1) Explain what is the difference in terms of CPU source access/utilization when there is a concurrent processing versus parallel processing. Draw two timing diagrams showing three different tasks A, B and C are processed 1) through interleaved concurrency 2) parallelism.

2) Name and explain different types of parallelism in processor. Give an example for each.

3) Suppose a program takes 1 unit of time to execute serially. A fraction of the program, $S$, is inherently serial (unparallelizable). The program, when executing on single processor, spends 10% of its time in a non-parallelizable region. How much faster will this program run on a 3-processor system? What is the speedup of three-processor system over single processor system when executing this program?