

**CSE321: Operating Systems**  
**Quiz 6 SET A**

<b>Name:</b>	<b>ID:</b>	<b>Section:</b>
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**Marks: 10**

**Time: 20 minutes**

**Instructions:** Answer all questions on the space provided below for each.

**Question 1: [CO2]** Consider a computer with a main memory that has **4 frames** and a page reference string of some pages [3 2 4 1 0 5 4 2 0 0 3 7 4 5]. The page reference string represents the order in which the pages are accessed by a program. Apply **LRU & Optimal** algorithm to simulate the page replacement that occurs when the main memory can hold at most **4 pages** at a time. Record the number of page faults and compare the results with appropriate calculations. Mention which algorithm performs better in this scenario. **[Marks 10]**

**CSE321: Operating Systems**  
**Quiz 6 SET B**

<b>Name:</b>	<b>ID:</b>	<b>Section:</b>
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**Marks: 10**

**Time: 20 minutes**

**Instructions:** Answer all questions on the space provided below for each.

**Question 1: [CO2]** Consider a computer with a main memory that has **4 frames** and a page reference string of some pages [2 3 4 1 0 5 4 3 0 0 2 7 4 5]. The page reference string represents the order in which the pages are accessed by a program. Apply **FIFO & Optimal** algorithm to simulate the page replacement that occurs when the main memory can hold at most **4 pages** at a time. Record the number of page faults and compare the results with appropriate calculations. Mention which algorithm performs better in this scenario. **[Marks 10]**

**CSE321: Operating Systems**  
**Quiz 6 SET C**

<b>Name:</b>	<b>ID:</b>	<b>Section:</b>
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**Marks: 10**

**Time: 20 minutes**

**Instructions:** Answer all questions on the space provided below for each.

**Question 1: [CO2]** Consider a computer with a main memory that has **4 frames** and a page reference string of some pages [5 2 4 3 0 5 1 2 1 0 2 7 4 5]. The page reference string represents the order in which the pages are accessed by a program. Apply **FIFO & LRU** algorithm to simulate the page replacement that occurs when the main memory can hold at most **4 pages** at a time. Record the number of page faults and compare the results with appropriate calculations. Mention which algorithm performs better in this scenario. **[Marks 10]**