



Daffodil International University
Department of Computer Science and Engineering

Faculty of Science & Information Technology

Midterm Examination, Summer 2021 @ DIU Blended Learning Center

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

Level: 3, Term: 2

Date: Sunday 4 July, 2021 Time: 01:30-04:00pm

Time: 2:30, 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.

1. a) Mr. Laziz Khan is an owner of Akankha Holdings Ltd. As a System Analyst you need to talk with holdings owner Mr. Laziz Khan and find out what his information requirements are. Divide it into operational, tactical, strategic and statutory components. Describe how his operational and tactical information needs could be satisfied if he installs a PC. [3]

b) Visit the MIS department of General Pharmaceuticals Limited of Head Office at Gulshan. Ask the Manager of the organization his/her opinion of the role of the professional and the technical writer in the system development. [2]
2. In this new era of technology, children are more exposed to the advanced technology even at an early age with smartphones, tablets and e-readers being some dominant choices as observed by many educators and parents. The experiences with the latest technology can surely pave the way for extraordinary learning opportunities. Every time a new mode of technology is invented, say from television to computers to mobile devices, it always presents some new potential as an educational tool for the young children. Nowadays there are more platforms for the educational media content than there were ever before. With children spending so many hours a day with these technologies, there are certain concerns which parents have regarding technology use for children. [5]

Prepared a survey question and shared it with the parents of elementary school age children (aged 6 to 10 years) in Bangladesh Context. This survey question is an attempt to investigate the attitude of parents towards the use of mobile technology for children and specifically in the context of education by using educational or learning apps for children. This survey aspires to provide guidance in order to overcome the concerns of parents and to increase the accessibility of mobile technology in education for young children.

Survey is a good option. Besides, which Information Gathering Tools do you think to use for best practice to build up this learning app?

3. Mr. Saiful Islam Rony is an IT Manager of "Dhaka Bank" in Motijhil Branch at Dhaka. They are using computer-based Banking information management system in their branch. 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 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 or TIN certificate and any recent utility bill documents, when all the verification will be completed the customer will receive Account opening information. To activate the account number the customer should deposit minimum 500 taka. After activating account information, he or she can apply for Cheque book or ATM card. After getting Cheque book or ATM card he/she can withdraw money from the bank or ATM booth. Every deposit and withdrawn transaction are recorded in a file and the customer can collect the Bank statement from the Bank for a specific period. [5]

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

4. **"Best Buy"** is a leading provider of technology products, services and solutions. The company offers expert service at an unbeatable price more than 1.5 billion times a year to the consumers, small business owners and educators. They have 40 showrooms in Dhaka city and every showroom has several sales persons. They purchase products 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 customers: Platinum, Golden and General. If a Platinum customer purchase items by less than 2000 taka then they will get 10 % discount and purchase items by more than or equal 1000 taka they will get 5 % discount. If a Golden customer purchase items by less than 2000 taka they will get 5 % discount and purchase items by more than or equal 2000 taka they will get 10 % discount. General customers will always get 3% discount whatever they purchase. [5]

Draw a decision tree, decision table and structured English language for the above policy.

5. We all interact with various management information system every day: at the grocery store, at work, at college, and at hospital systems. [5]

Write a case study from any one of above mention system and identified deficiencies of the current manual system of your choices system.

Now, classify 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?