1. What is a Finite automaton?

a. A Finite automaton is an automaton having an infinite number of states.

**b**. A Finite automaton is an automaton having a finite number of states

2. An automaton is made up of \_\_\_\_.

1. States b. Transitions c. Both

3.In the theory of automation, how do we represent states?

a. Rectangle b. Arrow c. **Circles**

4. In the theory of automation, how do we represent transitions?

a.Triangle b. Arrows c. Double circle

5. \_\_\_\_ are entities or single objects that can be any letter, alphabet, or picture.

a. Objects b. Transitions c. Symbols d. Alphabets

6. What are the alphabets in the theory of computations?

a. Alphabets are a finite set of symbols

b. Alphabets are an infinite set of symbols

7. Which of the following is used to denote alphabets?

a.W b. ∑ c.|W| d. ~

8. \_\_\_\_ is a finite collection of symbols from the alphabet.

a. Switch b. String c. State d. Symbols

9. The string is denoted by \_\_\_\_.

a. w b. A c. G d. s

10. How many states do finite automata have?

a. Accept b. Reject c. Both

11. A \_\_\_\_\_\_\_\_\_\_ is an ordered collection of objects

a. Relation b. Set c. Function

12. What is the cartesian production of A={1,2} and B={a,b}

a. {(1,a)(1,b)(2,a)(b,b)}

b. {(1,a),(1,b),(2,b),(b,b)}

c. {(1,a)(1,b)(2,a)(2,b)}

13. A collection appropriate string is called

a. Language b. String c.

14. If a set contaians no elements it is called

a. No elements b. null set c. empty set

15. It’s a form when you write the common characteristic of all the elements on a symbolic way, this set model is

a. Descriptive form b. Set builder form c. Subset

16. If every element of the set B is included on the set A

a. Subset b. Equality set c. Sub string

17. Line graph consists of

a. (x,y) axis b. (x,y,z) axis c. (x,x) axis

18. To find the lenght \_\_\_\_\_\_\_\_\_\_\_\_ graph is used.

a. Directed b. Weighted c. Directed graph

19. Turing machine consist of \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_

a. tape and ribbon b. tape and tape reader c. Tape and tape head

20. ENIAC was designed in the year of

a. 1940 b. 1956 c. Second genration computers