

**Name & Sign. :** \_\_\_\_\_

**Subject: Compiler Construction**

**Time: 20 min.**

Q.	Choose the appropriate choice	15 Marks
1.	<b>An Ambiguous Grammar</b> a) Generates only a single parse tree b) Generates more than one parse tree c) Cannot generate a parse tree	
2.	<b>In lexical analysis the source code is broken up into meaningful units called</b> a) Non Terminal                      b) Lexemes	
3.	<b>Strings of characters representing lexical units of programs.</b> a) Non Terminal                      b) Terminal                      c) Tokens	
4.	<b>A finite state machine where for each pair of state and input symbol there may be several possible next states</b> a) DFA                                      b) Regex                                      c) NFA	
5.	<b>Choose the correct statement</b> (a) Every construct that can be described by a regex can also be described by the CFG (b) Every construct that can be described by a CFG can also be described by a regex (c) Both a and b	
6.	<b>A data structure for storing the names of the variables, and their associated attributes</b> a) Regex                                      b) Symbol table                                      c) NFA	
7.	<b>NFA and DFA accept .....</b> a) Context-free languages      b) regular languages      c) non-regular languages	
8.	<b>Concatenates each string in L zero or more times</b> a) Kleene Closure ( $L^*$ )      b) Positive Closure ( $L^+$ )      c) Concatenation ( $L1.L2$ )	
9.	<b>A notation for specifying lexeme patterns</b> a) Regex                                      b) NFA                                      c) DFA	
10.	<b>A Transition Function(<math>\delta</math>) has two arguments</b> a) The state and the input alphabet b) The state and the input word c) The initial state and the final state	
11.	<b>Parsing the token stream to identify the grammatical structure of the stream</b> a) Syntax analysis                                      b) Parsing                                      c) Semantic analysis	
12.	<b>In Regular expression the highest Precedence is for</b> a) Kleene Star                      b) Boolean 'OR'                      c) Concatenation	
13.	<b>Written in a formal language and is used to specify the lexical structure of that language</b> a) Regular expressions                      b) Kleene star                      c) Syntax analysis	
14.	<b>If <math>r</math> and <math>s</math> are regexes: <math>r s</math> is a regex with language</b> a) $L(r) \cup L(s)$ b) $L(r)L(s)$ c) $L(r)$	
15.	<b>If <math>r</math> is a regex: <math>r^+</math> is a regex that is equal to</b> a) $rr^*$ b) $r^+ \in$ c) Both a and b	