23 Lecture - CS402

Important Mcqs

1.	Which of the following is a regular language? a) {anbn n ? 0} b) {anbn n > 0} c) {anbm n ? m} d) {an n is prime} Answer: a) {anbn n ? 0}
	Which of the following operations does not result in a regular language? a) Union b) Concatenation c) Kleene star d) Intersection Answer: d) Intersection
	Which of the following is a regular expression for the language consisting of all strings of 0's and 1's that do not contain the substring 11? a) (0+1)11(0+1) b) (0+1)0(0+10) c) (0+1)(1+01) d) (0+1)1(0+01) Answer: d) (0+1)1(0+01) Which of the following is not a regular language?
	a) {0n1n n ? 0} b) {0n1n n > 0} c) {0n1m n, m ? 0} d) {0n n is a perfect square} Answer: d) {0n n is a perfect square}
	Which of the following is a regular expression for the language consisting of all strings of 0's and 1's that end with 01? a) (0+1)*01 b) (0+1)*0(1+01) c) (0+1)*1(0+1)*01 d) (0+1)1(1+01) Answer: c) (0+1)*1(0+1)*01
	Which of the following is a regular expression for the language consisting of all strings
	Which of the following is a regular expression for the language consisting of all strings of 0's and 1's that contain at least one 0 and one 1? a) (0+1)01(0+1) b) (0+1)*0(0+1)1(0+1) c) (0+1)*0+(0+1)1+

Which of the following is a regular language?

a) {w | w contains an equal number of 0's and 1's}

Answer: b) (0+1)*0(0+1)1(0+1)

- b) {w | the length of w is a prime number}
- c) {w | w contains a substring of three 0's}
- d) {w | the number of 0's in w is equal to the number of 1's in w}

Answer: d) {w | the number of 0's in w is equal to the number of 1's in w}

Which of the following is a regular expression for the language consisting of all strings of 0's and 1's with an even number of 0's and an odd number of 1's?

- a) (0+1)*00(0+1)11(0+1)
- b) (0+1)*01(0+1)10(0+1)
- c) (0+1)*0(0+1)*1(0+1)*1
- d) (0+1)*0(0+1)*1+

Answer: c) (0+1)*0(0+1)*1(0+1)*1

Which of the following is not a regular language