Daffodil International University

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Midterm Examination, Spring 2022

Course Code: CSE325/321, Course Title: System Analysis and Design

Time: 1:30 hours, Marks: 25

<u>**Answer all the following questions**</u>

You must answer parts of a question sequentially. The figure in square brace at the right side of a question indicates the marks allocated to the questions.

1.	a) If an information system were to be design for an "*Intelligent Tour Recommendation System*", what would be the operational, strategic, tactical, and statutory information?	**[3]**	**C01**
	b) Mr. Samir is a system analyst and he is working in Vision Tech Ltd. As a system analyst Mr. Samir should have an "*Breath of Knowledge*". Why?	**[2]**	

2.	Dhanmondi Community College(DCC) is a two-year school in Dhaka. Twice a year, the records office of the Community send mails for donations to the alumni. The College staff uses a word processing merge file to create personalized letters, but the data on past contributions and other alumni information is stored manually.
	      The registrar, Mr. Sadik, recently submitted a systems request asking the college's IT department to develop a computerized alumni information system. The school does not have a formal systems review committee, and each department head has an individual budget for routine information services.
	    Mr. Razon, a systems analyst, was assigned to perform a preliminary investigation. After reading his report, Mir. Zafar asked him to proceed with the systems analysis phase, saying that a formal presentation was unnecessary. Mr. Razon has scheduled an interview tomorrow with him, and he asked you to help him prepare for the meeting.
			C03

	Prepare a list of the question that Mr. Razon ask. Include open-ended, closed-ended and range of response questions. Conduct student-to-student interviews, with half the students assuming System Analyst role and the other half playing the registrar.	**[5]**	

3.	FE is a renowned financial organization in Bangladesh. Sansa is working in the human resources department at this company. She is constantly being asked by employees how much is taken out of their paychecks for insurance, taxes, medical, mandatory retirement, and voluntary retirement. It takes up to a few hours every day, says Sansa. She would like a Web system that would allow employees to use a secure logon to view the information. She wants the system to interface with health and dental insurance companies to obtain the amount remaining in the employee's account for the year. She would also like to obtain retirement amounts saved along with investment results. Sansa has a high regard for privacy and wants the system to have employees register and give permission to obtain financial amounts from the dental insurance and retirement companies. Construct a DFD-0 Diagram for the above and Construct Level-1 DFD from your DFD 0.	**[5]**	**CO4**
4.	C&M is a fashion wares business company in Bangladesh. They have 40 showrooms in Dhaka city and every showroom has several sales persons. They purchase finished dresses of men and women of all ages from different suppliers and sale those items to the registered or nonregistered customers. All Purchases are controlled from the head office and distributes items to all showrooms based on their previous sales records. They have discount policy for the registered customers. They have three types of customer: Platinum, Golden and General. If a Platinum customer purchase items by less than 1000 taka then they will get 5% discount and purchase items by more than or equal 1000 taka they will get 7 % discount. If a Golden customer purchase items by less than 1000 taka they will get 4 % discount and purchase items by more than or equal 1000 taka they will get 6 % discount. General customers will always get 2 % discount whatever they purchase. Draw the decision tree and decision table for the above discount policy.	**[5]**	**CO3**
5.	Data Soft administrator calls a system analyst to improve the system administration of sponsored research projects. The main problems are delay in obtaining latest financial position to project coordinators, reconciliation of advance given to coordinators, prompt demands not sent to sponsors to collect promised grants and lack of information to answer the following questions: Which areas of research get maximum grants? Which agency aids which types of projects? What trends can be seen in the nature of grants?	**[5]**	**C03**
	Now, classify the above problems into missing functions, unsatisfactory performance, and excessive cost of operation. How would you set goals and sub-goals to meet the deficiencies?		