Quiz 2 Operating Systems and Networks IIIT Hyderabad

Time: 30 minutes; Max. Marks: 24

Note: Give a brief and correct answer. Mention your name and roll number on the answer sheet. Answer the question after writing the question in the answer sheet.

- 1. What do you understand by the term "long term scheduler"?
- 2. What are the strengths and weaknesses of the two models of inter-process communication?
- 3. Consider a multiprocessor system and a multi threaded program using many-to-many threading model. Let the number of user-level threads in the program be more than the number of processors in the system. Discuss the performance implications of the following: "The number of kernel threads allocated to the program is less than the number of processors".
- 4. Do you agree that "multithreading framework improves both Concurrency and Parallelism on multicore system?" Justify your answer.
- 5. Suppose a CPU scheduling algorithm favors those programs that have used little processor time in the recent past. Explain why this algorithm favors I/O-bound processes and yet does not permanently deny processor time to CPU-bound processes?
- 6. What is the purpose of thread pools?