with OpenMP

D A Y 3	Time (Hrs.)	Lecture / Lab Session
	09:30 – 11:00	Session: Distributed Memory Parallelism with MPI
	11:00 – 11:15	Tea Break
	11:15 – 13:00	Lab Session: Distributed Memory Parallelism with MPI
	🍴 Lunch Break - 1 hour	
	14:00 – 15:45	Lab Session: Introduction to compiler flags for optimization and Python environment setup with Miniconda
	15:45 – 16:00	Tea Break
	16:00 – 17:30	Lab Session: Introduction to GPU Architecture & Basics of Accelerated Programming