■ CHAPTER 13 ■

														[1]Y		[2]B							
		[3]D												E		I							
	[4]Y	E	S									[5]Y	E	S		N				[6]O			
		T						[7]F	A	L	S	E				E				P			[8]Y	
	[9]Y	E	S									[10]S	U	B	S	T	R	U	C	T	U	R	E	S
		R																		I			S	
		M								[11]Y	E	[12]S						[13]M		M				
		I		[14]C								H						E		A				
		N		A								O						M		I				
		I		T				[15]U	P	P	E	R				[16]G		O		L			[17]B	
[18]Y	E	S		A		[19]T						T		[20]M	U	L	T	I	S	T	A	G	E	
		T		L		R					[21]Y	E	S			O		Z		Y			L	
		I		A		U						S				B		A					L	
		[22]C	O	N	[23]N	E	C	T	I	V	I	T	[24]Y			A		T					M	
					O								E			L		I					A	
											[25]P	A	S	C	A	L		O					[26]N	O
																Y		N						

Across

4. Approximation algorithms can be designed by dynamic programming by truncating input instances _____ yes/no [YES]
5. Idea of reuse is a chief characteristic of dynamic programming _____ yes/no [YES]
7. The value of golden ratio is 2.3 _____ true/false [FALSE]
9. The mean flow time is dependent on finish or completion time of jobs _____ yes/no [YES]
10. Characteristics of dynamic programming are overlapping subproblems and optimal _____ [SUBSTRUCTURES]
11. Matrix multiplication is associative _____ yes/no [YES]
15. Relaxation means reducing the _____ bound in the Bellman–Ford algorithm [UPPER]
18. Dynamic programming employs both top-down and bottom-up approaches—yes/no [YES]
20. Dynamic programming can solve _____ decision problems [MULTISTAGE]
21. The complexity analysis of the knapsack problem is often referred to as a pseudo-polynomial algorithm _____ yes/no [YES]
22. The reachability matrix is also known as a _____ matrix [CONNECTIVITY]
25. Binomial coefficient is solved using the _____ Identity [PASCAL]
26. Matrix multiplication is commutative _____ yes/no [NO]

Down

1. Reachability matrix is the adjacency matrix of binary relation *E* _____ yes/no) [YES]
2. The *N*th Fibonacci is approximated by the _____ formula [BINET]
3. Dynamic problems can be classified into _____ and probabilistic problems [DETERMINISTIC]
5. In a deterministic DP, there are two ways of computing the stages _____ yes/no [YES]
6. The core principle of dynamic programming is the principle of _____ [OPTIMALITY]
8. The tabulation method is a bottom-up method _____ yes/no [YES]
12. The Bellman–Ford algorithm can find the _____ path [SHORTEST]
13. The top-down approach of dynamic programming is the _____ technique [MEMOIZATION]
14. The number of BSTs for given nodes is given by the _____ number [CATALAN]
16. Dynamic programming decisions are _____ optimal [GLOBALLY]
17. Dynamic programming was designed by Richard _____ [BELLMAN]
18. Stages refer to subproblems _____ yes/no [YES]
19. A negative edge cycle can be detected by the Floyd algorithm _____ true/false [TRUE]
23. Dynamic programming solves fractional knapsack problem _____ yes/no [NO]
24. A multistage graph has edges that connect two Stages _____ yes/no [YES]

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