

**F 3760**

Reg. No.....

Name.....

**B.TECH. DEGREE EXAMINATION, NOVEMBER 2010**

**Eighth Semester**

Branch : Computer Science Engineering/Information Technology

**DISTRIBUTED COMPUTING—(Elective II) (RT)**

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

*Answer all the questions.*

**Part A**

*Each question carries 4 marks.*

1. What are the advantages and disadvantages of distributed systems ?
2. Distinguish between Centralized and Distributed system.
3. Discuss file service architecture.
4. Discuss about name services.
5. Define the distributed mutual exclusion problem.
6. What is meant by clock synchronization ? Explain.
7. Discuss about Resource Management.
8. Discuss about "threads" and "process".
9. Discuss the methods of transaction recovery.
10. Explain dead locks in distributed systems.

(10 × 4 = 40 marks)

**Part B**

*Answer any five questions.*

*Each question carries 12 marks.*

11. Write notes on "evolution and characteristics of Distributed System. (12 marks)
12. Discuss about network technology and protocols used in DS. (12 marks)
13. Discuss in detail the file service architecture. (12 marks)
14. Discuss about distributed file systems. (12 marks)
15. Write notes on :
  - (i) Mutual exclusion. (6 marks)
  - (ii) Clock synchronization. (6 marks)
16. What is RPC ? Explain the need of marshalling ? What is stub matching ? (12 marks)
17. Write notes on "Scheduling algorithms". (12 marks)
18. Explain in detail process migration mechanism. (12 marks)
19. Explain server crash failures and Byzantine failures. (12 marks)
20. Define fault tolerance. Describe various approaches to masking faults. (12 marks)

[5 × 12 = 60 marks]

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**B.TECH. DEGREE EXAMINATION, NOVEMBER 2010**

**Eighth Semester**

Branch : Computer Science and Engineering / Information Technology.

**NEURAL NETWORKS (Elective III) (R T)**

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

**Part A**

*Answer all questions.*

*Each question carries 4 marks.*

1. Explain with a diagram, a components of artificial neuron.
2. Define linear separability.
3. What are the types of CPN ? Explain.
4. What is meant by supervised training ?
5. What are the applications of BPN ?
6. What is Kebenon layer ? How to train this layer ?
7. How is Boltzmann machine used to optimize non-linear problems ?
8. What is meant by statistical networks ? Mention its advantages .
9. Discuss about associative memories.
10. Discuss Recurrent networks.

(10 × 4 = 40 marks)

**Part B**

*Each question carries 12 marks.*

11. (a) Compare the characteristics of artificial neuron and biological neuron.

(6 marks)

*Or*

- (b) Discuss learning rules in ANN.

(6 marks)

12. Explain the following : —

(i) Single layer networks.

(6 marks)

(ii) Multilayer networks.

(6 marks)

**Turn over**

13. Explain training algorithm used in Basic propagation net.

(12 marks)

Or

14. Explain in detail the applications of BPN.

(12 marks)

15. Discuss training methods used in CPN network.

(12 marks)

Or

16. Explain the applications of full (CPN) counter propagation network.

(12 marks)

17. State the application algorithm used in Cauchy's machine.

(12 marks)

Or

18. Explain artificial heat methods.

(12 marks)

19. Explain about continuous BAM.

(12 marks)

Or

20. What are the two types of learnings in the ART net ?

(12 marks)

[5 × 12 = 60 marks]

Part B

Each question carries 12 marks

11. (a) Compare the characteristics of artificial neuron and biological neuron.

(8 marks)

Or

(b) Discuss learning rules in ANN.

(8 marks)

12. Explain the following :-

(i) Single layer network

(ii) Multilayer network

Turn over

**F 3713**

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**B.TECH. DEGREE EXAMINATION, NOVEMBER 2010**

**Eighth Semester**

**Branch : Information Technology**

**INFORMATION SYSTEMS AND MANAGEMENT (T)**

**(Supplementary)**

**Time : Three Hours**

**Maximum : 100 Marks**

*Answer all the questions.*

**Part A**

1. Differentiate classical approach to system approach in organization.
2. List out the factors affecting productivity.
3. What is databank ?
4. What are the objectives of MIS ?
5. What is Management Information Systems ?
6. Discuss planning of strategics for MIS.
7. Mention the benefits of ERP.
8. How users and consultants are connected to MIS ?
9. Explain briefly about DSS.
10. List out the applications of Datamining.

(10 × 4 = 40 marks)

**Part B**

11. (a) Discuss in detail about management and organizational behaviour.  
*Or*  
(b) Write short note on :
  - (i) Organizational effectiveness.
  - (ii) Tasks and functions of management.
12. (a) Discuss in detail about information systems for decision-making. Also explain about automation of decision-making.  
*Or*  
(b) Discuss in detail about any *two* decision assisting information systems.
13. (a) Explain the detailed system design of an MIS.  
*Or*  
(b) What are the difficulties in implementing MIS ? Discuss with appropriate examples.
14. (a) What are the characteristics of ERP ? What are its components ?  
*Or*  
(b) Discuss in detail about the ERP implementation process.
15. (a) Discuss in detail about decision support tools in DSS.  
*Or*  
(b) Explain about "Data Warehousing and Knowledge Management. Also discuss about knowledge based decision support.

(5 × 12 = 60 marks)

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**B.TECH. DEGREE EXAMINATION, NOVEMBER 2010**

**Eighth Semester**

Branch : Computer Science and Engineering/Information Technology

**CLIENT SERVER COMPUTING—(Elective II) (RT)**

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

*Answer all the questions.*

**Part A**

*Each question carries 4 marks.*

1. What is meant by Hetrogenous computing ?
2. Mention the advantages and disadvantages of client server computing.
3. Discuss about client/server development tools.
4. What is request for service ? Explain the basic service provided by NOS.
5. Compare Multiprogramming with Multitasking.
6. Discuss about advantages of multiple processor.
7. Discuss about "semaphores".
8. Discuss "Critical Sections".
9. Discuss about "Kernal Structure".
10. Describe inter processor communication.

(10 × 4 = 40 marks)

**Part B**

*Each question carries 12 marks.*

11. Write notes on client server computing and cross platform computing. (12 marks)  
*Or*
12. Discuss about client-server databases. (12 marks)
13. Explain the fundamentals of client server design. (12 marks)  
*Or*
14. Discuss about client server communication protocol. (12 marks)
15. Write notes on multi programming. (12 marks)  
*Or*
16. Explain Windows NT for developing client-server application. (12 marks)
17. How to create semaphore and explain semaphore implementations in NT. (12 marks)  
*Or*
18. Write notes on :  
(i) Context switching.  
(ii) Preemptive systems. (12 marks)
19. Write notes "Communication protocols". (12 marks)  
*Or*
20. Discuss the importance of the Kernel structure for network communication. (12 marks)

[5 × 12 = 60 marks]

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**B.TECH. DEGREE EXAMINATION, NOVEMBER 2010**

**Eighth Semester**

Branch : Information Theory

E-COMMERCE (T)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

**Part A**

*Each question carries 4 marks.*

1. What is E-Commerce ? Explain with an example.
2. Explain how WWW related with E-Commerce ?
3. What are the types of Electronic Payment Systems ?
4. Short note on "Online Payment Process".
5. What is EDI ? Explain its applications in business.
6. Define MIME and explain Gateways.
7. Explain the types of Digital Documents.
8. List the advantages of data warehouses.
9. Short note on "Mobile Computing".
10. What is meant by "Marketing on the Internet" ?

(10 × 4 = 40 marks)

**Part B**

*Each question carries 12 marks.*

11. Give the anatomy of E-commerce and its applications. (12 marks)  
*Or*
12. List the organizational applications of e-commerce and explain. (12 marks)
13. What is Credit card ? Explain credit card based payment system. (12 marks)  
*Or*
14. Compare different types of electronic payment system. (12 marks)
15. Explain the internet based EDI in detail. (12 marks)  
*Or*
16. Short notes on :
  - (i) Security and Privacy issues of EDI. (6 marks)
  - (ii) EDI standardization. (6 marks)

**Turn over**

17. What is document library ? Explain its function.

(12 marks)

Or

18. Explain Internal Information System in detail.

(12 marks)

19. Explain wireless computing technique in detail.

(12 marks)

Or

20. Short notes on :

(i) Multimedia in E-commerce.

(6 marks)

(ii) SMDS.

(6 marks)

[5 × 12 = 60 marks]

Part A

Each question carries 4 marks

1. What is E-commerce ? Explain with an example.
2. Explain how WWW related with E-commerce ?
3. What are the types of Electronic Payment Systems ?
4. Short note on "Online Payment Process".
5. What is EDI ? Explain its applications in business.
6. Define MIME and explain Gateway.
7. Explain the types of Digital Documents.
8. List the advantages of data warehouse.
9. Short note on "Mobile Computing".
10. What is meant by "Marketing on the Internet" ?

(10 × 4 = 40 marks)

Part B

Each question carries 12 marks

11. Give the anatomy of E-commerce and its applications.  
(12 marks)
12. List the organizational applications of e-commerce and explain.  
(12 marks)
13. What is Credit card ? Explain credit card based payment system.  
(12 marks)
14. Compare different types of electronic payment system.  
(12 marks)
15. Explain the internet based EDI in detail.  
(12 marks)
16. Short notes on :  
(i) Security and Privacy issues of EDI. (6 marks)  
(ii) EDI standardization. (6 marks)

Total over

**F 3704**

Reg. No. IT.....

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**B.TECH. DEGREE EXAMINATION, NOVEMBER 2010**

**Eighth Semester**

Branch : Computer Science and Engineering/Information Technology

**SECURITY IN COMPUTING (R,T)**

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

*Answer all the questions.*

**Part A**

*Each question carries 4 marks.*

1. What is Hackers ?
2. What is Trojan Horse ?
3. Mention the different protection mechanisms of OS.
4. What are all the different types of holes ?
5. What is Cryptography ?
6. Mention the important features of modern symmetric key algorithms.
7. What is secure socket layer ?
8. What is Firewalls ?
9. What do you mean by data security ?
10. Explain the security requirements in database.

(10 × 4 = 40 marks)

**Part B**

*Answer all, each carries 12 marks.*

11. (a) Explain the different aspects of network security.  
*Or*  
(b) Discuss in detail about security services and mechanisms.
12. (a) Discuss in detail about discretionary and Mandatory Access Control.  
*Or*  
(b) Discuss in detail about access control and remote execution in UNIX.
13. (a) Discuss in detail about Fiestal network and DES algorithm.  
*Or*  
(b) Write a technical note on Digital Signature.
14. (a) With neat diagram, explain about IP security architecture.  
*Or*  
(b) Discuss in detail about Secure Electronic Transaction.
15. (a) Discuss in detail about MAC for multilevel security.  
*Or*  
(b) Explain about the security issues in data security and also explain about statistical database security.

(5 × 12 = 60 marks)



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**B.TECH. DEGREE EXAMINATION, NOVEMBER 2010**

**Eighth Semester**

Branch : Computer Science and Engineering / Information Technology

**ARTIFICIAL INTELLIGENCE (R, T)**

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

*Answer all questions.*

**Part A**

*Each question carries 4 marks.*

1. Discuss problem characteristics.
2. What is meant by bi-directional search?
3. What is informed search?
4. What is Iterative deepening?
5. Discuss Alpha-Beta cut-off.
6. What is meant by semantic net?
7. Discuss about learning knowledge acquisition.
8. What is unification?
9. Discuss search strategies.
10. What is meant by Recursive search?

(10 × 4 = 40 marks)

**Part B**

*Each question carries 12 marks.*

11. Write notes on problems and problem spaces.

*Or*

12. Explain constraint satisfaction search and breadth first search.
13. Describe A\* algorithm with suitable example.

*Or*

14. How does hill climbing ensure greedy local search? What are the problems of hill climbing?

**Turn over**

15. Describe knowledge structures and imperfect decisions.

Or

16. Construct semantic net representations for the following :

Pomepeian (Marcus),

Blacksmith (Marcus)

Marry have the green flowered vase to her favourite cousin.

17. Discuss representation of knowledge and reasoning with logic.

Or

18. Explain forward and backward chaining with suitable examples.

19. Write notes on :

(a) Meta predicates.

(b) Meta interpreters.

(6 + 6 = 12 marks)

Or

20. Explain the implementation of semantic nets in prolog.

[5 × 12 = 60 marks]