CS/IT 321

Hall Ticket Number:

III/ IV B.Tech (Supplementary) DEGREE EXAMINATION

April, 2018 **Common for CSE/IT**

Sixth Semester **Computer Networks**

Time: Three Hours **Maximum :** 60 Marks

Answer Question No.1 compulsorily. (1X12 = 12 Marks)

Answer ONE question from each unit. (4X12=48 Marks)

1. Answer all questions (1X12=12 Marks)

a.. Social issues of computer networks.
b. What is meant by store and forward packet switching?
c. Distinguish between adaptive and non-adaptive algorithms.
d. Uses of subnet?
e. Write techniques for achieving good quality of service.
f. What is fragmentation?
g. Uses of Berkeley sockets.
h. What is meant by transport entity?
i. What is multiplexing?
j. Write message formats for electronic mail.
k. Uses of HTTP.
l. Necessity of application layer.

UNIT I

2.a. Describe Protocol Hierarchies. 6M

2.b List two ways in which the OSI reference model and the TCP/IP reference model are same and also list two ways in which they differ. 6M

(OR)

3.a. Describe a Comparison of Virtual circuit and Data gram subnets. 6M

3.b. Explain Hierarchical Routing algorithm in detail. 6M

UNIT II

4.a. Describe Congestion prevention policies. 4M

4.b. Explain load shedding and jitter control in detail. 8M

(OR)

5.a. Describe Tunnelling in detail. 4M

5.b Explain Interior and Exterior Gateway routing protocols. 8M

UNIT III

6.a Explain Flow control and Buffering with relevant figures. 6M

6. b Describe Remote procedure call and the Real-Time transport protocol. 6M

(OR)

7.a. Illustrate TCP segment header with figure. 6M

7.b Describe TCP congestion control and TCP timer management. 6M

UNIT IV

8.a. Explain static and dynamic web documents with examples. 6M

8. b Describe Multimedia in detail. 6M

(OR)

9.a Illustrate DNS with relevant figures. 6M

9.b Describe Architectural Overview of WWW. 6M

CS/IT323

Hall Ticket Number:

III/IV B.Tech (Supplementary) DEGREE EXAMINATION

April, 2018 — **Computer Science & Engineering**

Sixth Semester — **Introduction to Data Analytics & Cyber Security**

Time: Three Hours — **Maximum :** 60 Marks

Answer Question No.1 compulsorily. (1X12 = 12 Marks)

Answer ONE question from each unit. (4X12=48 Marks)

1. Answer all questions (1X12=12 Marks)

a) Define Bigdata
b) How do set the path for current working directory in R?
c) Define correlation?
d) What is a normal distribution?
e) What is a Regression?
f) What is Business Intelligence?
g) How Anti-virus software works?
h) What is audit?
i) Define a Security Policy?
j) What is the difference between Worm and trojan?
k) Define Cyber security?
l) Define Cross-site scripting attack?

UNIT I

2. a) Write calculator and vector operations in R with examples? 6 M
   b) Explain normal distribution & binomial distribution with example. 6 M

(OR)

3. a) Explain the process of importing and exporting data into the following file format by using R program 6 M
      I. CSV File
      II. Excel file
   b) Explain outliers and missing data treatment with examples 6 M

UNIT II

4. a) Differentiate SQL vs. NOSQL 6 M
   b) What is an OLS Regression? 6 M
      Explain Regression Modelling techniques?

(OR)

5. a) Explain Correlation, Autocorrelation & Multi collinearity? 6 M
   b) The Business Analysis(BA) process can solve problems and identify opportunities to improve business performance-Justify 6 M

UNIT III

6. a) Explain about Common Vulnerabilities and Exposures (CVE)? 6 M
   b) Explain briefly types of trojans? 6 M

(OR)

7. a) Explain about Key elements of Network? 6 M
   b) What is SQL injection. Explain about phishing attack? 6 M

UNIT IV

8. a) Explain about information security roles and responsibilities? 6 M
   b) Write about Information security Laws, Reegulations & Guidelines.? 6 M

(OR)

9. a) Explain about feedback loops of Risk management? 6 M
   b) Explain about security Regulations and Guidelines? 6 M

CS/IT 324

Hall Ticket Number:

III/IV B.Tech (Supplementary) DEGREE EXAMINATION

April, 2018 — **Computer Science & Engineering**

Sixth Semester — **Software Engineering**

Time: Three Hours — **Maximum:** 60 Marks

Answer Question No.1 compulsorily. (1X12 = 12 Marks)

Answer ONE question from each unit. (4X12=48 Marks)

1. Answer all questions (1X12=12 Marks)
   a) Define Legacy Software.
   b) List types of process models.
   c) What is agility?
   d) Define Software Engineering in IEEE terms.
   e) Classify different types of modeling.
   f) Draw sample flow oriented model.
   g) Define Software Architecture?
   h) What is a Component?
   i) List out the Golden rules of User Interface Design.
   j) What is the strategic approach of testing?
   k) Define Validation testing.
   l) Define alpha and beta testing.

UNIT I

2. a) State and explain about Software Myths. 6M
   b) What is CMMI? Discuss in detail about CMMI. 6M

(OR)

3. a) Describe in detail about incremental process models. 6M
   b) Differentiate in your own terms about TSP and PSP. Which one is best as per your perception? Explain why? 6M

UNIT II

4. a) What are Communication practices and Construction practices 7M
   b) Explain about developing use cases. 5M

(OR)

5. a) Explain about requirements engineering concepts in brief. 7M
   b) Create a Class based model with an Example. 5M

UNIT III

6. a) Illustrate about Design model. 6M
   b) How mapping data flow into software architecture. 6M

(OR)

7. a) Discuss about Object constraint language explain with an example. 7M
   b) Explain about Golden rules of user interface design. 5M

UNIT IV

8. a) What are the testing strategies for conventional software. 6M
   b) Discuss about Formal technical reviews. 6M

(OR)

9. a) Differentiate between White box and Black box testing. 7M
   b) Construct a Framework for Product metrics and its purpose. 5M

Hall Ticket Number **CS324**

III/IV B.Tech (Regular) DEGREE EXAMINATION
(Common to CSE)

Time: 3 Hours **Max.Marks:60**

Part A

Answer All Questions **Each Question Carries Equal Marks** **12 x 1 = 12 M**

1. a) Define Legacy Software.
   b) List types of process models.
   c) What is agility?
   d) Define Software Engineering in IEEE terms.
   e) Classify different types of modeling.
   f) Draw sample flow oriented model.
   g) Define Software Architecture?
   h) What is a Component?
   i) List out the Golden rules of User Interface Design.
   j) What is the strategic approach of testing?
   k) Define Validation testing.

Part B

Answer One Question from each Unit. **4 x 12 = 48 M**

UNIT – I

2. a) State and explain about Software Myths. 6 M
   b) What is CMMI? Discuss in detail about CMMI. 6 M

(OR)

3. a) Describe in detail about incremental process models. 6 M
   b) Differentiate in your own terms about TSP and PSP. Which one is best as per Your perception? Explain why? 6 M

UNIT – II

4. a) What are Communication practices and Construction practices.. 7 M

b) Explain about developing use cases. 5 M

(OR)

5. a) Explain about requirements engineering concepts in brief. 7 M

b) Create a Class based model with an Example. 5 M

UNIT – III

6. a) Illustrate about Design model. 6 M

b) How mapping data flow into software architecture. 6 M

(OR)

7. a) Discuss about Object constraint language explain with an example. 7M

b) Explain about Golden rules of user interface design. 5 M

UNIT – IV

8. a) What are the testing strategies for conventional software. 6 M

b) Discuss about Formal technical reviews. 6 M

(OR)

9. a) Differentiate between White box and Black box testing. 7 M

b) Construct a Framework for Product metrics and its purpose. 5 M

Scheme of evaluation for Software Engineering.

Part - A

1. a) Definition - 1M.

b) Any Names of Models – 1M

c) Definition – 1M

d) IEEE definition – 1M

e) Any Names of two types of modeling – 1M

f) Any sample flow oriented model – 1M

g) Definition – 1M

h) Component definition – 1M

i) List of any one rule – 1M

j) Approach explanation – 1M

k) Definition – 1M

Part – B

2. a) Types of Software Myths. 2 M

Explanation 4 M

b) Definition of CMMI 1M

Detailed explanation. 5 M

(OR)

3. a) Explanation of incremental process models. 6 M

b) PSP – 2 M

TSP – 2 M

Perception and Reason – 2 M

4. a) Communication practices 3M

Construction practices.. 4 M

b) Use cases development procedure. 5 M

(OR)

5. a) Explanation about REP. 7 M

b) Explanation of Class based model 4M.

Example 1 M

6. a) Design model Explanation with diagrams. 6 M

b) Mapping data flow procedure to SA. 6 M

(OR)

7. a) Explanation of Object constraint language. 5 M

Example 2M

b) Naming three Golden rules 2 M

Explanation 3 M

8. a) Detailed description of strategies. 6 M

b) Explanation of Formal technical reviews. 6 M

(OR)

9. a) Description of BBT 2 M.

Description of WBT 2 M.

Differences 3M

b) Clear Framework 4 M

Purpose 1 M

CS/IT 325

III/IV B.Tech (Supplementary) DEGREE EXAMINATION

April, 2018 **Common for CSE & IT**

Sixth Semester **Enterprise Programming**

Time: Three Hours **Maximum :** 60 Marks

Answer Question No.1 compulsorily. (1X12 = 12 Marks)

Answer ONE question from each unit. (4X12=48 Marks)

1 Answer all questions (1X12=12 Marks)

a) What are the Standard Services provided by J2EE?
b) How to say XML document is validated.
c) Differentiate servlet and CGI.
d) What is the purpose of web.xml?
e) What are the types of Session Bean?
f) Write the syntax for variable declaration in JSP.
g) What are the advantages of RMI?
h) What is the purpose of JMS?
i) Describe WSDL.
j) Define Distributed Object Model.
k) What are the disadvantages of Web services?
l) What is the API for SOAP Web Service?

UNIT I

2 a) Explain J2EE multi tire architecture with neat diagram 6M
b) Explain Servlet Life Cycle methods with simple example. 6M

(OR)

3 a) Explain about service tier patterns. 6M
b) Explain how to read the Servlet initialization parameters with an example. 6M

UNIT II

4 a) Explain about JSP scripting elements with an examples. 6M
b) Discuss about EJB roles, relationships and responsibilities. 6M

(OR)

5 a) Write about JSP Implicit Objects. 6M
b) Explain EJB Container Functionality. 6M

UNIT III

6 a) Explain about JMS. 6M
b) Explain Java Mail API with a simple application. 6M

(OR)

7 a) Explain RMI Architecture with a neat diagram. 6M
b) Explain the classes available in JNDI. 6M

UNIT IV

8 a) What is UDDI? Discuss UDDI architecture. 6M
b) Explain Web Services in Service Oriented Architecture. 6M

(OR)

9 a) Explain SOAP Message Architecture. 6M
b) Write short notes on Electronic Business XML. 6M

CS/IT 326(E)

Hall Ticket Number:

III/IV B.Tech (Supplementary) DEGREE EXAMINATION

April, 2018 **Common for CSE & IT**

Sixth Semester **.NET Technologies**

Time: Three Hours **Maximum:** 60 Marks

Answer Question No.1 compulsorily. (1X12 = 12 Marks)

Answer ONE question from each unit. (4X12=48 Marks)

1. Answer all questions (1X12=12 Marks)
   a) What is the .NET Framework?
   b) How arrays are declared and initialized in C#?
   c) What is the member accessibility operator in C#?
   d) What is the use of Generic Type?
   e) What is the purpose of the Memory Stream Class?
   f) Define multicast delegate.
   g) What is the purpose of the Thread Pool class?
   h) What is Reflection?
   i) Differentiate between managed and unmanaged code.
   j) Compare Data Set and Data Table Reader.
   k) What is ADO.NET?
   l) What is the purpose of Master Pages in ASP.NET?

UNIT I

2. a) Explain about Generics in C# with an example. 6M
   b) Define Collections? Explain different types of Collections. 6M

(OR)

3. a) What is the difference between Using statement and Try, Catch blocks? 6M
   b) What do you mean by delegate? Explain the syntax of delegate and Multicast delegate 6M

UNIT II

4. a) Explain about App domains with an example. 6M
   b) Explain about cryptography and data production with an example. 6M

(OR)

5. a) Write a C# program to access data records from SQL server database. 6M
   b) How to use ADO.NET? Explain the different Data Providers with an example. 6M

UNIT III

6. a) Describe the implementation of Authentication and Security in ASP.NET 6M
   b) What is State Management? Explain bout Client-side and Server-side state management in ASP.NET 6M

(OR)

7. a) Explain about life cycle management in ASP.NET. 6M
   b) Define SOAP? Explain the steps to create Web Services in ASP.NET 6M

UNIT IV

8. a) Describe about different windows form controls 6M
      i) Menu Strip ii) Tools Strip iii) Status Strip
   b) Different types of Navigation controls in ASP.net? 6M

(OR)

9. a) Difference between Server. Transfer, Server. Execute and Response.Redirect in ASP.net? 6M
   b) Difference between Data Set and Data Reader? 6M