

Course Instructor(s):

Dr. Labiba Fahad, Dr. Mehreen

Alam, Ms. Tajwar ,

Ms. Maryam Shahbaz

Sections A,B,C,D,E,H,G,J,K

Roll No

Course Section

Stud

Sessional-I Exam

Total Time (Hrs): 1

Total Marks: 60

Total Questions: 4

Date: Sep 24, 2024

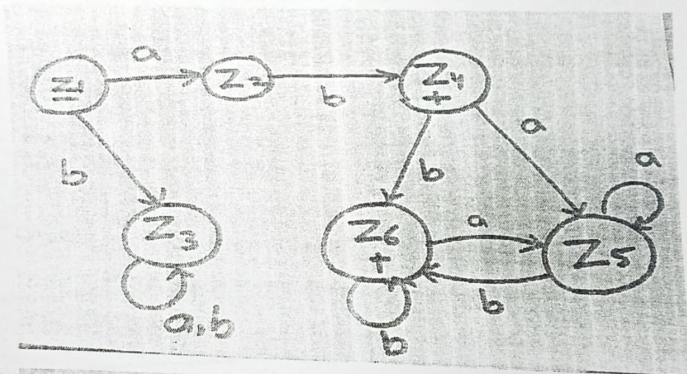
Instructions : Attempt all questions on answer sheet and properly mention the question number, of be marked.

Do not write below this line.

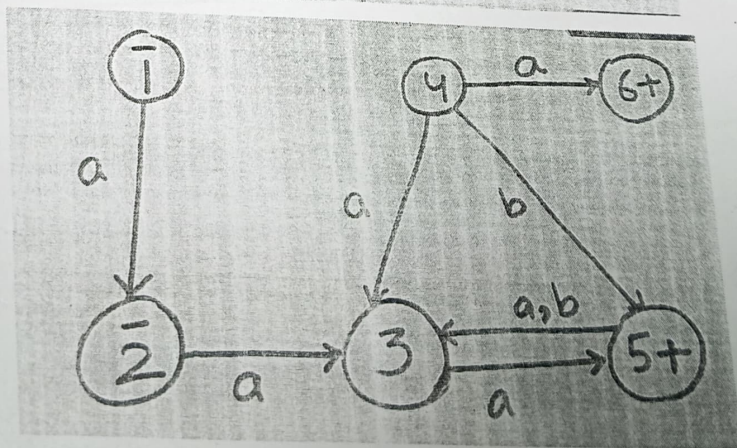
Attempt all the questions.

Q1: Convert TG to RE.

a.



b.



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Q2: Write a Recursive Definition, $\Sigma = \{a,b\}$

[20 marks]

a. for all strings not ending with aa or bb.

[10 Marks]

b. No word has substring aa.

[10 Marks]

Q3: Design a FA for Language L , that contains word of even length and word don't have substring ab.

$\Sigma = \{a,b\}$

[10 marks]

Q4: Write a Regular Expression (RE) that contains word of odd length and word don't have substring

[10 marks]

ba. $\Sigma = \{a,b\}$

a, b aba bab $abba$ $baab$

length

a, b aba bab $abba$ $baab$

\exists exists in L then (a,b)

$(a) \wedge (b)$

b^*

