

**Name:**

**Id#**

**ISE 307, Term 153**  
**ENGINEERING ECONOMIC ANALYSIS**

**Quiz# 2**

Date: Monday, August 8, 2016

**Q1.** The accompanying table shows a cash flow for a company along with CPI:

Year	Cash	CPI	Inflation Rate
0	100,000	179.8	
1	115,000	183.8	
2	128,000	188.0	
3	145,000	194.6	

- i. Assuming that year 0 is the base period, determine the inflation rate for each period, and calculate the average inflation rate over the three years.
  
  
  
  
  
  
  
  
  
  
- ii. What will be the equivalent cash of year 1 stated in terms of year 3 cash?

**Q2.** Suppose that you borrow \$60,000 at 9% compounded monthly over five years. Knowing that the 9% represents the market interest rate, you compute the monthly payment in actual dollars as \$1245.51. If the average monthly general inflation rate is expected to be 0.25%, determine the equivalent equal monthly payment series in constant dollars.

**Q3.** Consider the following two mutually exclusive projects:

<b>Net Cash Flow</b>		
<b>End of Year</b>	<b>Project A</b>	<b>Project B</b>
0	-\$1,000	-\$1,000
1	\$912	\$284
2	\$684	\$568
3	\$456	\$852
4	\$228	\$1,136

At an interest rate of 25%, which project would you recommend choosing?