



## **Individual assignment on HPC for SE(10%)**

1. Clearly explain the fundamental issues in parallel computing
2. Clearly explain about mapping parallel algorithm in to parallel architecture
3. Clearly explain about fundamental limitations facing parallel computing (band width imitation, latency limitation and latency tolerating technique's)
4. Clearly explain parallel computing with CUDA PROCESSOR programming models in parallel computing
5. Clearly explain memory hierarchy and transaction specific memory design in parallel computing

## **6. Group assignment on HPC for SE (15%)**

1. Clearly discuss about peta scale computing
2. Clearly discuss about Optics in parallel computing
3. Clearly discuss about Quantum computing its impact on HPC
4. Clearly discuss about Nano technology and its impact on HPC

- Dead line: Dec/18/2025
  - Both assignments will be written by hand, don't copy from the source you used, rather, you can read and take the notes.
  - Use appropriate references