

**Quiz 4**  
**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 FIRST 10 WORDS OF THE QUESTION ALONG WITH THE QUESTION NUMBER in the answer sheet.**

1. The kernel of a multiprogramming system classifies a program as CPU-bound or I/O-bound and assigns appropriate priority to it. What would be the consequence of a wrong classification of programs for throughput and response times in a multiprogramming system ? [6]
2. Why preemption points are included to system calls [6]
3. Pre-emptive kernels are difficult to design. However, why almost all modern OSs go for it ?[6]
4. Explain the merits and demerits of queuing and simulation model based method of performance evaluation.[6]