1. Regular languages are accepted by _____

A. DFA B. Moore machines C. Mealy Machines D. Pushdown automata

2. _____is output generation machine

A. DFA B. Moore machine C. NFA D. Pushdown automata

3. The leaf nodes in the parse tree are _____

A. Terminals B. Variables C. Any D. Depending on the grammar

4. The CFG S --> aS / aSbS / ∈ is _____

A. Ambiguous B. RLG C. LLG D. Regular grammar

5. The internal nodes in the parse tree are_____

A. Variables B. Terminals C. Any D. Depending on the grammar

6. The union of two regular languages is ----- -----

A. Context sensitive B. Regular C. Context free language D. None of the above

7. While applying pumping lemma on Regular Languages, the string w in L is divided to _____

A. Two parts x, y B. Three parts x y z C. four parts w x y z D. five parts u v w x y

8. In NFA, the input strings _____

A. Have unique path B. may have multiple paths C. All paths end at final state D. None

9. _is the regular expression for representing all the strings ending with 00 A.

(0+1)* B. 00 (0+1)* C. (0+1)*00 D. 10(0+1)*00

10. In Mealy machine the output depends up on _____

A. Present State B. Present Input C. Both Present State and Input D. None

11. Suppose the NFA has 3 states, then the maximum states in equivalent DFA are _____

A. 4 B. 3 C. 8 D. 6

12. How many final states are there in Mealy and Moore machines?

A. Zero B. One C. Two D. Any number of final states

13. In DFA, the input strings _____

A. Have unique path B. Must have multiple paths C. All paths end at final state D. None

14. In Regular grammar how many variables are allowed in RHS

A. One B. Two C. Three D. Any number of variables

15. In CFG how many variables are allowed in LHS

A. One B. Two C. Three D. Any number of variables

16. How many final states are there in DFA ?

A. Zero B. One C. Two D. Any number of final states

17. Which of the following set of strings is not regular

A. Having even zero's B. Strings with length=2 C. Having odd one's D. Equal number of a's and b's

18. The regular expression for representing all the strings whose second and fourth symbols are 0 is

A. (0+1)* B. (0+1)*0(0+1)* 0(0+1)* C. (0+1)0(0+1)0(0+1)* D. None

19. Which of the following regular expression represents zero or more zero's

A. 0* B. 00* C. 10* D. None

20. Type-3 languages are accepted by

A. DFA B. PDA C. TM D. LBA

1. Regular languages are accepted by ------
   a) DFA b)Moore machines c)Mealy Machines d)Pushdown automata ( )
2. ------ is output generation machine
   a) DFA b) Moore machine c)NFA d)Pushdown automata ( )
3. is the regular expression for representing all the strings ending with 00
   a) (0+1)* b) 00 (0+1)* c) (0+1)* 00 d) 10 (0+1)* 00 ( )
4. In Mealy machine the output depends up on ---
   a) present state b) present input c) both present state and input d)None ( )
5. Suppose the NFA has 3 states, then the maximum states in equivalent DFA are ---
   a) 8 b) 4 c) 3 d)6 ( )

6. Which of the following production is having left recursion -------
   a) S□S*S b) S□S+S c) E□E + T d) All ( )
7. The internal nodes in the parse tree are ----
   a) Variables b) terminals c) Any d) depending on the grammar ( )
8. The leaf nodes in the parse tree are ----
   a) Variables b) terminals c) Any d) depending on the grammar. ( )
9. The CFG S□S+S / S * S / a/ b is ------
   A) Ambiguous B) CNF c) GNF d) reduced grammar ( )
10. Which of the following is having writing capability on to the tape?
    a) DFA b) NFA c) PDA d) Turing Machine ( )

11. If RHS of all the productions contains either two variables or single terminal such grammar is said to be in -----
    a) CNF b) GNF c) Left recursion d) Right recursion ( )
12. If RHS of all the productions starts with a terminal and followed by any number of variables then grammar is said to be in --------
    a) CNF b) GNF c) Both d) None ( )
13. The union of two regular languages is ----- -----
    a) Context sensitive b) Regular
    c) Context free language d) none of the above. ( )
14. The intersection of Regular language and CFL is ------
    a) CFL b) Context sensitive
    c) Regular d) none ( )
15. TYPE-3 or Regular languages are accepted by ---
    a)Moore machines b) TM c)PDA d) Finite automata ( )

16. TYPE-2 or CFL are accepted by -----
    a) Mealy Machines b) FA c)TM d)PDA ( )
17. While applying pumping lemma on CFL, the string in L is divided to ----
    a) Two parts x, y b) three parts x y z c) four parts w x y z d) five parts u v w x y ( )
18. The production which has single variable on both sides of arrow is called -----
    a) Unit production b) epsilon production c) CNF d) GNF ( )
19. A string is accepted by PDA when ----
    a) Empty Stack b) Final state c) both d) None ( )
20. In NFA, the input strings ----
    a) Have unique path b) multiple paths c) all paths end at final state d) None ( )