G 1158

(Pages : 2)

Reg. No.....17.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2012

Eighth Semester

Branch : Computer Science/Information Technology

SECURITY IN COMPUTING (RT)

(Regular/Supplementary)

Time : Three Hours

Maximum : 100 Mar

Part A

Answer **all** *questions.*

Each question carries 4 *marks.*

1. Explain Digital Signature.
2. What are the different Authentication mechanisms adopted for OS security?
3. What are Firewalls?
4. What is a Virus?
5. Describe SQL Security.
6. Write the need for encryption and decryption.
7. What are the common intrusion techniques?
8. Write briefly on Applet security.
9. Illustrate the different official levels of computer security.
10. Write the need for database security.

(10 × 4 = 40 marks)

Part B

Answer **all** *questions.*

Each question carries 12 *marks.*

11. Explain the different security services and mechanism provided for network security.

(12 marks)

Or

12. Explain briefly :

    (a) Trojan Horse.

    (b) Worm.

(6 + 6 = 12 marks)

Turn over

13. Discuss the need for OS security. Describe the protection mechanisms adopted for OS security.

(12 marks)

Or

14. Discuss the security features for authentication, access control and remote execution in Windows 2000.

(12 marks)

15. Explain DES algorithm. Discuss the strength of DES algorithm.

(12 marks)

Or

16. (a) Explain RSA algorithm. Compare RSA algorithm with DES algorithm.

(b) Explain the importance of Hash functions.

(6 + 6 = 12 marks)

17. Explain, with an example, E-mail security.

(12 marks)

Or

18. Explain briefly :

(a) Kerberos.

(b) S/MIME.

(6 + 6 = 12 marks)

19. Discuss the security issues for databases and how database security is provided.

(12 marks)

Or

20. (a) Write briefly on statistical database security.

(b) Explain how MAC provides multilevel security for databases.

(6 + 6 = 12 marks)

[5 × 12 = 60 marks]

G 1167 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2012

Eighth Semester

Branch : Information Technology

INFORMATION SYSTEMS AND MANAGEMENT (T)

(Regular/Supplementary)

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*

Each question carries 4 *marks.*

1. Planning is a major function of Management. Discuss.
2. Describe the classical approach of organisation.
3. Define Automation.
4. Explain the DataBank concept.
5. What are the major problems to be faced in implementing an MIS?
6. What is meant by "Conceptual Design"?
7. Write a note on ERP modules.
8. Discuss the new trends in ERP.
9. What is meant by Data mining?
10. Explain the concept of Knowledge Management.

(10 × 4 = 40 marks)

Part B

Each question carries 12 *marks.*

11. (a) Describe the placement of MIS organisation in a company with the help of an example.

Or

(b) How does organizational theory differ from Management theory? Explain any *two* organizational theories.

12. (a) Discuss the steps involved in the conversion of Manual to Computer-based Information System.

Or

(b) Differentiate between batch processing and real-time application of MIS. Discuss about the application areas of each of them.

Turn over

13. (a) Establish the relationship between Strategic planning, Project planning and MIS with a real life example.

Or

(b) What is meant by Early System testing? Explain the different ways to do it.

14. (a) Discuss the reasons for the growth of ERP Market. Explain the integration of Information through ERP systems.

Or

(b) Compare and contrast any *two* of the ERP packages established in the market.

15. (a) Explain how information systems can assist managers in improving decision-making. Quote examples.

Or

(b) Describe the concept of Data warehousing. What are its features? Where is it applicable?

(5 × 12 = 60 marks)

G 1178 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2012

Eighth Semester

Branch : Information Technology

E-COMMERCE (T)

(Regular/Supplementary)

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*

Each question carries 4 *marks.*

1. What is Just-in-time marketing? Explain.
2. What is meant by supply chain management?
3. Write notes on e-cash.
4. Comment on the suitability of EFT for commercial payments.
5. Explain what is MIME.
6. What are digital signatures? Explain.
7. What are data warehouses? How are they useful?
8. Explain what are active documents.
9. Differentiate between pull based and push based advertising.
10. What are the advantages of digital video over analog video?

(10 × 4 = 40 marks)

Part B

Each question carries 12 *marks.*

11. Explain the various transport routes available for e-commerce.

Or

12. Discuss the consumer e-commerce applications.

13. Discuss the various types of electronic tokens for payments in detail.

Or

14. Explain, what are credit cards? Show how credit card payments are processed.

Turn over

15. Examine the benefits of EDI in detail.

Or

16. Examine the usefulness of internet for EDI.

17. Discuss the various types of digital documents.

Or

18. Discuss the role of internal information systems.

19. Explain ATM in detail.

Or

20. Explain the features of cell relay and frame relay.

(5 × 12 = 60 marks)

G 1185 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2012

Eighth Semester

Branch : Computer Science and Engineering/Information Technology

ARTIFICIAL INTELLIGENCE (RT)

(Regular/Supplementary)

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 4 *marks.*

1. Give two examples of real world problems that can be solved by AI.
2. What is meant by search tree ?
3. Name the four factors based on which search algorithms are judged.
4. Show that if a heuristic is consistent, it must be admissible.
5. Explain simulated annealing.
6. How is the speed of mini-max algorithm improved ?
7. Distinguish between Forward and Backward chaining.
8. What is meant by resolution ? What are its different types ?
9. What is meant by tautology ?
10. Give example of a parse tree.

(10 × 4 = 40 marks)

Part B

Answer **all** *questions.*
Each question carries 12 *marks.*

11. Explain breadth first and depth first search algorithms. Illustrate a problem where the former algorithm would work better than the later.

Or

12. Explain iterative deepening depth first search. What are its advantages ?

13. Explain various Heuristic search strategies.

Or

14. Explain Hill climbing search algorithm.

15. Explain Mini-Max algorithm.

Or

16. Explain the basics of application of AI in a typical state of the art deterministic game.

Turn over

17. State and explain resolution theorem.

Or

18. Explain unification of predicates.

19. (a) What is meant by non-monotonic reasoning ?

(b) With example, explain metapredicates.

Or

20. Explain semantic nets and frames in prolog.

(5 × 12 = 60 marks)

G 1215 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2012

Eighth Semester

Branch : Computer Science and Engineering/Information Technology

CLIENT – SERVER COMPUTING (Elective II) (R T)

(Regular/Supplementary)

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*

Each question carries 4 *marks.*

1. What are semaphores?
2. Write briefly on the fundamentals of client-server design.
3. What is a processing queue?
4. Discuss the uses of client-server computing.
5. Explain Network Communication.
6. What is Multitasking?
7. Explain the concept of Thread.
8. What is Heterogenous computing?
9. Write examples of client-server implementation.
10. Discuss the different communication protocols.

(10 × 4 = 40 marks)

Part B

Answer **all** *questions.*

Each question carries 12 *marks.*

11. Explain the relevance of client-server computing. Discuss its advantages and disadvantages.

(12 marks)

Or

12. Write technical notes on :
    (a) Distributed computing.
    (b) Client-server databases.

(6 + 6 = 12 marks)

Turn over

13. Explain the process of preparing applications for client-server and optimization of applications for client-server.

(6 + 6 = 12 marks)

Or

14. Write briefly on :

(a) Client-server interaction protocols.

(b) Client-server interaction management.

(6 + 6 = 12 marks)

15. (a) Explain child and parent processor.

(b) Discuss the disadvantages of multiple processors.

(6 + 6 = 12 marks)

Or

16. (a) Explain the uses of Threads.

(b) Discuss server communication model.

(6 + 6 = 12 marks)

17. Explain the concept of context switching. Explain context switching pre-emptive systems.

(12 marks)

Or

18. Explain the uses of semaphores. Briefly illustrate the semaphore implementations in NT and Netware.

(12 marks)

19. (a) Explain how Network communication is achieved.

(b) Explain Interprocess Communication.

(6 + 6 = 12 marks)

Or

20. Discuss the different client-server applications and explain how portable client-server applications can be built.

(12 marks)

[5 × 12 = 60 marks]

G 1250 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2012

Eighth Semester

Branch : Computer Science and Engineering / Information Technology

NEURAL NETWORKS (Elective III) (RT)

(Regular/Supplementary)

Time : Three Hours Maximum : 100 Marks

Answer **all** *questions.*

Part A

Each question carries 4 *marks.*

1. Explain the principle of an Artificial neuron.
2. What is linear separability ?
3. What are the applications of BPN ?
4. Differentiate between local minima and global minima.
5. What are the two types of CPN ?
6. What is Grossberg learning rule ?
7. Explain neocagnitron network in brief.
8. What is Cauchy's learning rule ?
9. What are the advantages of recurrent nets ?
10. What are the three states of ART network ?

(10 × 4 = 40 marks)

Part B

Each question carries 12 *marks.*

11. Discuss on the development of ANN.

Or

12. Describe the training algorithms used in ANN.
13. Explain with diagram the architecture of a back propagation network.

Or

14. Discuss on the optimization technique used in back propagation algorithm.

Turn over

15. State and explain the application algorithm used in full CPN.

Or

16. With the Architecture, give a detailed description of forward only CPN.

17. Describe the structure of simulated annealing algorithm.

Or

18. Discuss on the applications of statistical methods for the optimization non-linear problems.

19. Draw the architecture of a BAM network and discuss on its training algorithm.

Or

20. Explain the basic structure and operation of ART network.

(5 × 12 = 60 marks)

G 1252 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2012

Eighth Semester

Branch : Computer Science and Engineering / Information Technology

BIOMETRICS (Elective III) (R, T)

(Regular/Supplementary)

Time : Three Hours Maximum : 100 Marks

Answer **all** *questions.*

Part A

Each question carries 4 *marks.*

1. Differentiate between Physiological and behavioural characteristics of human being. Give examples for each.
2. Define false non-match rate. What is its importance ?
3. What are the strengths of finger scan biometric ?
4. Discuss the challenges in Facial scan.
5. Explain the user discomfort with eye-based technology.
6. What are the weaknesses of voice scan ?
7. Explain the template generation process in retina-scan.
8. Compare AFIS and Finger-scan.
9. Explain the need for standard in biometrics.
10. Define Urgency, exclusivity and receptiveness in connection with biometric diployment.

(10 × 4 = 40 marks)

Part B

Each question carries 12 *marks.*

11. What are the advantages of biometrics compared to traditional authentication methods ?

Or

12. Explain with diagrams how biometric matching work.
13. Explain the working of finger scan technology.

Or

14. Explain the strengths and weaknesses of facial-scan technology.

Turn over

15. What is the role of infrared sensors in iris recognition ? Explain in detail.

Or

16. Discuss the various artifacts used for voice biometrics.

17. Explain in detail the automatic fingerprint identification system.

Or

18. Describe in detail the working and application of any *one* type of behavioural biometric system.

19. Discuss the designing privacy sympathetic biometrics system.

Or

20. Explain with examples the role of biometric solution matrices in the deployment of biometric systems for authentication problems.

(5 × 12 = 60 marks)