Faculty of Engineering and Technology
Khwaja Moinuddin Chishti Language University, Lucknow
Mid Semester Examination: Decmeber-2021

Paper Name: Microprocessor **Code:EC501**
Branch Name: CSE **Semester:V**
Max. Max.: 30 (6 X 5) **Max. Time: 1:30 Hours**

Note: Each question carries five marks
Out of eight questions, attempt any six

1. Draw the Pin diagram of 8085 μp and explain in brief.
2. Indicate machine cycles and T-states required for execution of MVI, 8 bit data.
3. Give the format of flag register in 8085. Explain each flag.
4. Explain how the multiplexed data/address bus is shared for data and address.
5. Find the status of all flags and result stored.
   MVI A,40H
   MVI B,DFH
   MOV C,B
   ADD B
   ADC C
   HLT
6. Explain the operation performed by 8085 for the execution of SBB C instruction.
7. Explain the following data transfer instructions-
   MOV R_d,M
   MOV M,R_S
8. Find the status of all flags and result stored-
   MVI A,30H
   MVI B, 25H
   SUB B
   HLT

Roll No.									

Khwaja Moinuddin Chishti Langauge University
(Faculty of Engineering & Technology)
B. Tech. (Semester - V) Branch: Computer Science & Engineering
Mid Semester Test Dec, 2021

Subject: Software Engineering (CS 504)
Maximum Time: 90 Minutes **Maximum Marks: 30**

Attempt any six questions. (6 x 5 = 30)

1. Differentiate between Software Engineering and Computer Science
2. Explain the phases of Software Development Life Cycle (SDLC).
3. What do you mean by prototype? Under what conditions prototying model id preferred over other models.
4. What is the role of risk management activity in Spiral model
5. What do you understand by ER - diagram?. What are graphical notations of ER – diagram? Show in a example.
6. What is the difference between Functional and Non - Functional requirements?
7. Why is Software Requirement Specification (SRS) important?
8. What do you understand by Data Flow Diagram (DFD)? Explain with example.

.....xxxxxxxxx.....

Roll No.									

Khwaja Moinuddin Chishti Language University
Faculty of Engineering and Technology
Semester-V/ Department- Computer Science and Engineering
Mid-Semester Test-2021
Subject: Industrial Management (AS-501)

Time: 90 mins **MM : 30 (6*5)**

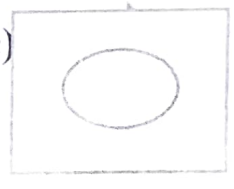
Attempt **SIX** out of **EIGHT** Questions:

a) What is the Nature and Scope of Industrial Management?
b) Give the Applications of Industrial Management
c) Define Productivity and its Importance
d) Differentiate between Productivity and Production
e) Why is Single Stationed Automated Cell is preferred?
f) What is Ownership? Explain the different types of Industrial **Ownership** with examples?
g) What do you understand by the term Management? Give one definition of Management and Explain the 14 Principles of Fayol.
h) What is Work Study? What are the aims and advantages of Work Study? How is Work Study Different from Method Study? Explain the following symbols.

a)

b)

c)



Faculty of Engineering and Technology

Khwaja Moinuddin Chishti Language University, Lucknow

Mid Sem Exam: Dec-2020- 21

Paper Name: JAVA Programming **Code: CS502**

Branch Name: CSE **Semester: V**

[Total Max.: 30 (6 X 5)] **[Max. Time: 1:30 Hours]**

Note: Each question carries five marks

Out of eight questions, attempt any six

9) What is JAVA Programming Language and Explain the history of JAVA?
10) Explain its
    f) Variable.
    g) Constant.
    h) Keyword.
    i) Operator.
    j) Object.
11) What is Array & Explain Type of Array?
12) What is different between JAVA and C Programming Language?
13) What are properties of JAVA?
14) Write Packages in JAVA and How to Creating Packages?
15) Explain the Interfaces in Java and How to Implementing Interfaces?
16) Explain its
    f) Recursion.
    g) Method.
    h) Constructor.
    i) Class.
    j) Control Statements.

Note: Please Focus on Presentation , Proper Definition, Example.

Wish You all the best

Faculty of Engineering and Technology
Khwaja Moinuddin Chishti Language University, Lucknow
Mid Sem Exam: Dec-2020- 21

Paper Name: DESIGN & ANALYSIS OF ALGORITHM **Code: CS501**
Branch Name: CSE **Semester: V**
[Total Max.: 30 (6 X 5)] **[Max. Time: 1:30 Hours]**

Note: Each question carries five marks
Out of eight questions, attempt any six

1) Define Algorithms with its characteristics & Properties?
2) Explain Merge sort and Quick sort with example?
3) Explain Asymptotic Notation?
4) What are Shell sort and Heap sort explain with example?
5) What is Minimum Spanning Tree with example?
6) What is TRAVELING SALESMAN PROBLEM with example?
7) Write the Kruskal's Algorithm with example OR Prim's Algorithm with example?
8) Explain Single-Source Shortest Paths with example?

Note: Please Focus on Presentation, Proper Definition,Algorithms Example.
Wish You all the best

Faculty of Engineering and Technology
Khwaja Moinuddin Chishti Language University, Lucknow
Mid Semester Examination: Decmeber-2021

Paper Name: Theory of Automata & Formal Language **Code:** CS503
Branch Name: CSE **Semester:** Vth
Max. Max.: 30 (6 x 5) **Max. Time:** 1:30 Hours

Note: **Each question carries five marks, Out of eight questions, attempt any six**

Q1. Define basic terminologies used in Theory of Computation such as Symbol, Alphabet, String, Language and power of Σ.

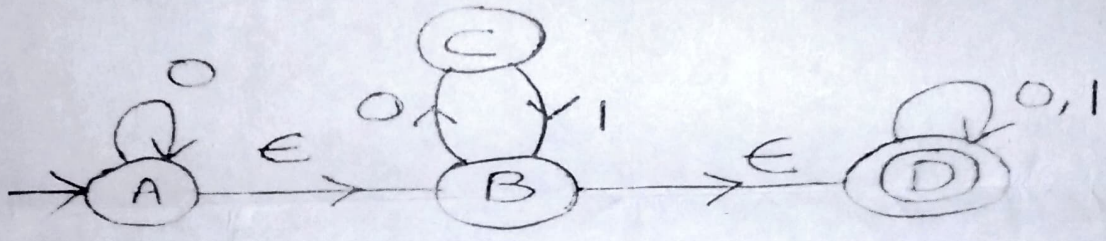
Q2. (i) Construct a minimal DFA over $\Sigma = \{a, b\}$ *and* $\omega \in (a, b)^*$ such that $n_a(\omega) = 2$.
(ii) Construct a minimal DFA which accepts set of all strings over $\Sigma = \{a, b\}$ where $|\omega| \geq 2$

Q3. Explain briefly about five tuples of an NFA. Construct NFA which accepts set of all strings over $\Sigma = \{a, b\}$ that contains 'ab'.

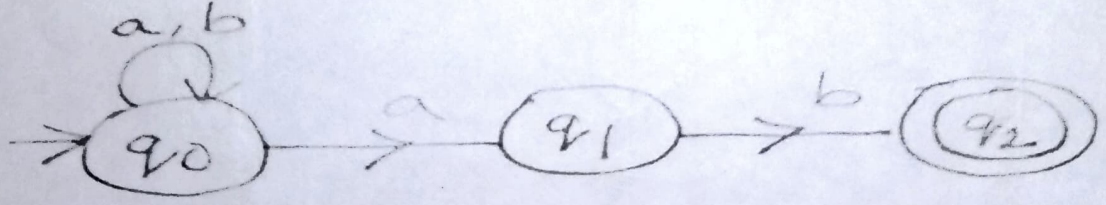
Q4. Discuss Operators and Identities of Regular expression.

Q5. Find Regular Expression for set of all strings over $\Sigma = \{a, b\}$ in which no 2 a's and no 2 b's should come together

Q6. For a given ϵNFA, find the NFA.



Q7. For a given NFA, Find the equivalent DFA.



Q8. Construct a Regular Expression corresponding to the finite automata given below.