<u>Dashboard</u> / My cou	rses / <u>CS305 2022</u> / <u>Quiz / Quiz 2</u>
Started on	Sunday, 28 August 2022, 9:00 PM
State	Finished
	Sunday, 28 August 2022, 9:09 PM
	9 mins 40 secs
	6.00/13.00
Grade	4.62 out of 10.00 (46 %)
Question 1	
Incorrect	
Mark 0.00 out of 1.00	
If $h(L)$ is regular fo	or some homomorphism h then, L must be regular.
. , , -	
Select one:	
True X	
○ False	
The correct answer	is 'False'.
Question 2	
Incorrect	
Mark 0.00 out of 1.00	
Walk 0.00 Out 01 1.00	
How many one-sta	re finite automata over the alphabet $\{0,1\}$ are there no two of which are isomorphic?
Answer: 9	×
The correct answer	ie: A
The correct answer	15. 4

Question 3
Incorrect
Mark 0.00 out of 1.00
INDIA 0.00 Out of 1.00
State equivalence is not a transitive relation.
Select one:
□ True ★
○ False
The correct answer is 'False'.
Question 4
Incorrect
Mark 0.00 out of 1.00
Which of the following order of quantifiers describe the contrapositive of pumping lemma?
\bigcirc a. $orall n$ $\exists w$ $orall w = xyz$ $\exists i \geq 0$
\bigcirc b $\exists a \forall a u \exists a u - max \forall i > 0$
$lacktriangledown$ b. $\exists n \ orall w \ \exists w = xyz \ orall i \geq 0$
$lacktriangledown$ b. $\exists n \ orall w = xyz \ orall i \geq 0$
\circledcirc b. $\exists n \ orall w \ \exists w = xyz \ orall i \geq 0$ Your answer is incorrect.
Your answer is incorrect.
Your answer is incorrect. The correct answer is:
Your answer is incorrect. The correct answer is:
Your answer is incorrect. The correct answer is: $orall n \; \exists w \; orall w = xyz \; \exists i \geq 0$
Your answer is incorrect. The correct answer is:
Your answer is incorrect. The correct answer is: $orall n \; \exists w \; orall w = xyz \; \exists i \geq 0$
Your answer is incorrect. The correct answer is: $\forall n \; \exists w \; \forall w = xyz \; \; \exists i \geq 0$ Question $\bf 5$
Your answer is incorrect. The correct answer is: $\forall n \;\; \exists w \;\; \forall w = xyz \;\; \exists i \geq 0$ Question $\bf 5$ Correct
Your answer is incorrect. The correct answer is: $\forall n \; \exists w \; \forall w = xyz \; \exists i \geq 0$ Question $\bf 5$ Correct Mark 1.00 out of 1.00
Your answer is incorrect. The correct answer is: $\forall n \;\; \exists w \;\; \forall w = xyz \;\; \exists i \geq 0$ Question $\bf 5$ Correct
Your answer is incorrect. The correct answer is: $\forall n \; \exists w \; \forall w = xyz \; \exists i \geq 0$ Question 5 Correct Mark 1.00 out of 1.00 Distinguishability of states is not an equivalence relation.
Your answer is incorrect. The correct answer is: $\forall n \; \exists w \; \forall w = xyz \; \exists i \geq 0$ Question 5 Correct Mark 1.00 out of 1.00 Distinguishability of states is not an equivalence relation. Select one:
Your answer is incorrect. The correct answer is: $\forall n \; \exists w \; \forall w = xyz \; \exists i \geq 0$ Question 5 Correct Mark 1.00 out of 1.00 Distinguishability of states is not an equivalence relation. Select one: \blacksquare True \checkmark
Your answer is incorrect. The correct answer is: $\forall n \; \exists w \; \forall w = xyz \; \exists i \geq 0$ Question 5 Correct Mark 1.00 out of 1.00 Distinguishability of states is not an equivalence relation. Select one:
Your answer is incorrect. The correct answer is: $\forall n \; \exists w \; \forall w = xyz \; \exists i \geq 0$ Question 5 Correct Mark 1.00 out of 1.00 Distinguishability of states is not an equivalence relation. Select one: \blacksquare True \checkmark
Your answer is incorrect. The correct answer is: $\forall n \; \exists w \; \forall w = xyz \; \exists i \geq 0$ Question 5 Correct $Mark \; 1.00 \; out \; of \; 1.00$ Distinguishability of states is not an equivalence relation. Select one: $\bigcirc True \; \checkmark \; \bigcirc False$
Your answer is incorrect. The correct answer is: $\forall n \; \exists w \; \forall w = xyz \; \exists i \geq 0$ Question 5 Correct Mark 1.00 out of 1.00 Distinguishability of states is not an equivalence relation. Select one: \blacksquare True \checkmark

Question 6	
Correct	
Mark 1.00 out of 1.00	
The language $L=\{a^mb^nc^{m+n}:m,n\geq 0\}$ is regular.	
Select one:	
○ True	
■ False	
The correct answer is 'False'.	
The correct answer is Taise.	
Question 7	
Correct	
Mark 1.00 out of 1.00	
Suppose, we have been given that $L_1 \cup L_2$ and L_1 are regular, then we can conclude that L_2 must be regular.	
Select one:	
○ True	
□ False ✓	
The correct answer is 'False'.	
i ne correct answer is faise.	
Question 8	
Incorrect	
Mark 0.00 out of 1.00	
Minimum number of states (excluding the dead state) in a finite automaton to accept strings that begins with b and ends with aa is:	
Answer: 3	
The correct answer is: 4	
The confect diswer is, 4	

Question 9	
Correct	
Mark 1.00 out of 1.00	
There exists an algorithm for determining whether a regular language is finite.	
Select one:	
True ✓	
○ False	
The correct answer is 'True'.	
Question 10	
Complete	
Mark 0.00 out of 2.00	
Noam Chomsky (C) and Marcel-Paul Schutzenberger (S) were playing a game: C: Consider L=\{bba(ba)^{\n}a^{\n-1}\}: S: Okay, I choose k as the pumping constant. C: Take the string w=? S: Okay, let me partition w=xyz such that xy \leq k and y\neq \lambda. C: I choose =?, and see, xy^{\internet{i}z \notin L}. Yay! I win! \text{!} Help Chomsky win by choosing proper w and	
W = 2	
i = 1	
Comment:	

Question 11	
Correct	
Mark 1.00 out of 1.00	
Two states can be merged.	
Two States can be merged.	
a. distinguishable	
b. indistinguishable	~
© D. Malsanguishable	
Your answer is correct.	
The correct answer is:	
indistinguishable	
Question 12	
Correct	
Mark 1.00 out of 1.00	
If $\boxed{\underline{1}_{\underline{L}} \ 1 = \underline{L}(\underline{a}^*\underline{b}\underline{a}\underline{a}^*)}$ and $\boxed{\underline{L}} \ \underline{2} = \underline{L}(\underline{a}\underline{b}^*\underline{b})$ then $\boxed{\underline{L}} \ \underline{1} / \underline{L} \ \underline{2}$ is	
where	
○ a. <u>L(aa^*b)</u>	
○ b. <u>Aemptyset</u>	
○ c. (a^*ba^*)	✓
Your answer is correct.	
The correct answer is:	
<u>L(a^*ba^*)</u>	
■ Quiz 1 (re-exam)	
Jump to	
	Quiz 3 ►