Assignment 01

Sabaragamuwa University of Sri Lanka

Faculty of Computing

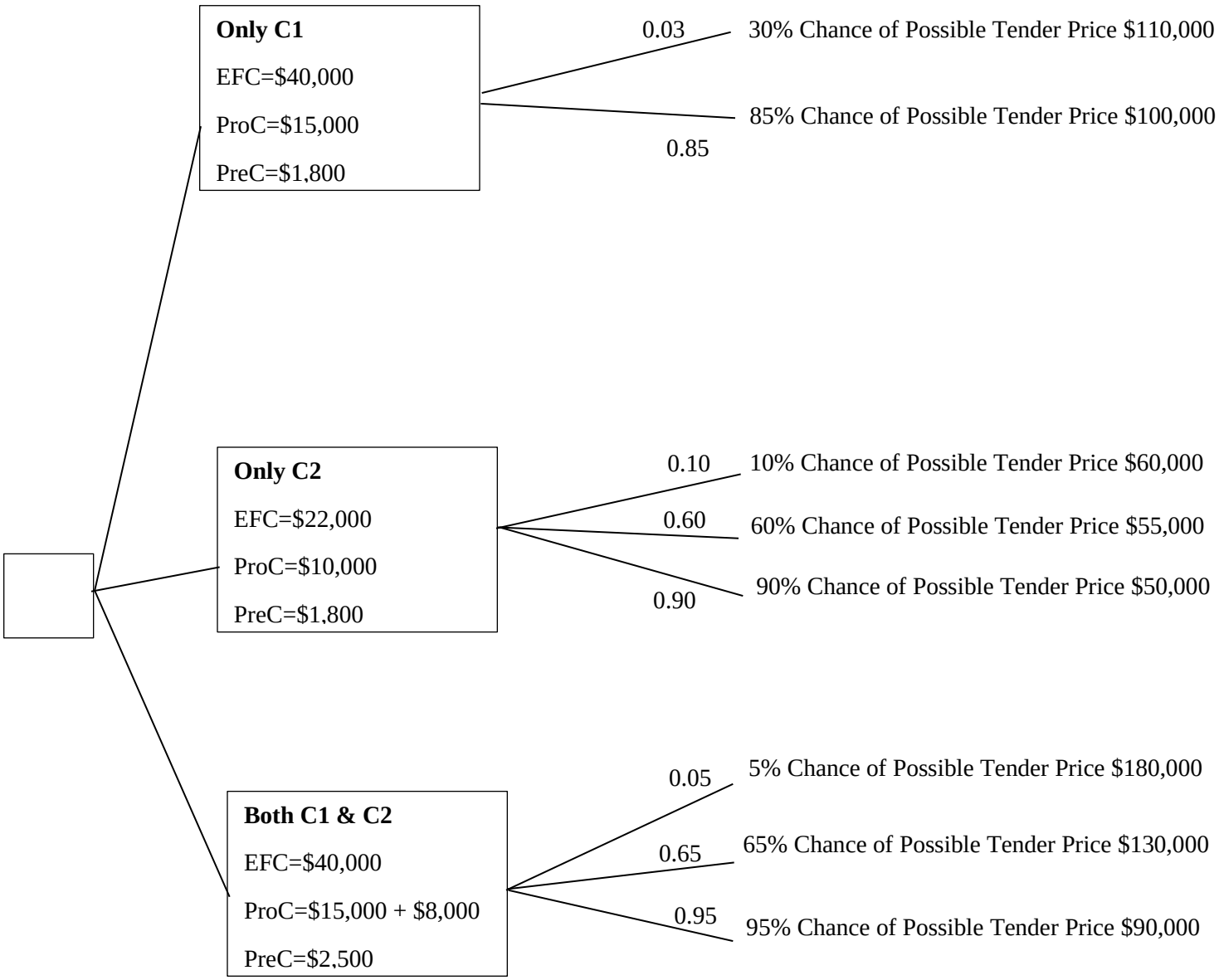
Computing & Information Systems

Course Code – IS 1107

Course Name - Personal Productivity with IT

Name	: U.N.T. Abepala
Reg. No	: 20APC4653
Academic Year	: 2020/2021
Degree Program	: Information Systems
Due Date	: 2023-02-05

1. **Draw the Decision Tree representing the options open for the company.**



EFC: Extra Facility Cost

ProC: Production Cost

PreC: Preparation Cost

2. **Calculate the expected values of total profit for each of the options from the initial node to the terminal node.**

Possible Tender Prices - Total Cost ($)	Profit ($)
110000-56800	53200
100000-56800	43200
60000-33800	26200
55000-33800	21200
50000-33800	16200
180000-65500	114500
130000-65500	64500
90000-65500	24500

C1;

C1 = [0.3(53200) +0.85(43200)]-56800= - 4120

C2;

C2 = [0.1(26200) +0.6(21200) +0.9(16200)]-33800= - 3880

Both C1 & C2;

Both C1, C2 = [0.05(114500) +0.65(64500) +0.95(24500)]-65500= 5425

3. **What do you suggest the company should do? Justify your suggestions.**

-3880<-4120<5425

Most suitable one is Both C1&C2

4. **What are the downside and the upside of your suggested course of action?**

The downside of this course of action is that the company could potentially lose both contracts and write off the cost of the extra facilities. The upside is that the company has a higher probability of getting both contracts and a higher expected profit overall.