Started on	Thursday, 8 February 2024, 8:17 AM
State	Finished
Completed on	Thursday, 8 February 2024, 8:22 AM
Time taken	5 mins
Marks	8.33/9.00
Grade	**9.26** out of 10.00 (**92.59**%)

Question 1

Correct

Mark 1.00 out of 1.00

For L_1 = {aa, b,cc} and L_2 = {a,ca}, what will be the number of strings in L_1L_2 and $L_1 \cup L_2$ respectively,

Select one:

- a. 6 and 2
- b. 6 and 5 ✔
- c. 5 and 3
- d. 2 and 3
- e. 2 and 5

Question 2

Correct

Mark 2.00 out of 2.00

Which of the followings can be generated through regular expression 1*10?

Select one or more:

- a. 111110 ✔
- b. 11100
- c. 10 ✔
- d. 0
- e. 110 ✔

Question 3

Correct

Mark 1.00 out of 1.00

What is the regular expression for the following regular language, **{11}*{1, Λ}{0, 11}**

Select one:

- a. (11)*|1|(011)
- b. (11)|(1|Λ)0(11)
- c. (11)*(1|Λ)(0|11) ✔
- d. (11)*|1|(0|11)

Question 4

Partially correct

Mark 1.33 out of 2.00

Which of the following regular expressions represent(s) the language of all strings over {0, 1} that contain the substring “01” ?

Select one or more:

- a. (01)*01(01)*
- b. (0*|1*)01(1*|0*) ✖
- c. (0|1)*01(0|1)* ✔
- d. (0|1)0|10|0*

Question 5

Correct

Mark 3.00 out of 3.00

Drag and drop the missing values to represent a Finite Automata that accepts strings **ending with b and not containing aa.** Place either of **a** or **b** markers in the corresponding area shaded in red. (See the small example below on how to place the answers)