Cs402 objective 2021 past papers

(by Mr Ahsan legend)

03028160804

New course mcqs important mcqs Ye new course me sy hn sb is sy tyari kren InshaAllah acha result ae ga

In FA, initial state can be represented by:

Select the correct option

- ○ Leave the state empty
- ○ drawing a cricle in that state
- ○ drawing '+' sign in that state
- ● drawing an arrow head before that state

Edit with WPS Office

Melay machine to increase the output string in magnitude by 1 is called:

Select the correct option

- Incrementing machine
- Complementing machine
- Converting machine
- Decrementing machine

Edit with WPS Office

Let L be the language of all strings, defined over SUM = {0,1}, e
are indistringuishable with respect to L with z being 0?

Select the correct option

○	100. 101
●	111.101
○	110. 101
○	010.101

Edit with WPS Office

The language having even number of a's and even number of b's defined over S = {a, b} is called____

Select the correct option

- FACTORIAL
- PALINDROME
- ODD-ODD
- EVEN-EVEN

Edit with WPS Office

Which of the following string belongs to the language of the regular expression (aa*b)*?

Select the correct option

- aaaaaa
- aabaab
- baabab
- abbbaa

Edit with WPS Office

In Mealy machine the output depends on _____

Select the correct option

- Nothing
- Type of input
- Only present state
- Present state and Present input

Edit with WPS Office

If L1 and L2' are regular languages, L1 intersects (L2' U L1) will be

Select the correct option

- (●) regular
- ( ) non regular
- ( ) may be regular
- ( ) none of the mentioned

Edit with WPS Office

In Moore machine, output is produced over the change of:

Select the correct option

- ○ Transitions
- ○ None of the mentioned
- ● States
- ○ Transitions and states

Edit with WPS Office

--------- state is not important in Moore machine.

Select the correct option

○	Initial
●	Final
○	Combination of
○	Empty

Edit with WPS Office

Kleene's Theorem Part II expresses the relationship between _____.

Select the correct option

○	FA and RE
●	TG and RE
○	RE and FA
○	FA and TG

Edit with WPS Office

What is false about the PALINDROME LANGUAGE?

Select the correct option

- ○ It is an infinite language.
- ○ FA can be build for it.
- ● None of the given option
- ○ Every word is reverse of itself.

Edit with WPS Office

Keeping in view the language of all strings ending with 'a', for which symbol we will take a loop on the final state of its transition diagram?

Select the correct option

- ○ c
- ○ d
- ● a
- ○ b

Edit with WPS Office

In FA, final state is represented by a _____ sign.

Select the correct option

○	=
●	+
○	-
○	*

Edit with WPS Office

Finite Automaton (FA) has:

Select the correct option

○	Not more than two final states
○	Exactly one final state
●	Zero or more final states
○	Two final states

Edit with WPS Office

There is no question of accepting any language in:

Select the correct option

○	Melay machine
●	Moore machine
○	Both moore and melay machine
○	FA

Edit with WPS Office

Every _____ is a _____ as well, but the converse may not be true.

Select the correct option

- TG, FA
- FA, TG
- TG, GTG
- GTG, FA

Edit with WPS Office

The language of all strings defined over alphabet set = {x, y} having triple x's or triple y's will have the minimum strings with length of:

Select the correct option

○	4
○	1
○	3
●	2

Edit with WPS Office

There may be more than one transition for a certain letter on a state in:

Select the correct option

- ● Finite Automata
- ○ Moore Machine
- ○ Transition Table
- ○ Non-Deterministic Finite Automata

Edit with WPS Office

What is false about the PALINDROME LANGUAGE?

Select the correct option

○	It is an infinite language.
●	FA can be build for it.
○	Every word is reverse of itself.
○	None of the given option

Edit with WPS Office

The minimum length of the strings(except null string) of a language that starts and ends in different letters will be:

Select the correct option

- (●) 2
- ( ) 4
- ( ) 1
- ( ) 3

Edit with WPS Office

Dead states are defined as:

Select the correct option

- ○ None of the given
- ○ It is non-distinguishable state
- ● No such state exist
- ○ A dead state is non final state of a DFA whose transition on every input symbol terminates on itself.

Edit with WPS Office

Which of the following statement is NOT true about TG?

Select the correct option

○	There exists exactly one path for certain string
○	There may be no final state
○	There may exist no path for certain string
●	There may exist more than one paths for certain string

Edit with WPS Office

Substrings as input letters can be specified on edges in:

Select the correct option

- ○ NFA
- ● TG
- ○ FA
- ○ PDA

Edit with WPS Office

An FA is a collection of:

Select the correct option

○	Only finite states and finite transitions
○	Only infinite states and infinite transitions
○	Infinite states, infinite transitions and infinite input letters
●	Finite states, finite transitions and finite input letters

Edit with WPS Office

Melay machine to increase the output string in magnitude by 1 is called:

Select the correct option

- ○ Complementing machine
- ● Incrementing machine
- ○ Decrementing machine
- ○ Converting machine

Edit with WPS Office

In proving Kleene Theorem II, circuits are reduced into:

Select the correct option

- ○ both difference and asterisk
- ○ sum
- ○ asterisk
- ● difference

Edit with WPS Office

Edges are expressed with a regular expression in:

Select the correct option

- ○ FA
- ○ TG
- ○ NFA
- ● GTG

Edit with WPS Office

Kleene's Theorem Part I expresses the relationship between _____.

Select the correct option

- (●) FA and TG
- ( ) TG and RE
- ( ) RE and FA
- ( ) FA and RE

Edit with WPS Office

If two RE's generate same language then these RE's are called _____.

Select the correct option

○	Similar RE
○	Equal RE
○	Same RE
●	Equivalent RE

Edit with WPS Office

If we have only one state, having no transition for input letters, then it is an example of:

Select the correct option

- (●) NFA
- ( ) RE
- ( ) FA
- ( ) TG

Edit with WPS Office

Which of the following is NOT true about the term alphabet?

Select the correct option

○	It is a finite set of symbols
●	It can be an empty set
○	Strings are generated by concatenating its elements
○	It is usually denoted by Greek letter sigma

Edit with WPS Office

If we have only one state, having no transition for input letters, then it is an example of:

Select the correct option

- (●) NFA
- ( ) RE
- ( ) FA
- ( ) TG

Edit with WPS Office

Which of the following is NOT true about the term alphabet?

Select the correct option

- It is a finite set of symbols
- It can be an empty set
- Strings are generated by concatenating its elements
- It is usually denoted by Greek letter sigma

Edit with WPS Office

The language {a, ab, aba, bab} is _____ .

Select the correct option

- (●) regular
- ( ) recursive
- ( ) infinite
- ( ) irregular

Edit with WPS Office

If FA1 corresponds to (a+b)* then FA1 must accept _____ string/strings.

Select the correct option

○	Even length
○	Odd length
●	No
○	Every

Edit with WPS Office

According to theory of automata there are _____ types of languages.

Select the correct option

- ○ Four
- ○ Three
- ○ One
- ● Two

Edit with WPS Office

There may be more than one transition for a certain letter on a state in:

Select the correct option

- ○ Transition Table
- ● Non-Deterministic Finite Automata
- ○ Finite Automata
- ○ Moore Machine

Edit with WPS Office

The length of output string in case of _____ is one more than the length of corresponding input string.

Select the correct option

●	Moore machine
○	Incremental machine
○	Mealy machine
○	Adding Machine

Edit with WPS Office

Closure of an FA is the same as _____ of an FA with itself except that the initial state of the required FA is a final state as well.

Select the correct option

- ○ Sum
- ● Concatenation
- ○ Union
- ○ Intersection

Edit with WPS Office

The language of all strings defined over alphabet set = {x, y} that ends with same letters will have the maximum length of:

Select the correct option

- ○ 1
- ● 2
- ○ 3
- ○ infinite

Edit with WPS Office

The language {a, ab, aba, bab} is _____.

Select the correct option

- (●) regular
- ( ) recursive
- ( ) infinite
- ( ) irregular

Edit with WPS Office

In Mealy machine the output depends on _____

Select the correct option

- (●) Nothing
- ( ) Type of input
- ( ) Only present state
- ( ) Present state and Present input

Edit with WPS Office

If L1 and L2' are regular languages, L1 intersects (L2' U L1) will be

Select the correct option

- (●) regular
- ( ) non regular
- ( ) may be regular
- ( ) none of the mentioned

Edit with WPS Office