



BANGAMATI SCIENCE AND TECHNOLOGY UNIVERSITY

Department of Computer Science and Engineering

3rd Year 2nd Semester BSc (Engr.) Final Examination - 2022

Session: 2019-2020

Course Title: Data Communication; Course Code: CSE-3201

Full Marks: 60

Duration: 03 Hours;

[Answer any 04 questions]

1. a) Define data communication and describe its key elements and transmission modes. 05
b) Explain the OSI model and briefly discuss the function of each layer. 05
c) Illustrate and compare different types of communication media. 05

2. a) Classify different types of computer networks and briefly describe their characteristics. 04
b) Discuss various network topologies, highlighting their advantages and disadvantages. 05
c) Define modulation. Explain the principles of:
 - i. Amplitude Modulation (AM)
 - ii. Frequency Modulation (FM)06

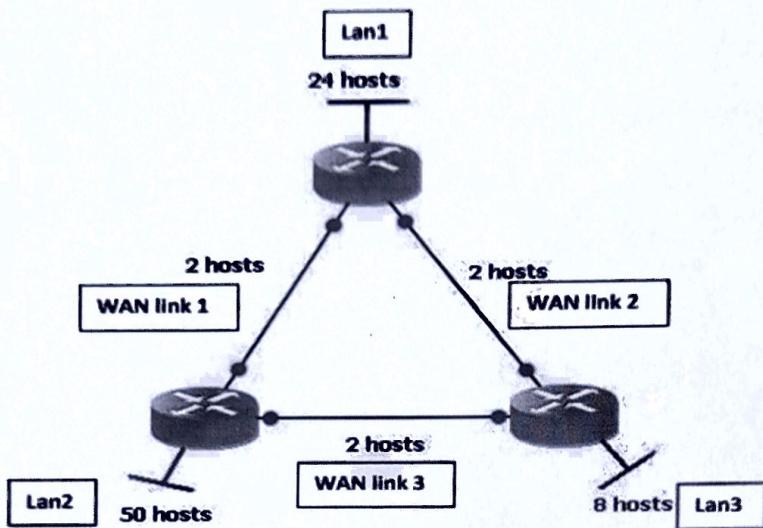
3. a) Show the data encapsulation process in data communication with block diagram. 03
b) In what way bit stuffing is impact of data transparency? 02
c) How do you calculate the network and broadcast addresses from the IP address with example? 04
d) Given that an IP address 190.168.100.0/24, Find the no of subnet and block size using CIDR technique when user 31 also finds out the resize of block? 04
e) By what method does modulation affect in communication? 02

4. a) Explain the following mechanisms:
 - i. Cyclic Redundancy Check (CRC)
 - ii. Forward Error Correction Technique
 - iii. Hamming Code09
b) Identify and elaborate on the primary causes of transmission impairments. 06

5. a) Explain the need for multiplexing and describe different types of multiplexing techniques. 10
b) Describe the mechanism of Delta Modulation (DM). 05



6. a) Mention some objectives of subnetting for IP address? 02
- b) Show the basic difference between classful and classless IP address. 02
- c) Given that an IP address 192.168.2.0/24, find out the sub netting by using VLSM in the following figure? 06



- d) What is Hamming distance and write about minimum Hamming distance? 02
- e) Show the comparison between simplex and stop-and-wait protocol. 03



RANGAMATI SCIENCE AND TECHNOLOGY UNIVERSITY

Department of Computer Science and Engineering

3rd Year 2nd Semester BSc (Engr.) Final Examination - 2022

Session: 2019-2020

Course: Data Communication Lab; Code: CSE 3202

Duration: 03 Hours;

Full Marks: 40

[Answer all questions]

1. **Cable Making Task:**

20

Using physical tools such as cables, connectors, crimping tools, and a cable tester, how can you make a straight-through and a cross-over LAN cable?

Demonstrate each step involved and specify the color coding standards used.

2. **Network Simulation Task (Cisco Packet Tracer):**

20

Using **Cisco Packet Tracer**, how would you design and configure a network consisting of **three LANs** connected to a **single router**, with at least three computers per LAN?

Explain the **IP configuration**, **network diagram**, and **routing setup**. Then demonstrate **successful packet propagation** between computers in different LANs using the simulation tool.



Rangamati Science and Technology University

Department of Computer Science and Engineering

3rd Year 2nd Semester B.Sc. (Engg.) Final Exam-2022

Course Code: CSE-3203; Session: 2019-2020

Course Title: SOFTWARE ENGINEERING

Marks: 60

Time: 3 Hours

- NB: 1. Answer any **FOUR(4)** questions out of **SIX(6)** questions.
2. Figures in the right margin indicate marks($15 \times 4 = 60$).
3. All parts of a question must be answered serially.

1. (a) What do you mean by Software Engineering? Describe the Characteristics of Good software. 04
(b) What is sprint in a scrum? How it works? 02
(c) What is software life cycle model? Explain any 2 types of life cycle model with their pros & cons. 05
(d) What is Agility and Agile Process model?
Derive the phases of Agile development Process model in details. 04
2. (a) What is Software Requirements document? Write the IEEE requirements standard for specifics system. 03
(b) Write a short note on REFINEMENT and REFACTORYING. 02
(c) What is design architecture? Why is architecture design Important in software process? 03
(d) Describe the process of User interface analysis and design process with its framework activities. 04
(e) A supermarket needs to develop the following software to encourage regular customers. For this, the customer needs to supply his/her residence address, telephone number, and the driving license number. Each customer who registers for this scheme is assigned a unique customer number (CN) by the computer. A customer can present his CN to the checkout staff when he makes any purchase. In this case, the value of his purchase is credited against his CN. At the end of DEPT OF CSE & IT
VSSUT, Burla
each year, the supermarket intends to award surprise gifts to 10 customers who make the highest total purchase over the year. Also, it intends to award a 22 caret gold coin to every customer whose purchase exceeded Rs.10,000. The entries against the CN are the reset on the day of every year after the prize winners' lists are generated. 03

Draw The **use case model** for the Supermarket Prize Scheme based on the above details.

3. (a) What are the principal activities for S/W quality management? 03
(b) Write the Two approaches for maintaining quality control. Draw and explain the re-engineering process in short. 2+3 =05



- (c) How the reverse engineering process provides for development process? **03**
Describe with diagram.
- (d) What is documentation standard? Classify it. Describe the process with diagram. **04**
-
4. (a) What is Risk assessment? Describe the types of diagrams of UML as to construct different views of a system. **05**
(b) Explain the three issues of RMMM with its diagram. **03**
(c) What is Coupling and Cohesion in software modularization? Describe with its levels two generic approaches for software designing. **05**
(d) Draw the Six Sigma process of Software Engineering. **02**
-
5. (a) What is a Problem Definition Document (PDD)? Mention its importance in the software development process. **03**
(b) Differentiate between technical feasibility and operational feasibility with examples. **04**
(c) Discuss the primary responsibilities of a project manager in software engineering. **04**
(d) Explain the challenges involved in managing people in software projects and the processes to mitigate them. **04**
-
6. (a) Explain behavioral models in system modeling. How do they help in understanding system behavior? **04**
(b) Describe the concept of structural models with the help of an example. **04**
(c) Briefly explain the concept of architectural patterns and their role in software design. **03**
(d) Compare and contrast Layered Architecture and Three-Tier Architecture. **04**



Rangamati Science and Technology University

Department of Computer Science and Engineering

B.Sc. in Engineering 3rd Year 2nd Semester Final Examination- 2022

Course Title: Artificial Intelligence,

Course Code: CSE-3205

Time: 3 Hours

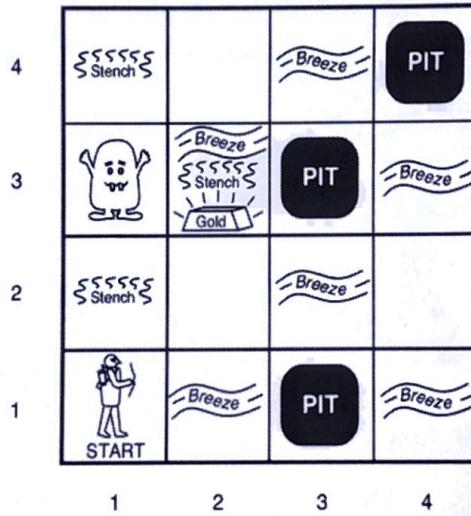
Full Marks: 60

Answer any 4 (four) questions

(Figure in the right hand margin indicates marks)

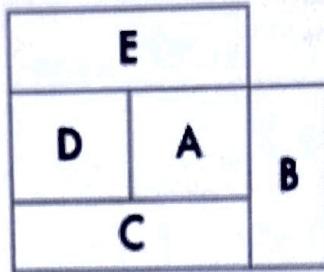
1. (a) What do you understand by **Intelligence** and **Artificial Intelligence**? Describe Turing test approach. 04
- (b) What do you mean by PEAS? For each of the following activities, give a PEAS description of the given incident. 04
- a) Exploring the surface of mars
 - b) Interactive English Tutor
 - c) Backgammon
- (c) Describe the steps involved in problem formulation in the case of vacuum cleaner problem in two block environment. 03

(d)

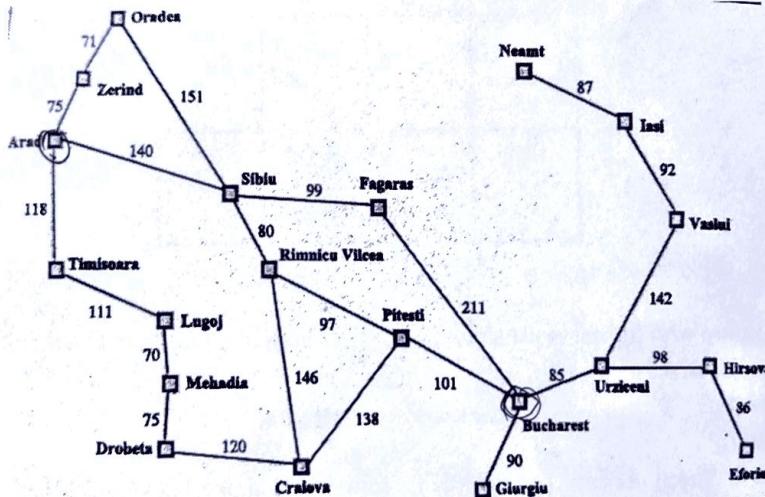


Prove above figure with logical explanation that there is no pits in [1, 2] for a wumpus world problem with proper steps.

2. (a) We use Google Voice Assistant in our daily activities and we know that there are some categories of AI agents. Explain which kind of agent Google Voice Assistant is with proper logical explanations. Also, include the block diagram of that agent type. 03
- (b) Is it possible to solve the below map coloring problem 2 different colors? If is it, color it using CSP Backtracking Search either color it using the minimum number of possible colors. 04



- (c) Write about different types of task environments that an AI-based Agent can face in its operation. 05
- (d) Define the rules of inference for Propositional Logic. 03
3. (a) What is entailment? Explain genetic algorithm and its importance. 04
- (b) Differentiate between informed search and uninformed search. 03
- (c) "Hill climbing is a greedy local search"-write some of your thought about this. 03
- Describe the drawbacks of hill climbing search in short.
- (d) The following figure shows a partially expanded search tree. Each arc is labeled with the cost of the corresponding operator. here also given the values of h_{SLD} , straight line distance to Bucharest. 05





Arad	366	Mehadia	241
Bucharest	0	Neamt	234
Craiova	160	Oradea	380
Drobeta	242	Pitesti	100
Eforie	161	Rimnicu Vilcea	193
Fagaras	176	Sibiu	253
Gurgui	77	Timisoara	329
Hirsova	151	Urziceni	80
Iasi	226	Vaslui	199
Lugoj	244	Zerind	374

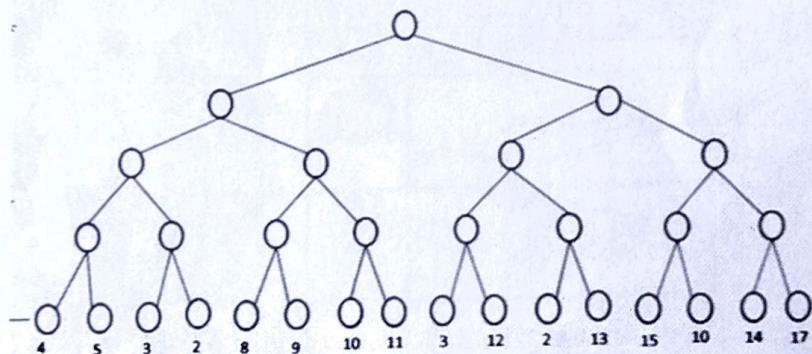
Briefly describe the graph with A* strategy and show which node (in the figure above) will be expanded next in each case, when starting from node Arad. Conclude your opinion about the performance of these search strategies.

4. (a) What are zero sum games? Explain the process of minimax algorithm. 04

02+06=08

- (b) What do you mean by evaluation function?

Define pruning. How does pruning improve the situation in game playing? Explain the given expanded tree with alpha-beta pruning .



- (d) Define forward and backward reasoning chaining. What are the factors that determine whether it is better to reason forward or backward? 03

5. (a) Write the difference between Universal Quantifiers and Existential Quantifier with example. 03

- (b) What is knowledge representation? How can you represent knowledge base using propositional logic? 03



06

(C) Consider the following sentences:

- 1) The-humidity-is-high or the-sky-is-cloudy
- 2) If the-sky-is-cloudy then it-will-rain
- 3) If the-humidity-is-high then it-is-hot
- 4) it-is-not-hot

Now answer the following questions:

- i) First, translate the above sentences into **First Order logic** sentences.
- ii) Convert to Clause forms.

Apply the **resolution method** with the unification to prove the goal sentence: "it-will-rain".

(d) Compare among propositional, first-order, and fuzzy logic.

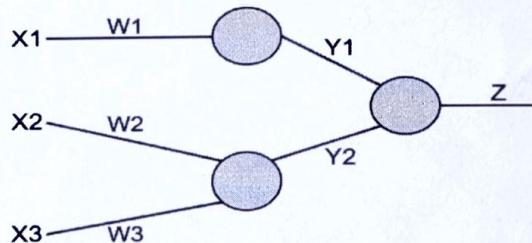
03

6. (a) What do mean by neuron of human brain. Describe the mathematical model of a neuron.

05

(b) Review the following neural network and compute Z:

06



Where $X_1=17$, $X_2=7$, $X_3=12$, $W_1=0.6$, $W_2=0.3$, $W_3=0.1$, weight for $Y_1=0.6$, Weight for $Y_2=0.45$

- i) Compute the value of Z without a transfer function.
- ii) Compare the value of Z with a threshold function. If the value is 5 or less, call it 0, otherwise, call it 1.
- iii) Compute the value of Z with the sigmoid transfer function used at all the neurons.

(c) What do you mean by learning? Describe about reinforcement learning, supervised learning and unsupervised learning with proper example.

04



Kannur University
Department of Computer Science and Engineering
Final Examination, 2023

Course Code: CSE-3206 Course Title: Artificial Intelligence Lab

Total marks: 50 Time: 3 hours

[Answer all the questions from Group A and solve the problems from Group B. Figures in the right hand margin indicate full marks.]

C Set

Group A - Quiz (20 Marks)

1. Which of the following is a valid Prolog fact? (a) likes(mary, pizza). (b) likes mary pizza. (c) likes(mary pizza) (d) likes-mary-pizza.	2. In Prolog, what does a fact end with? (a), (b). (c); (d):
3. In Prolog, a rule is written using which symbol? (a) = (b) :- (c) :- (d) <:-	4. In a Bayesian network, what does an edge between two variables represent? A. A deterministic rule B. A logical implication C. A probabilistic dependency D. A causal outcome
5. What is the role of a "language model" in NLP? A. To convert text into numerical vectors B. To predict the probability of a word sequence C. To generate decision trees D. To classify sentiments only	6. What is the "bias-variance tradeoff" in ML referring to? A. The balance between model size and training data B. The tradeoff between prediction speed and accuracy C. The balance between error due to assumptions (bias) and error due to sensitivity to data (variance) D. The conflict between interpretability and performance
7. Which of the following is an advantage of alpha-beta pruning in game trees? A. It reduces the branching factor B. It increases the accuracy of the utility function C. It reduces the number of nodes evaluated D. It avoids using the minimax strategy	8. What is the purpose of the perceptron learning rule in neural networks? A. To minimize overfitting B. To adjust weights based on the output error C. To cluster input data D. To encode symbolic rules
9. In a fully observable, deterministic, single-agent environment, which search strategy is guaranteed to find the optimal solution if the cost of each action is the same? A. Depth-First Search B. Breadth-First Search C. Greedy Best-First Search D. Hill Climbing	10. In A search, which of the following heuristics ensures optimality? A. A heuristic that always overestimates the cost to the goal B. A heuristic that underestimates the cost to the goal C. A random heuristic D. A heuristic with no consistency



11. Which algorithm is most commonly used to train a deep neural network?

- A. Breadth-First Search
- B. Backpropagation with Gradient Descent
- C. Expectation Maximization
- D. Genetic Algorithm

12. In supervised learning, the primary objective is to:

- A. Discover hidden patterns in unlabeled data
- B. Predict output values given input features using labeled examples
- C. Learn from feedback through rewards and penalties
- D. Minimize unsupervised loss functions

13. In the Minimax algorithm used in game playing, what assumption is made about the opponent?

- A. They choose moves randomly
- B. They always choose the worst possible move
- C. They act optimally to minimize your utility
- D. They play passively

14. What distinguishes a rational agent from other types of agents?

- A. It always reaches the goal state.
- B. It behaves randomly to explore more.
- C. It maximizes its expected performance measure.
- D. It has perfect knowledge of the environment.

15. Which agent architecture is best suited for environments that require learning from experience and adapting behavior?

- A. Simple reflex agent
- B. Model-based agent
- C. Goal-based agent
- D. Learning agent

16. What does the underscore _ represent in Prolog?

- (a) A comment
- (b) A separator
- (c) An anonymous variable
- (d) A constant

17. In Prolog, what will happen if no matching facts or rules are found for a query?

- (a) Prolog will display an error
- (b) Prolog will return false
- (c) Prolog will restart
- (d) Prolog will crash

18. In Prolog, variables must begin with:

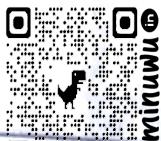
- (a) A lowercase letter
- (b) A number
- (c) An uppercase letter or underscore _
- (d) A special character

19. What does Prolog stand for?

- (a) Programming Logic
- (b) Programming Language
- (c) Professional Logic
- (d) Process Logic

20. In NLP, what is "tokenization"?

- A. Converting sentences into grammar trees
- B. Assigning parts of speech to words
- C. Breaking text into smaller units like words or sub-words
- D. Removing stop words from text



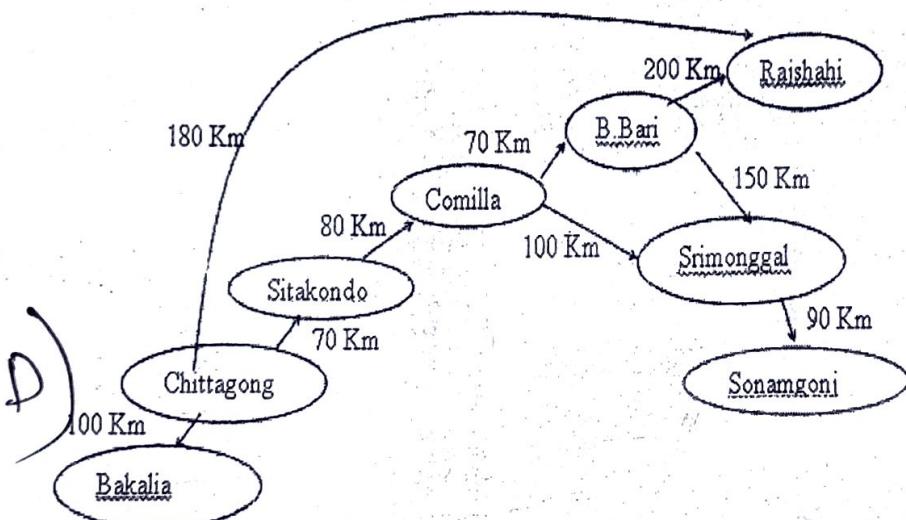
Group B - (30 Marks)

Sl		Marks
1.	<p>Consider the following database information and rules: <u>Database:</u></p> <p>male(hasan) male(omar) male(alii) male(usman) female(rahima) female(jannat) female(habiba) female(fatema) mother(hasan, fatema) father(hasan, ali) father(rahima, omar) father(jannat, ali) father(habiba, hasan)</p> <p><u>Rules:</u></p> <ul style="list-style-type: none">(i) The parent of X is Y if Y is mother of X(ii) The parent of X is Y if Y is father of X(iii) The brother of X is Y if Y is a male and the parent of X is P and the parent of Y is P and X and Y are not the same.(iv) The sister of X is Y if Y is female and the parent of X is P and the parent of Y is P and X and Y are not the same(v) The uncle of X is U if the mother of X is P and the brother of P is U(vi) The uncle of X is U if the father of X is P and the brother of P is U(vii) The grandfather of X is G if the father of P is G and the mother of X is P.(viii) The grandfather of X is G if the father of X is P the father of P is G <p>Implement a Prolog program for the above rules and database and answer the following queries by formulating appropriate goals.</p> <ul style="list-style-type: none">(a) Is hasan usman's brother?(b) Who is habiba's grandfather?(c) Who is jannat's sister?(d) What is the relationship (if any) between habiba and rahima?	10

2. Write a Prolog program using the information from the following directed graph that can be used to investigate the following questions:

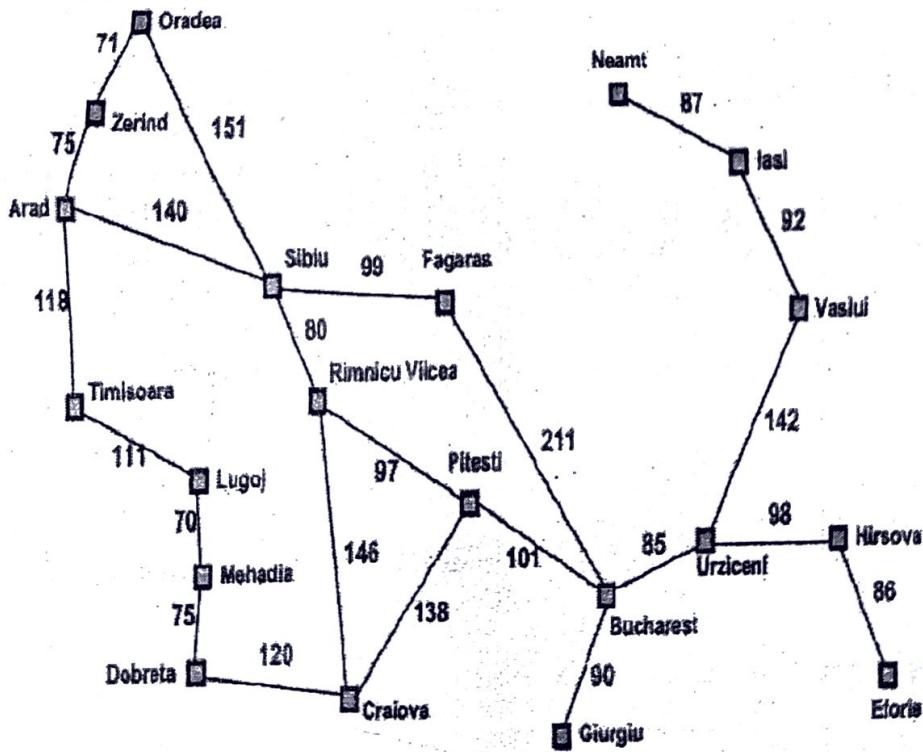
- Is there a direct road from one particular town to another?
- What is the distance between two given town?

10



3. Apply A* Search Algorithm on the following figure to find the path from Arad to Bucharest.

10





Rangamati Science and Technology University
Department of Computer Science and Engineering
3rd Year 2nd Semester B.Sc. (Engg.) Final Exam-2022
Course Code: CSE-3207; **Session:** 2019-2020
Course Title: System Analysis and Design

Time: 3 Hours

Marks: 60

- NB: 1. Answer any **FOUR (4)** questions out of **SIX (6)** questions.
2. Figures in the right margin indicate marks($15 \times 4 = 60$).
3. All parts of a question must be answered serially.

1. (a) What do you understand by System? What are the elements of System? Define each of them. 5
- (b) "Cooperative Bank Ltd." has automated banking management system and human resource management system. Every employee has their unique user ID and password to access information systems. This bank offers online customer bank account opening process. A customer can apply for open a bank account via web-based interface from anywhere of the world by submit required documents. After verification of personal details and other system uses National ID card or TIN certificate and any recent utility bill for address verification. Customer will receive unique user id and OTP for active his/her account. To activate his/her account customer have to deposit minimum 500 taka. After activating account customer can apply for ATM card or cheque book. Then customer can withdraw money from bank of ATM booth. Every deposit and withdrawn transaction are recorded in a file and the customer can collect specific date wise bank statement from the bank. 5

Now, draw a DFD to withdraw money from bank using either ATM card or Cheque.

- (c) What categories of information are relevant to decision making in business? Relate each category to the managerial level and an information system. 5
2. (a) Briefly describe all the phases of the system's development life cycle (SDLC). 5
- (b) When does an analyst terminate a project? How does it tie in with postimplementation? Explain. 4
- (c) List some of the problems with the traditional waterfall model of SDLC. 2
- (d) What are the differences between open ended questionnaires and close ended questionnaires regarding information tool? 4
3. (a) Describe three technical skills and three interpersonal skills that would be very important to have on any project. 3
- (b) Pretend that your instructor has asked you and two friends to create a Web page to describe the course to potential students and provide current class information (e.g., syllabus, assignments, readings) to current students. You have been assigned the role of leader, so you will need to coordinate your activities and those of your classmates until the project is completed. Describe how you would apply the project management techniques that you have learned in this situation. Include descriptions of how you would create a work plan, staff the project, and coordinate all activities—yours and those of your classmates. 4

(c) In 1997, Oxford Health Plans had a computer problem that caused the company to overestimate revenue and underestimate medical costs. Problems were caused by the migration of its claims processing system from the Pick operating system to a UNIX-based system that uses Oracle database software and hardware from Pyramid Technology. As a result, Oxford's stock price plummeted, and fixing the system became the number-one priority for the company. Pretend that you have been placed in charge of managing the repair of the claims processing system. Obviously, the project team will not be in good spirits. How will you motivate team members to meet the project's objectives?

(d) A system development project may be approached in one of two ways: as a single, monolithic project in which all requirements are considered at once or as a series of smaller projects focusing on smaller sets of requirements. Which approach seems to be more successful? Why do you suppose that this is true?

4. (a) What traditional information-gathering tools are available for the analyst? 3

(b) What basic rules are relevant to constructing a DFD? 2

(c) The systems analyst of a radio assembly plant contacts the manager of the production department. She briefs him on the survey she is taking and asks the manager to help her get answers to some questions. The manager is cordial, and he invites her to come over. The following interview takes place.

Analyst: What is the main function of your department?

Manager: We assemble radios from components and ship them to order.

Analyst: How many people work here?

Manager: Why do you want to know?

Analyst: It could be that you have too many people on your payroll.

Manager: Maybe I should be the judge of that.

Analyst: [ignores answer]. What's that girl doing in the room across the hall? She hasn't done a thing since I walked in here.

Manager: She verifies shipping orders. It could be that she is waiting for more orders from purchasing.

Analyst: Why do you need to check these orders when they have already been cleared for production?

Manager: We've had occasions when the units ordered belong to more than one person or to another address.

Analyst: I want to talk to her.

The manager reluctantly agrees. The manager walks with the analyst to the clerk's desk. She is idle. He introduces the analyst to her.

Analyst: What work do you do, Miss Meyer?

Meyer: I verify the goods against shipping orders.

Analyst: How do you know that the shipping orders are correct?

Meyer: I guess I don't, but I verify the type, number of units ordered, and shipping address

against the units produced before they are loaded on the truck.

Analyst: Aren't you wasting your time doing this?

Meyer: You'll have to ask Mr. Kehoe (the manager) that.

The manager, standing by, begins to get irritated. The analyst now talks to the manager while in Meyer's area.

Analyst: That's all I wanted to find out from this area. What are those other girls doing there?

Manager: They're preparing bills of lading, taping the firm's logo on the cartons, and making sure that the bill accompanies each order.

Analyst: I'd like to walk over there and talk with one of them. It won't take a minute.

Manager: They're pretty busy right now. Jane over on the right is breaking in a new girl we just hired. If you are after the procedure, we have it all documented. I'd be glad to give you a copy in my office.

Analyst: I'm not sure how up to date your documentation is. I'd rather hear it from them.

The manager leads the analyst to the west corner of the warehouse where four girls are typing. He introduces the analyst to the senior clerk.

Analyst: How many bills of lading does your average typist prepare per day?

Senior clerk: Around 60; maybe 70.

Analyst: You have five typists here, including yourself and your total output yesterday was only 200. What happened?

Senior clerk: First, as you can see, we're training a new person here. The girls also file, call customers to tell them that the order is on its way, and the like. We stay busy.

Analyst: This is fine, but what else do they do?

Senior clerk: Well, we take the bills of lading to the drivers at the dock and have them sign for the shipment.

Analyst: Don't you think that this running around is a waste of time?

Senior clerk: [no answer]

Now, answer the following questions :

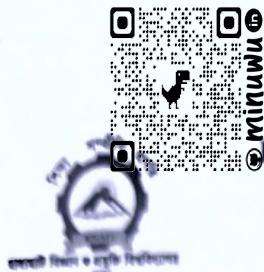
- i. How do you rate the interview? Explain.
- ii. What type of interview was conducted by the analyst?
- iii. What questions were open-ended? Closed?
- iv. Should the analyst have asked the questions in the same sequence to all respondents? why?
- v. Critique the analyst's questions in terms of their content, wording, and format.
- vi. If you were the analyst, illustrate how you would have conducted the interview.

5. (a) An international airline initiated a frequent traveler program designed to encourage passengers to fly regularly and earn awards based on miles flown. The airline policy is specified as follows:

Passengers who fly more than 100,000 miles per calendar year and, in addition, pay cash for tickets or have been flying with the airline regularly for more than five years are to receive a free round-trip ticket around the world. Passengers who fly less than 100,000 miles per calendar year and have been flying the airline regularly for more than five years also get a free round-trip ticket around the world.

Now, develop a decision table for passenger free ticket.

- b) In what perspective should the system analyst be a politician? What would be an example where political considerations are used in systems work? 3
- (c) If you were asked to observe a computer operator at work, what observation method would you select? Why? 3
6. (a) Explain three important user interface design principles. 5
- (b) Compare and contrast on-screen list boxes and drop-down list boxes. When would you use one versus the other? 3
- (c) A company wants to develop a mobile banking app. Customers are struggling to find key features such as money transfers and bill payments. How would you redesign the UI to improve usability and accessibility? 3
- (d) A company releases a new mobile app, but users report frequent crashes on certain devices. How would you approach debugging and resolving these issues through QA? 4



Rangamati Science and Technology University
Department of Computer Science and Engineering
3rd Year 2nd Semester B.Sc. (Engg.) Final Exam-2022
Course Code: Gen-3210; Session: 2019-2020
Course Title: Bangladesh Studies

Marks: 60

Time: 3 Hours

- NB: 1. Answer any FOUR(4) questions out of SIX(6)questions.
2. Figures in the right margin indicate marks($15 \times 4 = 60$).
3. All parts of a question must be answered serially.

- | | |
|---|-------------------|
| 1. a) What is the importance of studying Bangladesh studies in your discipline? | 4 |
| b) Narrate briefly about different ancient Janapadas and Their Present Location. | 7 |
| c) Why Shamsudin Ilyas Shah is Important in Bengal history? | 4 |
| 2. a) "The revolt of 1857 was not a mere sepoy Mutiny but a popular revolt" Explain it. | 5 |
| b) What are the causes of Bengal partition 1905 and why it has been annulled? | 5 |
| c) Define culture. What are the difference between culture and civilization? How would you explain cultural lag in your own society? | 5 |
| 3. a) What are the points of six-point programme why the six-point programme is called Bangla's charter of freedom? | 5 |
| b) Discuss the major economic challenges that Bangladesh faced soon after the independence. | 4 |
| c) What were the key challenges in reconstructing Bangladesh after independence? | 3 |
| d) Analyze how Bangladesh has emerged as a sovereign state post-1971. | 3 |
| 4. a) What are the key geophysical features of Bangladesh, and why are they important? | 4 |
| b) Discuss the functions of the 'House of people' or Parliament. | 4 |
| c) What do you mean by politicization of bureaucracy and what is their consequence? | 7 |
| 5. a) Define foreign policy. What are the determinants of Bangladesh foreign Policy? | 5 |
| b) Briefly discuss the contemporary challenges of Bangladesh foreign policy.
How can we overcome these challenges to enhance national interest and development? | 6 |
| c) How agriculture sector contribute in the national economy of Bangladesh? | 4 |
| 6. a) Compare the educational policies of primitive and present-day Bangladesh. Highlight challenges and achievements. | 4 |
| b) What is meant by juvenile delinquency? Do you think the advancement in science and technology has any connection with the increase in juvenile delinquency? Explain. | 5 |
| c) Write short note on any three (3) of the following; | 6 |
| (i) Lahore Resolution | (ii) SAARC |
| (iii) Ethnic community in CHT | (iv) Ahsan Manzil |