**(57p) Foundation (reading material for this section is available at iCollege, Week7, Project: Assigenmnt3 folder, Introduction to Parallel Computing\_2.pdf)**

* **(5p)Define the following:**
  + Task
  + Pipelining
  + Shared Memory
  + Communications
  + Synchronization
* **(8p)Classify parallel computers based on Flynn's taxonomy**
  + Briefly describe every one of them.
* **(7p)What are the Parallel Programming Models?**
* **(12p)List and briefly describe the types of Parallel Computer Memory Architectures**
  + What type is used by OpenMP and why?
* **(10p)Compare Shared Memory Model with Threads Model? (in your own words and show pictures)**
* **(5p)What is Parallel Programming? (in your own words)**
* **(5p)What is system on chip (SoC)? Does Raspberry PI use system on SoC?**
  + (5p)Explain what the advantages are of having a System on a Chip rather than separate CPU, GPU and RAM components.