## **COMP313 Project Management**

Exercise 3 (Chapter 3)

- 1. A change request has been raised by the end-users which leads to a modification of the course enrollment function. The modification is estimated to require 5 to 7 extra man-hours.
  - a. How do the processes work to tackle this problem? You can use a DFD to help in describing the processes.
  - b. There is another form of change request. How is this handled? You can use a DFD to help in describing the processes.
- 2. What is the Project Management Plan? What essential elements does it contain?
- 3. What is a Baseline? What is its purpose?
- 4. Currently, the operating cost for a company is \$20,000 each year. The manager proposes to purchase a software system with a cost of \$50,000. After the software system being deployed, it is expected that its operation will incur costs worth \$10,000 annually. Let's assume that the software is going to be used for 5 years and the discount rate is 5%. What financial method you should use to reflect a more realistic amount of initial investment for cost-benefit analysis? What is the present value for the net earnings/loss by the end of the 1st year? Show your steps.
- 5. You need to perform a financial analysis for a project using the format provided below. The project is estimated to complete in 1 year at the total development cost of \$100,000 before being adopted for operations. Assume that the projected operating costs and benefits for this project are spread over the next 3 years as follows. The expected operating cost for each year is \$25,000 and the estimated benefit is \$80,000 each year. Assume the discount rate is 5%.

5.1 Fill in the following table by calculating the present values. Identify the NPV (Net Present Value).

Discount rate: 5%	Year			
	1	2	3	4
Costs	100,000	25,000	25,000	25,000
Discounted costs				
Benefits	0	80,000	80,000	80,000
Discounted benefits				
Discounted benefits –				
costs (Net)				
Cumulative benefits –				
costs (Net)				

5.2 Calculate the ROI (Return On Investment) and the year in which payback occurs.