

Instructions:

- Students have to write the complete executable queries for the given tables.
- When writing a query, write the query in a way that it would work over all possible database instances and not just for the given example instance .
- ER/Schema diagram (5 marks), Queries (15 marks)
- Late submissions are not considered and will be awarded 0.
- Copied or downloaded instances from the internet will be awarded with zero Marks.

1. Considering the following Schema and example instance storing information, write an ER/Schema diagram.

Player ID	Player	Country	DOB	Role	No. of matches played
1	Virat Kohli	India	1/1/1989	Batsman	25
2	A B de Villiers	South Africa	2/2/1984	Batsman	35
3	Chris Morris	South Africa	3/3/1985	Batsman	10
4	Yuzvendra Chahal	India	4/4/1986	Bowler	11
5	Shivam Dube	India	5/5/1987	Bowler	11
6	Aaron Finch	Australia	6/6/1989	Bowler	12
7	Umesh Yadav	India	19/4/1989	Batsman-Bowler	10
8	Kane Richardson	India	12/5/1994	Wicket Keeper	14
9	Sunder	India	24/6/1996	Wicket Keeper	15

Batsmen:			Bowler and WK:		
ID	Batting_style	Runs_scored	ID	Bowling_style	Wickets taken
1	Right handed	380	4	Right arm	5
2	Right handed	450	5	Left arm	1
3	Left handed	90	6	Right arm	0
			7	Left arm	4
			8	Right arm	2
			9	Right arm	0

1. Write a query to add a column boundaries in the batsmen table, Set the default value of boundaries column as 0.
2. Update the boundaries column for the least run scored batsman as 1 boundary for 10 runs each. eg: if the runs are 20, then boundary is 2.
3. Create a column Age in the player table to calculate the age of each player based on their DOB.
4. List the name and age of all bowlers who are above 28 or more in age

5. Write a query to display Name, Nationality and bowling type of players who are Indian and Right armed bowlers but not both.
6. List the details of all Right handed batsmen who are above the age of 30 as on 31/03/2022.
7. Calculate the average runs scored up to 3 decimal places by batsmen. Add a column in the Batsmen table to store the difference between runs scored and average runs.
8. Retrieve the details of the bowlers and WK whose wickets taken is less than the average wickets.
9. Retrieve the details of the players who have played atleast 10 matches and also have letter 'a' in their name.
10. Count the number of Indian players whose age is 30-35 and also bowlers.
11. Write a query for the second highest wicket taker.

2. Considering the following Schema and example instance storing information, write an ER/Schema diagram.

EmpID	EmpFname	EmpLname	Department	Project	Address	DOB	Gender
1	Sanjay	Mehra	HR	P1	Hyderabad (HYD)	01/12/1976	M
2	Ananya	Mishra	Admin	P2	Delhi(DEL)	02/05/1968	F
3	Rohan	Diwan	Account	P3	Mumbai(BOM)	01/01/1980	M
4	Sonia	Kulkarni	HR	P1	Hyderabad (HYD)	02/05/1992	F
5	Ankit	Kapoor	Admin	P2	Delhi(DEL)	03/07/1994	M

EmpID	EmpPosition	DateOfJoining	Salary
1	Manager	01/05/2022	500000
2	Executive	02/05/2022	75000
3	Manager	01/05/2022	90000
4	Lead	02/05/2022	85000
5	Executive	01/05/2022	300000

1. Write a query to find all the employees whose salary is between 50000 to 100000.
2. Write a query to find the names of employees that begin with 'S'
3. Write a query to retrieve the EmpFname and EmpLname in a single column as "FullName". The first name and the last name must be separated with space.
4. Write a query to retrieve the details of employees who are above 25 years and male.
5. Write a SQL query to count the number of characters except for spaces for each employees full name and store it in new column "Name_Length"

Max. Marks: 45

Time: 3 hrs.

Note: 1. Answer all the following questions

2. Assume any missing data with the proper justification

Q1. (a) A bit stream 10011101 is transmitted using the standard CRC method. The generator polynomial is $x^3 + 1$. Show the actual bit string transmitted. Suppose the third bit from the left is inverted during transmission. Show that this error is detected at the receiver's end.

(b) A channel has a bit rate of 4 kbps and a propagation delay of 20 msec. For what range of frame sizes does stop-and-wait give an efficiency of at least 50 percent?

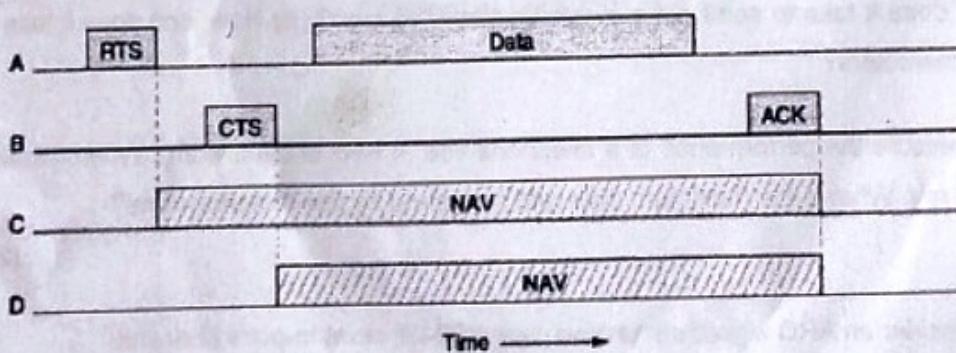
[3 + 2 Marks]

Q2. (a) Frames of 1000 bits are sent over a 1-Mbps channel using a geostationary satellite whose propagation time from the earth is 270 msec. Acknowledgments are always piggybacked onto data frames. The headers are very short. Three-bit sequence numbers are used. What is the maximum achievable channel utilization for (i) Stop-and-wait, (ii) Go-back N, and (iii) Selective repeat?

(b) Collection of five routers is to be connected in a point-to-point subnet. Between each pair of routers, the designers may put a high-speed line, a medium-speed line, a low-speed line, or no line. If it takes 100 ms of computer time to generate and inspect each topology, how long will it take to inspect all of them?

[3 + 2 Marks]

Q3. (a) In the below figure, four stations, A, B, C, and D, are shown. Which of the last two stations do you think is closest to A and why?



(b) Consider building a CSMA/CD network running at 1 Gbps over a 1 km cable with no repeaters. The signal speed in the cable is 200,000 km/sec. What is the minimum frame size?

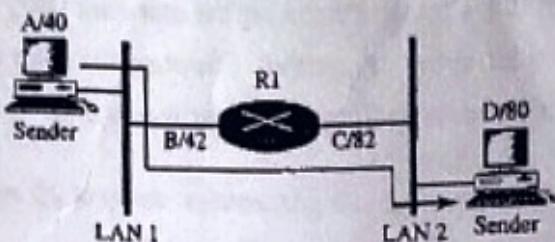
[3 + 2 Marks]

Page 1 of 3

4. (a) Measurements of a slotted ALOHA channel with an infinite number of users show that 10 percent of the slots are idle.

- (i) What is the channel load, G ?
- (ii) What is the throughput?
- (iii) Is the channel underloaded or overloaded?

(b) In the below-shown figure, computer A sends a message to computer D via LAN1, route R1, and LAN2. Show the contents of the packets and frames at the network and data link layer for each hop interface.



[3 + 2 Marks]

5. (a) A signal travels from point A to point B. At point A, the signal power is 100 W. At point B, the power is 90W. What is the attenuation in decibels?

(b) The attenuation of a signal is -10 dB. What is the final signal power if it was originally 5 W?

(c) A file contains 2 million bytes. How long does it take to download this file using a 56-Kbps channel? 1-Mbps channel?

[2 + 2 + 1 Marks]

6 (a) We have a baseband channel with a 1-MHz bandwidth. What is the rate for this channel if we use one of the following line coding schemes?

- (i) NRZ-L
- (ii) Manchester
- (iii) MLT-3
- (iv) 2B1Q

(b) A device is sending out data at the rate of 1000 bps. (i) How long does it take to send out 10 bits? (ii) How long does it take to send out a single character (8 bits)? (iii) How long does it take to send a file of 100,000 characters?

(c) We measure the performance of a telephone line (4 KHz of bandwidth). When the signal is 10 V, the noise is 5 mV. What is the maximum data rate supported by this telephone line?

[2 + 2 + 1 Marks]

7. (a) Consider an ARQ algorithm running over a 20-km point-to-point fiber link.

- (i) Compute the propagation delay for this link, assuming that the speed of light is 2×10^8 m/s in the fiber.
- (ii) Suggest a suitable timeout value for the ARQ algorithm to use.

(iii) Why might it still be possible for the ARQ algorithm to time out and retransmit a frame, given this timeout value?

(b) Calculate the baud rate for the given bit rate and type of modulation.

- (i) 2000 bps, FSK (ii) 4000 bps, ASK (iii) 6000 bps, QPSK (iv) 36,000 bps, 64-QAM

[3 + 2 Marks]

8. (a) A system uses the Stop-and-Wait Protocol. If each packet carries 1000 bits of data, how long does it take to send 1 million bits of data if the distance between the sender and receiver is 5000 Km and the propagation speed is 2×10^8 m? Ignore transmission, waiting, and processing delays. We assure no data or control frame is lost or damaged.

(b) Which of the following CRC generators guarantees the detection of a single-bit error?

- (a) $x^3 + x + 1$ (b) $x^4 + x^2$ (c) 1 (d) $x^2 + 1$

[3 + 2 Marks]

9. Suppose a 100-Mbps point-to-point link is being set up between Earth and a new lunar colony. The distance from the moon to Earth is approximately 385,000 km, and data travel over the link at the speed of light - 3×10^8 m/s.

(i) Calculate the minimum RTT for the link.

(ii) Using the RTT as the delay, calculate the delay \times bandwidth product for the link.

(iii) What is the significance of the delay \times bandwidth product computed in (ii)?

(iv) A camera on the lunar base takes pictures of Earth and saves them in digital format to disk. Suppose Mission Control on Earth wishes to download the most current image, which is 25 MB. What is the minimum amount of time that will elapse between when the request for the data goes out, and the transfer is finished?

[5 Marks]

**** Best of Luck ****



DEPARTMENT OF COMPUTER SCIENCE &
ENGINEERING

NITK, Surathkal

Design and Analysis of Algorithms (Code: CS253)

June 03, 2023
IV Semester B.Tech CSE

Registration No.

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Time: 180 minutes.

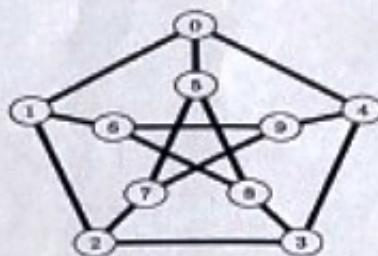
End Semester Exam

Maximum Marks: 80

Note:- Answer all the questions. Missing data may be suitably assumed, provided the assumption does not change the difficulty of the problem.

1. Explain the quick sort algorithm with an example. Also derive its best, worst and average case analysis. [12]
2. Suppose you have an unsorted array A of all integers in the range 0 to n except for one integer, denoted the missing number. Assume $n = 2^k - 1$. Design a $O(n)$ Divide and Conquer algorithm to find the missing number. Argue that your algorithm is correct and analyze its running time. [12]
3. Given n files of length m_1, m_2, \dots, m_n , the optimal Tape storage problem is to find which order is the best to store them on the tape, assuming that
 - i) each retrieval starts with the tape rewound.
 - ii) Each retrieval takes time equal to the length of the preceding files in the tape plus the length of the retrieval file.
 - a) Describe a greedy algorithm for this problem.
 - b) What is the running time of your algorithm?
 - c) Prove your algorithm is correct.[12]
4. Construct a maximum length common subsequence from the completed C table and the original sequences $X = \langle A, B, C, B, D, A, B \rangle$ and $Y = \langle B, D, C, A, B, A \rangle$ [12]
5. Give a polynomial time reduction from CNF to 3-SAT problem. [12]
6. Give a polynomial time reduction from VERTEX COVER to SET COVER. Prove the correctness of your reduction. [10]
7. Assuming that Hamiltonian cycle problem is NP-Complete, prove that travelling salesman problem (TSP) is NP-Complete. Give a 2 - factor approximation algorithm with analysis for metric TSP. [12]
8. a. Solve the recurrence $T(n) = 2T(\sqrt{n}) + \log n$ and give tight bounds.

- ✓ Let A_1, A_2, A_3 , and A_4 be four matrices of dimensions $10 \times 5, 5 \times 20, 20 \times 10$, and 10×5 , respectively. The minimum number of scalar multiplications required to find the product $A_1A_2A_3A_4$ using the basic matrix multiplication method is
- c. In order to prove a problem X to be NP-hard one needs to develop a polynomial transformation from a known NP-hard problem Y to X, or the other way round?
- d. Does the following graph have a Hamiltonian cycle? If YES, output the cycle. If NO, output a longest cycle in the graph?



- e. Consider the definition of an approximation algorithm. Explain the meaning of approximation ratio in the case of a maximisation problem.

[Each question 02]

Max. Marks: 20

Note: Answer all the following questions

- Q1.** A. A system has an n-layer protocol hierarchy. Applications generate messages of length M bytes. At each of the layers, an h-byte header is added. What fraction of the network bandwidth is filled with headers?
- B. The following data fragment occurs in the middle of a data stream for which the byte-stuffing algorithm described in the text is used: A B ESC C ESC FLAG FLAG D. What is the output after stuffing?
- C. How many Hamming bits are required when using the Hamming code with the extended ASCII synchronous message **Help! ?**
- D. An upper-layer packet is split into 10 frames, each of which has an 80% chance of arriving undamaged. If no error control is done by the data link protocol, how many times must the message be sent on average to get the entire thing through?

[1 + 1 + 1 + 2 Marks]

- 2.** A. For each of the following four networks, how many ports are needed for each device?
- (i) Five devices arranged in a mesh topology
 - (ii) Five devices arranged in a star topology
 - (iii) Five devices arranged in a bus topology
 - (iv) Five devices arranged in a ring topology
- B. Compute the CRC-4 character for the following message using a "divisor" constant of 10011:
 1100 0110 1011 01
- C. For the given irreducible polynomial $g(X) = X^3 + X^2 + 1$ of systematic block code (7, 4), compute the generator matrix (G) and parity-check matrix (H) using $g(X)$ and $h(X)$ respectively.

[1 + 2 + 2 Marks]

- 3.** For a (6, 3) systematic linear block code, the codeword comprises $m_0m_1m_2p_0p_1p_2$, where the 3 parity check bits $p_0p_1p_2$, are formed from the information bits as follows:

$$p_0 = m_0 \oplus m_1, p_1 = m_0 \oplus m_2, \text{ and } p_2 = m_1 \oplus m_2$$

Find,

- (i) The parity check matrix (H)
- (ii) The generator matrix (G)

- (ii) All possible codewords
- (iv) Minimum distance
- (v) Error detecting & correcting capability of this code
- (vi) If the received sequence is 101000, calculate the syndrome and decode the received sequence

[2 + 2 + 2 + 1 + 1 + 2 Marks]

**** BEST OF LUCK ****

National Institute of Technology, Karnataka, Surathkal
End-Semester Examination

21/CS138

Sub: Operating Systems (co252)

Class: IV Sem. BTech CSE

Total Marks (Weightage): 40

Date: 08.06.2023

Instruction:

Answer all questions.

All questions carry equal marks

Assume necessary details

To the point answers are appreciated than the stories

- What are the normal problems that an unknown user faces while using a computing system that has no OS in it? Explain your answer in brief and not exceeding five points.
- What do you mean by buffering? Does it improve the performance of the system? Justify your answer with the proper example.
- What is the process? How is it created?
- What are the basic problems faced by the programmers in multicore systems? Consider the following set of processes with the length of the CPU burst given in milliseconds. The processes are assumed to have arrived in the order P1,P2,P3,P4,P5 all at time 0.

Processes	CPU Burst	Priority
P1	2	2
P2	1	1
P3	8	4
P4	4	2
P5	5	3

- Draw four Gantt charts that illustrate the execution of these processes using the scheduling algorithms: FCFS, SJF, Non pre-emptive priority (The larger number shows the higher priority) and RR (Quantum-2)
- What is the turn around time for each process for each of the scheduling algorithms mentioned in Part a
- Distinguish mutex locks and Semaphores from the points of views of implementation, advantages, Disadvantages.
- Consider the following snapshot of the system

	Allocation A B C D	Max A B C D
P0	3 0 1 4	5 1 1 7
P1	2 2 1 0	3 2 1 1
P2	3 1 2 1	3 3 2 1
P3	0 5 1 0	4 6 1 2
P4	4 2 1 2	6 3 2 5

Using the Banker's algorithm, determine whether or not each of the following states IS UNSAFE. If the state is safe, illustrate the order in which the processes can be completed. Otherwise illustrate the reason that why the state is unsafe.

- Available= (0,3,0,1)
- Available= (1,0,0,2)
- Give your understanding of address binding.
- What is the difference between segmentation and paging? Which one does solve the problem of fragmentation? Why and How?
- What are the steps that a typical OS takes while handling page faults?
- Explain SSTF and Scan disc scheduling algorithms with necessary examples and possibly with figures.

Reg No. 216CS136

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, NITK
END-SEMSTER EXAMINATION JUNE 2023

IV SEM B.TECH (CSE) – CS321M- MACHINE LEARNING

Max. Marks: 40
Time: 3 hrs

1. Explain SVM method in detail. Why do we use kernels in SVM? (10 marks)
2. Discuss DBSCAN algorithm. For the below set of data points, label the core, border and noise points and plot the clusters with minPts = 4 and epsilon (ϵ) = 1.5 (10 marks)

Points	P1	P2	P3	P4	P5	P6	P7
X	3	4	5	3	2	3	2
Y	7	6	5	3	6	5	4

3. Cluster the following points into 3 clusters using K-Means clustering algorithm. Assume B, E, H as initial centroids. (10 marks)

A	B	C	D	E	F	G	H
(2,5)	(2,10)	(8,4)	(7,5)	(5,8)	(6,4)	(4,9)	(1,2)

4. For the below data, please construct the decision tree using Gini Index based CART method. (10 marks)

CGPA	Career Passion	Money	Decision
High	Yes	Rich	IT job
High	No	Rich	Higher Studies
Medium	Yes	Rich	IT job
Low	Yes	Poor	IT job
Low	No	Rich	Entrepreneurship
Low	Yes	Poor	IT job
Medium	No	Poor	IT job
Medium	No	Rich	PSU Exam
Medium	Yes	Rich	IT job
High	No	Rich	Higher Studies



DEPARTMENT OF COMPUTER SCIENCE &
ENGINEERING

NITK, Surathkal

Design and Analysis of Algorithms (Code: CS253)

May 22, 2023

IV Semester B.Tech CSE

Registration No.

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Time: 60 minutes.

Class Test

Maximum Marks: 15

Note:- Answer all the questions. Missing data may be suitably assumed, provided the assumption does not change the difficulty of the problem.

1. Given two strings $x = x_1x_2x_3\dots x_n$ and $y = y_1y_2\dots y_m$, a longest common subsequence is the largest k such that there exist indices $i_1 < i_2 < \dots < i_k$ and $j_1 < j_2 < \dots < j_k$ with $x_{i_1}x_{i_2}\dots x_{i_k} = y_{j_1}y_{j_2}\dots y_{j_k}$. Obtain an $O(mn)$ algorithm to find the length of the longest common subsequence in the given two input strings. (Notice that we need a subsequence here and not a substring, that is, the indices do not have to be continuous.)

[08]

2. Explain Polynomial time reducibility.

[03]

3. Define Class P, Class NP, Class NPC and Class NP-Hard problems.

[04]



DEPARTMENT OF COMPUTER SCIENCE &
ENGINEERING
NITK, Surathkal

Design and Analysis of Algorithms (Code: CS253)

April 16, 2023
IV Semester B.Tech CSE

Registration No.

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Time: 90 minutes.

Mid Semester Exam

Maximum Marks: 40

Note:- Answer all the questions. Missing data may be suitably assumed, provided the assumption does not change the difficulty of the problem.

1. Solve the following recurrences. Assume that $T(n)$ is constant for sufficiently small n .

- $T(n) = 2T\left(\frac{n}{4}\right) + \sqrt{n}$
- $T(n) = 2T\left(\frac{n}{2}\right) + \frac{n}{\log n}$ (use recursive tree method)

[02+04]

2. Suppose you are choosing between the following three algorithms:

- Algorithm A solves problems by dividing them into five subproblems of half the size, recursively solving each subproblem, and then combining the solutions in linear time.
 - Algorithm B solves problems of size n by recursively solving two subproblems of size $n - 1$ and then combining the solutions in constant time.
 - Algorithm C solves problems of size n by dividing them into nine subproblems of size $n/3$, recursively solving each subproblem, and then combining the solutions in $O(n^2)$ time.
- What are the running times of each of these algorithms (in big-O notation), and which would you choose?

[07]

3. Show that less than $\frac{3n}{2}$ comparisons are necessary in the worst case to find both the maximum and minimum of n numbers.

[05]

4. In the algorithm SELECT(the k^{th} smallest in a set whose worst case linear time), the input elements are divided into groups of 5.

Will the algorithm work in linear time, if they are divided into groups of 7? How about groups of 3? Analyze the running time of this algorithm?

[06]

5. Suppose you have k sorted arrays, each with n elements, and you want to combine them into a single sorted array of kn elements.

i) Here's one strategy: Using the merge procedure, merge the first two arrays, then merge in the third, then merge in the fourth, and so on. What is the time complexity of this algorithm, in terms of k and n ?

ii) Give a more efficient solution to this problem, using divide-and-conquer.

[08]

6. While walking on the beach one day you find a treasure trove. Inside there are n treasures with weights w_1, w_2, \dots, w_n and cost c_1, c_2, \dots, c_n . Unfortunately you have a bag that only holds a total weight M . Fortunately there is a knife handy so that you can cut treasures if necessary.
- Describe a $\theta(n \log n)$ time greedy algorithm to solve this problem
 - Prove the correctness of your algorithm.

[08]

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, NITK
MID-SEMSTER EXAMINATION APRIL 2023**

IV SEM B.TECH (CSE) – CS321M- MACHINE LEARNING

Max. Marks: 40
Time: 1.5 hrs

1. The age and height of 9 persons are given in the below table. Develop a regression model (linear regression). Show all the steps and calculations. (10 marks).

Age : 10 11 12 13 14 15 16 17 18
Height (in cms) : 137 142 147 152 161 169 174 174 175

2. How regularization techniques helps in avoinding overfitting ? Explain your answer with L1 and L2 regularization techniques (10 marks).
3. Derive the parameter updation formula for logistic regression (with gradient descent) (10 marks).
4. Consider the following training data consisting of four examples with three features, where each training example belongs to one of two classes (0 or 1). Suppose we use a k nearest neighbor classifier with k=1. What is the predicted class for the test data point (-3, 88, 16) ? (10 marks).

Feature 1	Feature 2	Feature 3	Class
-9	100	18	0
-1	85	11	0
-6	120	16	1
-4	95	19	1

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National Institute of Technology, Karnataka, Surathkal
Mid-Semester Examination

Sub: Operating Systems (co252)

Class: IV Sem. BTech CSE

Total Marks (Weightage): 20

Date: 13.04.2023

Instruction:

Answer all questions.

Questions 1 to 10 carry one mark each

Questions 11 to 15 carry 2 marks each.

Assume necessary details

To the point answers are appreciated than the stories

1. Arrange the following memory units in the increasing order of their nearness to the CPU
RAM, ROM, Pen drive, Programme counter, Acccumulator, paper tape, Cache, Solid state Hard disc, Magnetic Hard Disc.
2. What is the bootstrap programme? Normally, where does it stay?
3. Arrange the following activities into the sequence of their occurrence, beginning from the first one.
 - a. Occurrence of an event
 - b. Execution of a process
 - c. Execution of an ISR
 - d. Interrupt request signal to the CPU
 - e. Searching through the interrupt vector.
4. What is the problem of cache coherency in multiprogramming / multiprocessing environment?
5. Which high / machine level language/s do you prefer to write system calls? And why?
6. What are the differences between uniprocessing and uniprogramming systems? Give examples
7. What is your understanding of multitasking and time sharing systems? Are they same?
8. What is the technique that the operating system uses to protect itself from the errant users?
9. Which of the following is/are not the task/s of the Operating System as the process manager?
 - ➔ Scheduling processes or threads on a CPU by multiplexing
 - ➔ Creating and destroying both user and system processes
 - ➔ Compiling the programme into object code for putting it into the process
 - ➔ Providing mechanisms for process communication
 - ➔ Creating orphan and zombie processes
 - ➔ Suspending and resuming the processes
10. Which of the following is/are the file manipulation system call/s?
Open(), fork(), alarm(), read(), chmod(), write(), getpid(), close().
11. What is the CPU time (in percentage) used for the task of scheduling if the time quantum of multitasking is 100 ms and the scheduling activity by the CPU takes 10 ms.
12. Do you agree with the statement "Context switching time is highly dependent on the Hardware support" why?
13. What is the task of medium term scheduler? Explain the concept with the neat diagram and the proper context.
14. Which of the following system architectures is / are good for multithreading? Justify your answer
 - ➔ Uniprocessing systems
 - ➔ Multitasking with time sharing systems
 - ➔ Multiprocessing systems
 - ➔ Multiprogramming systems
 - ➔ Multicore systems
 - ➔ Batch processing systems
15. What do you mean by 'Implicit threading'? Is this a necessity of the day? Why?

**DEPARTMENT OF COMPUTER ENGINEERING
IV SEMESTER B.TECH. MID SEMESTER EXAMINATION 2023**

TIME : 90 MINUTES

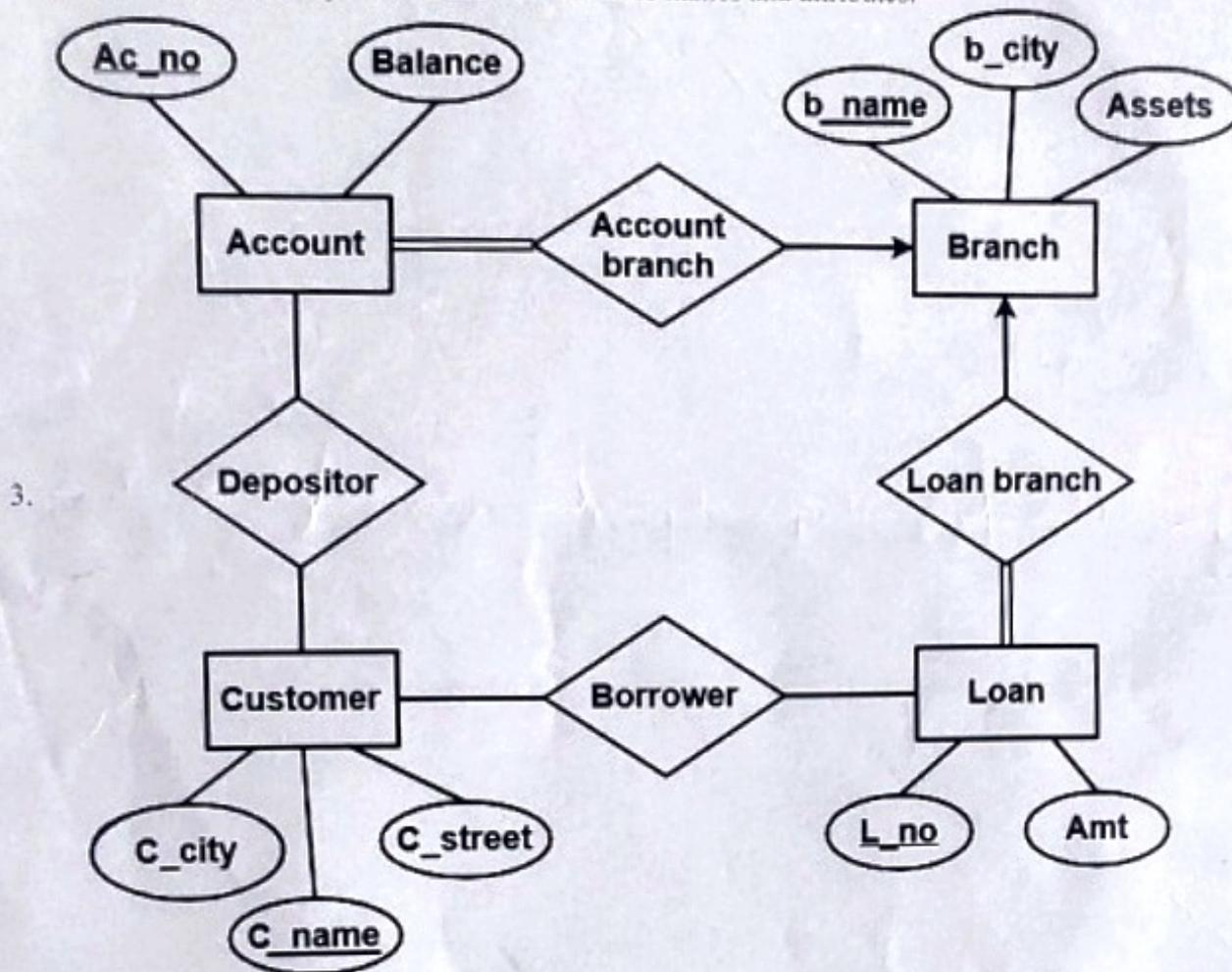
CS251 DATABASE SYSTEMS

MAX. MARKS : 20

Note: Assume missing data(if any) appropriately and mention the same in the answer.

1. What is the need for Primary key and Foreign-key? Justify the use of Primary key and Foreign-key with proper examples explaining its advantages and disadvantages. 05
2. Explain all the components of a DBMS with a neat diagram. 05

How many (minimum number) tables are required to represent the following ER diagram in relational model? Give detailed justifications with the table names and attributes. 05



- a) Create a SQL query to retrieve the first three characters from each string in the "Names" column of the "Employees" table. 'Initials' is the name of a new column where the result should be kept. 1.5
- b) In a database containing information about books and their authors, there are three tables: 'Books', 'Authors', and 'Genres'. Write an SQL query to return the names of all authors who have written at least one book in each genre, and the total number of books they have written. 02
- c) Write a SQL query to retrieve the names of all employees who earn at least 75% of the salary of their immediate manager, given a table called "Employees". 1.5

*** End of the question paper ***