

Code: 9A05801

1

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**DESIGN PATTERNS**

(Common to CSE, IT & CSSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 (a) Distinguish between iterator and list iterator.  
(b) Draw an interaction diagram that performs withdrawal operation.  
(c) What arithmetic's are supported by point? Explain them in detail.
- 2 (a) List and explain the reusable object oriented design aspects of a pattern.  
(b) How do we describe design patterns? Explain in detail.
- 3 (a) What distinguishes pull-down menus from that of glyphs?  
(b) Write a detailed note on abstracting of object creation.  
(c) Explain the traversal actions in detail.
- 4 (a) What issues to be considered while designing a factory method? Explain the consequence of the factory pattern.  
(b) Who are the different participants involved in the builder pattern. What relation exists between them? Explain it in detail.
- 5 (a) Explain the role of structural patterns in designing of pattern.  
(b) Draw and explain the multiple inheritance interface that illustrates relation between different participants in the adapter pattern.
- 6 (a) What is the role of interpreter in design of a pattern?  
(b) List and explain the various participants involved in design of the interpreter.  
(c) List the features that a proxy pattern exploits.
- 7 (a) Give brief description about the iterator design pattern.  
(b) What is the motivation for mediator pattern? Explain it in detail.
- 8 Explain the following:  
(a) Participants of template method.  
(b) Benefits and drawbacks of strategy pattern.  
(c) Decoupling sender and receiver.

\*\*\*\*\*

Code: 9A05801

2

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**DESIGN PATTERNS**

(Common to CSE, IT & CSSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 (a) How can we add and remove the items from list? Explain with a suitable example.  
(b) What is an iterator? Explain the various operations that an iterator supports. Explain them in detail.  
(c) What is the use of object diagram in modeling? Explain.
- 2 (a) Discuss in detail about the object interfaces and object implementations.  
(b) Distinguish between inheritance versus parameterized types.  
(c) Give brief description about the frameworks.
- 3 (a) Explain the role of formatting in creation of a document editor.  
(b) How can we configure windows and windoimps? Explain in detail.
- 4 (a) What are the liabilities and techniques for implementing the abstract factory pattern? Explain them.  
(b) Draw and explain the interaction diagram that illustrates the cooperation between a builder and director.  
(c) Who are the participants in factory method? Explain them.
- 5 (a) What is the motivation for bridge pattern? Explain in detail.  
(b) Explain the consequences and implementation issues of a composite pattern.
- 6 (a) Give brief description about the implementation issues and consequences of chain of responsibility.  
(b) Write a detailed note on collaborations, consequences and applicability of command pattern.
- 7 (a) Describe in detail about the mediator design pattern.  
(b) Explain the applicability, structure and participants of iterator pattern.
- 8 Write short notes on the following:  
(a) Documentation and learning aid.  
(b) Consequences of template method.  
(c) Applicability and Participants of strategy pattern.

\*\*\*\*\*

Code: 9A05801

3

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**DESIGN PATTERNS**

(Common to CSE, IT & CSSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 (a) What is an object diagram? Explain its role in design of a system.  
(b) Define a class diagram. Explain the various OMT notations of it.  
(c) List the different functions used to access the list.
- 2 (a) Explain the common causes for redesign a design pattern.  
(b) What are the different criteria that selects the right pattern for a given problem?
- 3 (a) How can we embellish the user interface? Explain with a suitable example.  
(b) Explain in detail about the factories and product classes.
- 4 (a) Explain the role of creational patterns in design of the patterns.  
(b) What is the motivation for builder creation pattern? Explain it in detail.  
(c) Draw and explain the structure of factory method.
- 5 (a) What relation exists between the different participants involved in composite pattern? Explain it in detail.  
(b) List the different issues that should be considered while using the adapter pattern.
- 6 (a) Discuss in detail about the façade design pattern.  
(b) Explain the applicability, structure and participants of flyweight pattern.
- 7 (a) What is the motivation for observer pattern? Explain it in detail.  
(b) Draw and explain the interaction diagram that illustrates how the objects cooperate to handle a change in list box selection.  
(c) Explain the structure of iterator pattern.
- 8 (a) Present a detailed note on visitor design pattern.  
(b) Write short notes on target for refactoring.

\*\*\*\*\*

Code: 9A05801

4

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**DESIGN PATTERNS**

(Common to CSE, IT & CSSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 (a) Distinguish between abstract class and concrete class.  
(b) Explain the role of interaction diagrams in design patterns.  
(c) Describe the various constructors used in list.
- 2 (a) Explain the step - by - step approach for selecting the design pattern.  
(b) What are the differences between class and interface inheritance?  
(c) Explain the compile time structure of a object oriented program.
- 3 (a) Describe in detail about the various problems associated with Lexi's design.  
(b) Explain in detail about the encapsulating the analysis.  
(c) Give brief description about the command history.
- 4 (a) What is the relationship between different participants present in prototype pattern?  
(b) Explain the implementation issues and benefits of singleton pattern.
- 5 (a) Explain when to use the bridge design pattern.  
(b) What are the different issues to be considered while applying the decorator pattern?  
(c) Draw and explain the structure of composite pattern.
- 6 (a) Discuss in detail about the proxy design pattern.  
(b) Explain the role of behavioral patterns in design of the patterns.
- 7 (a) What is the key idea of state pattern? Explain it in detail.  
(b) Explain the object structure of a mediator pattern.  
(c) Explain the implementation variants of iterator pattern.
- 8 (a) Give brief description about the strategy design pattern.  
(b) Explain the role of template method in designing of the patterns.

\*\*\*\*\*

Code: 9A12801

1

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**E-COMMERCE**

(Information Technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 How many types of E-commerce are there? Discuss them briefly.
- 2 Discuss about mercantile model from the Merchant's perspective.
- 3 What is a smart card? What are their types and uses?
- 4 Explain the working of financial EDI for E-commerce.
- 5 Discuss about the customization and internal commerce. Explain them briefly.
- 6 What concerns are used for the mobile enterprise? Explain in detail.
- 7 (a) Explain about categories of business value.  
(b) Discuss about the E-business intelligence tools for application development.
- 8 (a) What is Flawed infrastructure?  
(b) Write short notes on:
  - (i) Outside attacks
  - (ii) Inside attacks

\*\*\*\*\*

Code: 9A12801

2

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**E-COMMERCE**

(Information Technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 Explain the E-commerce consumer applications in detail.
- 2 Discuss about the Mercantile process models. Explain them briefly.
- 3 Discuss the advantages and disadvantages of various electronic payment systems.
- 4 What are financial EDI and financial VANS? State their applications.
- 5 What are the models available in supply chain management? Explain any one of the model with a suitable example.
- 6 What is WAN? Explain about the wireless WANS in detail.
- 7 Explain about the changing face of application development. Explain them briefly.
- 8 Write short notes on:
  - (a) Profiling
  - (b) Personalization
  - (c) Privacy

\*\*\*\*\*

Code: 9A12801

3

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**E-COMMERCE**

(Information Technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 Explain about the anatomy of E-commerce applications. Explain them briefly.
- 2 Discuss about mercantile model from Consumer's perspective.
- 3 How smart card payment system is better than credit card payment system? Explain in brief.
- 4 Explain the costs and benefits of EDI.
- 5 What is supply chain management? Discuss the key issues.
- 6 Explain about the wireless communication platforms for LANs in detail.
- 7 What is E-business? Explain about the E-business strategy in detail.
- 8 (a) What is a Cyber security need?  
(b) Explain about the Internet security education.

\*\*\*\*\*

Code: 9A12801

4

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**E-COMMERCE**

(Information Technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 Discuss about the generic frame work of electronic commerce.
- 2 Explain about the Mercantile transactions using credit cards.
- 3 (a) Write short notes on risks in electronic payment systems.  
(b) What are electronic payments issues? Explain them briefly.
- 4 What is EDI? How does it build up relationship between organizations?
- 5 Discuss about the workflow automation and co-ordination. Explain them briefly.
- 6 Explain in detail about wireless industry standards.
- 7 What are E-business requirements for rapid application development? Explain them briefly.
- 8 Discuss about bidding an E-commerce trust infrastructure.

\*\*\*\*\*



Code: 9A12804

1

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**CLOUD COMPUTING**  
(Information technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 What is a cluster? Explain its architecture and its role in high performance computing.
- 2 (a) Compare and contrast grid computing with cloud computing.  
(b) Briefly explain internet software evolution.
- 3 (a) Describe software as a service implementation issues.  
(b) Explain basic approach to a data center based SOA.
- 4 (a) "XMPP is a good fit for cloud computing." substantiate this statement.  
(b) Explain privacy and its relation to cloud based information systems.  
(c) Write about presence protocols.
- 5 Explain briefly the standards for application developers.
- 6 (a) Discuss Zoho cloud SQL.  
(b) Explain about collaboration applications for mobile platforms.
- 7 How to add a guest operating system to virtual box? Explain with illustrations.
- 8 (a) Write a note on Microsoft azure services platform.  
(b) What tasks can be accomplished by the developers through Google app engine?  
Discuss.

\*\*\*\*\*

Code: 9A12804

2

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**CLOUD COMPUTING**  
(Information technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 (a) Discuss parallel computing architectures.  
(b) Explain the importance of virtualization.
- 2 What are the key characteristics of cloud computing? Explain them.
- 3 (a) Describe the typical services provided by many MaaS vendors.  
(b) What is meant by collaboration? Discuss its role in building cloud networks.
- 4 (a) Discuss the basic types of federation.  
(b) Explain compliance as a service.
- 5 (a) Write about open virtualization format.  
(b) Briefly discuss the standards for messaging.
- 6 (a) "Dimdim is a good choice for presentation and online sharing." support or oppose.  
(b) Briefly describe mobile platform virtualization.
- 7 (a) Which is Amazon's storage solution for the internet? Explain.  
(b) Write about Amazon's EC2 service in detail.
- 8 (a) Discuss the features of Google app engine.  
(b) Write a note on Microsoft dynamics CRM online.

\*\*\*\*\*

Code: 9A12804

3

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**CLOUD COMPUTING**  
(Information technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 Explain in detail vector processing principles.
- 2 (a) Discuss the cloud based service offerings.  
(b) Briefly discuss the challenges for the cloud.
- 3 (a) Describe the key characteristics of platform as a service.  
(b) Write about Mosso cloud servers.  
(c) Discuss data center virtualization.
- 4 (a) How encrypted federation differs from trusted federation?  
(b) Explain identity as a service of cloud.  
(c) What is meant by federating identity?
- 5 (a) Discuss working groups of open cloud consortium.  
(b) Explain REST's effect on scalability.
- 6 (a) Write about Zimbra desktop and Zimbra collaboration suite.  
(b) Describe in detail Ubuntu MID edition.
- 7 "Amazon seems to have their finger in a number of cloud technologies." support or oppose with discussion.
- 8 (a) Write a note on Google web tool kit.  
(b) Describe windows Azure and its uses.

\*\*\*\*\*

Code: 9A12804

4

B. Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**CLOUD COMPUTING**

(Information technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 (a) What is a grid? What are the differences between grid computing and cluster computing?  
(b) Explain service oriented architecture concepts and its benefits.
- 2 Discuss the benefits of using a cloud model and also the evolution of cloud computing.
- 3 (a) Explain Amazon EC2 service characteristics.  
(b) Describe planning for SOA security.
- 4 (a) Discuss the privacy risks and the cloud.  
(b) Explain federated identity management.  
(c) Write about leveraging presence.
- 5 (a) Which stack is secure among LAMP and LAPP? Why?  
(b) Describe really simple syndication.
- 6 (a) What is a widget? Discuss widgets of YouTube API.  
(b) Explain the major components of the android operating system for mobile devices.
- 7 Write about Amazon simple DB. How does this service work closely with other services? Explain.
- 8 (a) Discuss the key features of Microsoft exchange online.  
(b) Write a detail note on Google app engine.

\*\*\*\*\*

B.Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**MANAGEMENT SCIENCE**

(Common to CSE, IT and CSSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 Critically evaluate the different leadership stages in an organization.
- 2 Explain the concept of organization as a process and as a structure.
- 3 Define factory layout. Discuss the objectives of factory layout.
- 4 What are the objectives and advantages of scientific inventory control?
- 5 What is Merit rating? What are its benefits and limitations? Explain any three methods of merit rating.
- 6 The following table gives the activities in a construction project and time duration.

Activity	Preceding activity	Normal time(days)
1 - 2	-	20
1 - 3	-	25
2 - 3	1 - 2	10
2 - 4	1 - 2	12
3 - 4	1 - 3, 2 - 3	5
4 - 5	2 - 4, 3 - 4	10

- (a) Draw the activity network of the project.
  - (b) Find the total float and free float for each activity.
  - (c) Determine the critical path and project duration.
- 7 Write short notes on the following:
    - (a) Generic strategy alternatives.
    - (b) Possible strategy variables.
    - (c) Pricing collaborations.
    - (d) Strategic deviations.
  - 8 How does TQM award model help in the process of bench marking? Explain.

\*\*\*\*\*

B.Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**MANAGEMENT SCIENCE**

(Common to CSE, IT and CSSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 Explain the Maslow's theory of Hierarchy of human needs.
- 2 Briefly explain the following:
  - (a) Line organization and functional organization.
  - (b) What is matrix organization?
- 3 What is plant layout? What are its different types? How do you control plant layout?
- 4 (a) What are the various functions of marketing?  
(b) What factors influence consumer behaviour?
- 5 (a) Explain the selection procedure and list various methods involved in it.  
(b) What are selections tests? What are various kinds of tests?
- 6 A project consists of 8 activities precedence relation and activity times are given. Draw the network and compute the critical path. Show the slack for each activity in a tabular column.

Activity	P	Q	R	S	T	U	V	W
Immediate predecessor	-	-	-	R	P, Q	T, S	S	U, V
Activity time(weeks)	12	20	28	12	28	12	8	8

- 7 Explain the strategies to improve sales performance of a strategic business unit.
- 8 Critically evaluate the ERP market in India.

\*\*\*\*\*

Code: 9AHS701

3

B.Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**MANAGEMENT SCIENCE**

(Common to CSE, IT and CSSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 (a) Explain the importance of management.  
(b) What are the challenges you have to face as a manager? Discuss.
- 2 What is meant by line and staff organization? Briefly explain with examples.
- 3 What are the factors influencing the fixed layout? List out its advantages and disadvantages.
- 4 Explain the following terms with the help of a neat diagram.  
(a) Economic order quantity and lead time.  
(b) Safety stock and re-order point.
- 5 (a) Explain the concept and various levels of human resource planning.  
(b) Discuss briefly the functions of a HR Manager.
- 6 (a) What is cost slope? What is its significance in project crashing?  
(b) Explain how you determine the probability of meeting the scheduled date of completion of a project.
- 7 Illustrate how multinationals have been translating their global strategies to suit to Indian context.
- 8 (a) What is the role of automation in JIT?  
(b) Explain the basic elements of JIT.

\*\*\*\*\*

Code: 9AHS701

4

B.Tech IV Year II Semester (R09) Regular Examinations, March/April 2013

**MANAGEMENT SCIENCE**

(Common to CSE, IT and CSSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

\*\*\*\*\*

- 1 What are the basic principles of management according to Henry Fayol's?
- 2 Explain the significance and advantages of functional organization.
- 3 What is process layout? Explain its merits and demerits.
- 4 With reference to an inventory model explain the following:
  - (a) Maximum stock.
  - (b) Safety stock.
  - (c) Lead time.
  - (d) Reorder point.
- 5 Define a job. Explain how job analysis forms the basis for job description and job specifications. How does it help the personnel manager in designing a job?
- 6
  - (a) Distinguish between PERT and CPM.
  - (b) What do you mean by project crashing? State the procedure involved in crashing.
- 7
  - (a) Define Mission and explain the components of mission statement.
  - (b) What do you understand by strategic business unit? Discuss its role and relevance in corporate planning.
- 8
  - (a) Define MRP and CRP and BOM.
  - (b) How MRP differs from inventory control.

\*\*\*\*\*