Quiz 6
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 QUESTON NUMBER in the answer sheet.**

1. In addition to hardware support such as page table and secondary memory what kind of software support is needed to implement demand paging ? Explain clearly.[6]

2. Two versions of a program P, called Ps and Pd, are developed using static and dynamic memory allocation, respectively. When an effort is made to execute Ps, an OS gives the message "Insufficient memory, can not run the program." However, the same OS executes program Pd without any difficulties. Explain why this happens. [6]

3. Assume a page size of 4Kbytes and that a page table entry takes 4 bytes, how many levels of page tables would be required to map a 64-bit address space, if the top level page fits into a single page.[6]

4. Identify whether the following statement is TRUE or FALSE. If the statement is FALSE, correct it and justify the corrected sentence. If the statement is TRUE, justify it. Restrict the justification to few (less than five) sentences: Global frame allocation algorithm gives better throughput over local frame allocation algorithm. [6]