**Analytical Exercise set on Feasibility Study Lecture**

**(This set do not cover th theoretical questions)**

1. A system costs Rs. 2,00,000 to install and Rs. 10,000 per month as recurring expenses. The benefit per year is 1,50,000. Assuming as interest rate is 15%, what is the payback period of the investment?
2. ABC Company Ltd will need bKash 250,000 at the end of 3 years for restructuring. Calculate the present investment value the company needs to invest at an annual compound interest rate of 10%.
3. You are promised 8, 00000/- BDT in 10 years' time. What is its Present Value at an interest rate of 6%?
4. Alan's Best Chocolates (ABC) is a leader in the sales of chocolates and confections throughout the United States. ABC's products are sold from 50 stores throughout the country and maintain a reputation for superior taste and quality. While ABC's sales have grown over the past 10 years, the rate of growth has slowed significantly. One key factor for this slowing growth rate is the shift in the marketplace to purchasing chocolates and confections online. While ABC maintains a web site, it is not capable of hosting an ecommerce platform for online sales. ABC's sales occur only in its brick and mortar facilities and the company is losing potential customers to competitors who provide online sales. The chocolate and confections marketplace is healthy and shows a continued growth trajectory over the next five to ten years. ABC is in a position to capitalize on this online marketplace by leveraging existing technologies, industry best practices, and an aggressive marketing and sales campaign to ramp up the company's growth projections for the foreseeable future.

ABC is considering a move to create and provide an online platform from which to sell its Existing product line. Until now ABC has only sold its products from its chain of brick and mortar facilities and has been limited to sales within the geographical regions where its stores Reside. Consider that you are the System Analyst of that project and now give the answers given below:

* What are the deficiencies in above scenario?
* What would be your main goals and sub goals to eliminate those deficiencies?
* A system costs Tk 3, 50,000 to install and Tk 3000 per month as recurring expenses. The benefit per year is Tk 35,740. Assume an interest rate of 2.5% per month, what is the payback period of the investment? (Use Payback method with interest).
1. A system costs Tk. 3, 50,000 to install and Tk. 3000 per month as recurring expenses. The benefit per year is Tk. 35,740. Assume an interest rate of 3.0% per month, what is the payback period of the investment? (Use Payback method with interest).
2. Mr. Nasim is a hostel supervisor of F R Khan Hall. He states the following requirements for a hostel information system:

Our hostel has 500 rooms and 4 messes. Currently, there are 1000 students all in 2 seated rooms. They eat in any one of the messes but can get a rebate if they inform and do not eat for at least 4 consecutive days. Besides normal menu, extra items are also Oven to students when they ask for it. Such extras are entered in an extras book. At the end of the month a bill is prepared based on the normal daily rate and extras and given to each student. We find that bill preparation is delayed. We are also not able to keep proper track of payments and billing for extras. We need a system to streamline this.

* What are the deficiencies in above scenario?
* What would be your main goals and sub goals to eliminate those deficiencies?
1. “MKC” is a leader in the sales of chocolates and confections throughout the Bangladesh. MKC’s products are sold from 50 stores throughout the country and maintain a reputation for superior taste and quality. While MKC’s sales have grown over the past 10 years, the rate of growth has slowed significantly. One key factor for this slowing growth rate is the shift in the marketplace to purchasing chocolates and confections online. While MKC maintains a web site, it is not capable of hosting an ecommerce platform for online sales. MKC’s sales occur only in its brick and mortar facilities and the company is losing potential customers to competitors who provide online sales. The chocolate and confections marketplace is healthy and shows a continued growth trajectory over the next five to ten years. MKC’s is in a position to capitalize on this online marketplace by leveraging existing technologies, industry best practices, and an aggressive marketing and sales campaign to ramp up the company’s growth projections for the foreseeable future.

MKC is considering a move to create and provide an online platform from which to sell its existing product line. Until now MKC has only sold its products from its chain of brick and mortar facilities and has been limited to sales within the geographical regions where its stores reside.

Consider that you are the System Analyst of that project and now give the answers given below:

1. What are the deficiencies in above scenario?
2. What would be your main goals and sub goals to eliminate those deficiencies?