Started on	Thursday, 8 February 2024, 9:16 AM
State	Finished
Completed on	Thursday, 8 February 2024, 9:21 AM
Time taken	5 mins
Marks	3.50/9.00
Grade	**3.89** out of 10.00 (**38.89**%)

Question 1

Correct

Mark 2.00 out of 2.00

Which of the following strings can be generated from the regular expression

$(b|ab)^{+}(a|ba)^{*}$?

Select one or more:

- [x] a. abbaa ✔
- [ ] b. aaabaa
- [ ] c. baab
- [x] d. abbb ✔
- [x] e. bb ✔
- [ ] f. Λ

Question 2

Partially correct

Mark 1.00 out of 2.00

Consider the finite automaton with the following transition table. q0 is the start state and q3 is the accepting state.

Current State	Input	
	0	1
q0	q1	q2
q1	q1	q3
q2	q0	q3
q3	q2	q3

Which strings are accepted by this finite automaton?

Select one or more:

- a. 1011 ✔
- b. 100100
- c. 001
- d. 01001

Question 3

Partially correct

Mark 0.50 out of 1.00

Which of the following statements is/are **correct** about Finite Automata? (Select all that apply)

Select one or more:

- a. From an accepting state of a Finite Automaton, the next state for any input must be another accepting state.
- b. Any state of a Finite Automaton can be reached from only one other state.
- c. For a particular Finite Automaton, there must be only one initial state. ✔
- d. For a given regular expression, there exists a Finite Automaton that accepts any string in the corresponding regular language.

Question 4

Not answered

Marked out of 1.00

Select the regular expression/s representing strings over {1, 0} that do not end with '1'.

Select one or more:

- a. $(1|0)^+(10)^*$
- b. $(1|0)^*(10)^*$
- c. $(1|0)^+(10^*)^+$
- d. $(1|0)^*(10)^+$

Question 5

Not answered

Marked out of 3.00

How many strings of length **less than or equal to 3** can be generated from the regular expression (x | y)*ba*?

Answer: