



12. (a) Explain the following GRASP patterns: Creator, Information Expert, Low Coupling, High Coupling and Controller. (16)

Or

- (b) Explain in detail about the Factory Pattern and mention the Limitations and applications of Factory pattern. (16)

13. (a) Write briefly about elaboration and discuss the difference between elaboration and inception with neat diagram. (16)

Or

- (b) (i) Explain the guidelines for finding conceptual classes with neat diagram. (10)  
(ii) Explain about Aggregation and Composition with examples. (6)

14. (a) Explain the UML Class, Sequence and Interaction diagrams for Library Management System. (16)

Or

- (b) State Model-View Separation principle and explain its motivations. (16)

15. (a) Explain the issues involved in OO Testing. (16)

Or

- (b) Explain the following

- (i) GUI Testing  
(ii) OO System Testing.