1. What are the categories of the problems based upon the time complexity?

Polynomial	Non Polynomial	Both of the above	None of the above

2. If any algorithm is having the time complexity of 2^n , then it comes under which category?

Polynomial	Non Polynomial	Dis Polynomial	None of the above

3. Find the odd one out based upon the time complexity.

Linear search	Binary search	Matrix chain multiplication	0/1 Knapsack

4. Find the odd one out based upon the time complexity.

Graph coloring	Hamiltonian cycle	Travelling salesman problem	Matrix chain multiplication

5. Which one is more preferred for algorithms?

Polynomial	Non Polynomial	Dis Polynomial	None of the above

6. Which of these represents the classes of problems?

P class	NP class	NP hard class	All of the above

7. If any algorithm is non-deterministic and the time complexity is polynomial, then the class of problem is

P problem	NP problem	NP hard problem	None of the above

8. The non deterministic algorithm uses the concept of

Choice	Success	Failure	All of the above

9. The scheduling problem is a sub problem of

Function	Decision	Optimization	None of the above

10. What is the approximation factor of greedy makespan algorithm

½	1/3	3/2	None of the above

11. The sequencing of jobs on a single processor with deadline constraints is known as

Job sequencing with deadlines	Job sequencing without deadlines	Job sequencing with processor	None of the above

In bin packing problem, we need to _____ the number of bins used.

12.

Minimize	Maximize	Make it 0	None of the above

13. The bin packing problem falls under _____ category.

P	NP	NP Hard	None of the above

14. What is the formula for calculation of lower bound of bins?

Ceil (Total weight/ Bin capacity)	Floor (Total weight/ Bin capacity)	Sqrt (Total weight/ Bin capacity)	None of the above

15. The bin packing problem takes _____ time.

Polynomial	Exponential	Linear	None of the above

16. **If weight [ ] = {4, 8, 1, 4, 2, 1} and the Bin Capacity c = 10, how many bins are required to pack all items?**

1	2	3	4