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Daffodil International University

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Midterm Examination, fall 2023

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

Level: 3, Term: 2

Time: 1:30 **Marks: 25**

Answer all the following questions

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.

			CO
1.	a) If an information system is to build for Online Ride Sharing. What would be the Strategic, Tactical, Operational and Statutory information?	[3]	CO1
	b) Mr. Ryan is a system analyst and he is working in Sara Tech Ltd. As a system analyst Mr. Samir should have a "Breath of Knowledge". Explain your answer.	[2]	
2.	Daffodil International University is considering to develop a new system that will speed up the DIU BUS Management System. Suppose you are a System Analyst, As a system analyst you are asked to develop a plan for fact-finding for DIU BUS Management System (a) Write down the possible requirements gathering techniques that you might use and why? (b) Prepared a survey question to find out the problems of the current system and shared it with the students of DIU. This survey question is an attempt to investigate the attitude of students towards the current system and their expectation of possible solution.	[5]	CO3
3.	DBBL is a well-known bank in Bangladesh. They are using computer-based Banking information management system in their bank. They have also computer-based human resource management system. Every employee has unique user ID and password and their access of the information systems are controlled using those user ID and password. They offer on-line customer Bank Account opening process. A customer can apply for a bank account from anywhere in the world using web-based interface and submit all the required documents using on-line. To confirm his/her personal information and address the system uses National ID card, TIN certificate, any recent of utility bill documents, NID and picture of nominee. When all the verification will be completed the customer will receive Account opening information. To activate the account number, the customer should deposit minimum 1000 takas. After activating account information, he or she can apply for Cheque book and ATM card. After getting Cheque book and ATM card he/she can withdraw money from the bank or ATM booth. Customer also can use their mobile app for online transaction and credit card bill payment. They can pay their online bill at different merchant point by ATM card and mobile app. Every deposit, withdrawn and bill payment transaction are recorded in a file and the customer can collect the Bank statement from the Bank for a specific period.	[5]	CO4

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Draw a context-level and Level 1 DFD from the above scenario.

4. DBBL also offer credit card to the customer. They provide different types of credit card based on the customer income like Visa Platinum, VISA Signature, MasterCard Titanium and MasterCard World credit cards. They offer a wide range of benefits & privileges to the credit card holder in Air ticket purchase and in many other sector. [5] CO3

In Air ticket purchase MasterCard Titanium and MasterCard World credit Card holder can enjoy up to 25% discount and VIP lounge uses for local and international flight for 10 times. For more than 10th times they can enjoy 15% discount on base fare and can use VIP lounge with minimum pay.

Visa Platinum, VISA Signature card holder can enjoy up to 15% discount with a maximum discount of BDT 12,000 per transaction on base fare of International flights at GoZayaan. 10% discount on the base fare for both International and Domestic routes when they purchase air tickets from www.flynovoair.com, NOVOAIR app or NOVOAIR sales outlets. They can also enjoy flat 5% discount on the base fare for both International and Domestic routes when they purchase air tickets from www.biman-airlines.com or nominated sales outlets of Biman Bangladesh Airlines.

Draw a **decision tree and a decision table** for the above benefits in Air ticket purchase.

5. Bangladesh has many government and private bank. Most of the government bank uses manual system for their different activities. [5] CO3

Write a case study for manual banking system and identify deficiencies of the system.

Now, categorize the above problems into missing functions, unsatisfactory performance, and excessive cost of operation of current system.
How would you set goals and sub-goals to remove the deficiencies?