

Question Paper Template : GoF Design Patterns 1 : RBT Postcourse Test

Note :

- 1) Unless specifically mentioned, pick up questions from any of the subtopics.
- 2) Please try to maintain fair distribution between subtopics.
- 3) Ensure that the questions with maximum use count should be avoided, as far as possible.

30%

70%

Topic	% Weightage of topic	Subtopic	% Weightage of subtopic (if specially needed)	Q. from Very Simple / Simple	Q. from Medium	Total No. of Questions
ReviewofObjectOrientedTechnology	5%	Review of Object Oriented Technology	NA	1	1	2
IntroductiontoPatterns	5%	Introduction to Patterns	NA	1	1	2
CreationalPatterns	25%	Overview of creational patterns	NA	2	5	7
		Concept of factories				
		Factory Method – efficient object creation				
		Singleton – unique instance, multithreading issues, double checked locking				
		Prototype - prevent expensive creation of objects from scratch				
StructuralPatterns	30%	Overview of structural patterns	NA	2	7	9
		Adapter – mixing incompatible interfaces				
		Proxy – representative, types				
		Facade – simple interface for a complex system				
		Decorator – alternative to inheritance				
BehaviouralPatterns	25%	Overview of behavioural patterns	NA	2	5	7
		Modifying behaviour through inheritance & composition				
		Strategy - different algorithms				
		Chain of Responsibility – multiple handlers for a request				
		Observer – notifications, publish subscribe, push-pull model				
		State - represent states as objects				
		Command - encapsulate requests as objects				
Conclusion	10%	Pros and cons of design patterns	NA	2	1	3
		How and when to apply the right pattern				
		Anti-Patterns – Overview				
	100%			10	20	30