

b) Consider the Logical address space of 8GB, Physical address space of 64MB, and page size of 4KB. Find the

- i ✓ Number of pages
- ii ✓ Number of frames
- iii ✓ Number of entries in the page table
- iv ✓ Size of page table

(10 Marks)

c ✓ Consider the following page reference string:

7, 0, 1, 2, 0, 3, 0, 4, 2, 3, 0, 3, 2, 1, 2, 0, 1, 7, 0, 1

Find the ratio of Page Fault (PF) and Page Hit (PH) for the First in First Out (FIFO) page replacement Algorithm assuming the main memory with 4 frames.

(10 Marks)

$$\begin{aligned} \text{Total hit} &= 10 & \text{Hit ratio} &= \frac{10}{20} \times 100 \\ \text{Total miss} &= 10 & \text{-----End-----} &= 50\% \\ \text{MRS ratio} &= \frac{10}{20} \times 100 \\ &= 50\% \end{aligned}$$