Sixth Semester B.Sc. Computer Science Degree Examination

Model Question Paper

CS 1641 INTRODUCTION TO INFORMATION SECURITY

Time 3hrs   Max Marks :80

SECTION A (Very Short Answer)

One word to maximum one sentences, Answer all questions

1. What is cryptography?

2. What do you mean by network security?

3. Define phishing?

4. What do you mean by worms?

5. What is stenography?

6. What is PGP?

7. What is a block cipher?

8. What do you mean by authentication?

9. What do you mean by DSS?

10. An attempt by an attacker to disallow authorized users from accessing a resource is called ……?

(10x1=10 Marks)

SECTION –B (short Answer)

Not to exceed **one** paragraph, Answer any eight questions. Each question carries **2 marks**

11. What is a block cipher?

12. Explain S/MIME.

13. Diffrenciate between confidentiality and Integrity in network security.

14. How does a DNS work?

15. What is digital signature?

16. What are the strengths and weakness of public key?

17. What do you know about biometric authentication method?

18. Write a note on IPV6.

19. What is a macro virus?

20. What are the elements of network security?

21. What is Gateway?

22. What is firewall?

(8 x 2=16 Marks)

SECTION-C (Short Essay)

Not to exceed 120 words, answer any six questions. Each question carries 4 Marks.

23. What is Secure Socket Layer? Explain..

24. Compare MD5 with MD4.

25. What are the different security services? Explain.

26. Write a note on hacking.

27. Write a note on firewall architecture.

28. Explain play cipher with example.

29. What are the different types of substitution ciphers? Explain.

30. Explain the applications and limitations of stenography.

31. Write a note on key generation in RSA.

(6 x 4=24 Marks)

SECTION-D (Long Essay)

Answer any **two** questions. Each question carries **15 marks**

32. Write a detail note on SSL?.

33. Explain about block cipher modes of operation.

34. Explain about various algorithms for Digital signature.

35. Write a detail note on IPSec.

(2 x 15=30 Marks)

Sixth Semester B.Sc. Computer Science Degree Examination

Model Question Paper

CS 1642 ARTIFICIAL INTELLIGENCE

Time 3hrs   Max Marks :80

SECTION A (Very Short Answer)

One word to maximum one sentences, Answer all questions

1.Define AI?

2.What is knowledge?

3.What do you mean by semantics?

4.What is parsing?

5.What is DENDRAL?

6.What do you mean by the term heuristic?

7.Name two commonly used languages for AI?

8.Define Meta knowledge?

9.What do you mean by Artificial Neural Network?

10.What is a Script?

                                                      (10x1=10 Marks)

SECTION –B (short Answer)

Not to exceed **one** paragraph, Answer any eight questions. Each question carries **2 marks**

11.What are expert systems?

12.What do you mean by alpha-beta pruning?

13.Write a short note on PROLOG?

14.What do you mean by speech coding?

15.Write a short note on semantic nets.

16.What is branching factor?

17.What do you mean by speech coding?

18. What do you mean by the term combinatorial explosion?

19. Differenciate between forward and backward reasoning?

20. What is Min-Max in game playing?

21. What do you mean by Natural Language Processing(NLP)?

22. Explain Knowledge representation.

(8 x 2=16 Marks)

SECTION-C (Short Essay)

Not to exceed 120 words, answer any six questions. Each question carries 4 Marks.

23. What are the issues in NLP?

24. Write a note on fuzzy set operators.

25. Explain MINIMAX search procedure.

26. Explain the steps in speech recognition.

27. Write a note on propositional Logic.

28. Explain HIllClimbing Problem.

29. What are the applications of AI?

30. Explain the steps in speech processing.

31. Explain ROBOT

(6 x 4=24 Marks)

SECTION-D (Long Essay)

Answer any **two** questions. Each question carries **15 marks**

32. Explain in detail the architecture of expert systems.

33. Discuss the steps in Natural Language Processing

34 .Write note on

a)Predicate Logic

b)Propositional Logic.

35. Explain about brute force search methods in AI.

(2 x 15=30 Marks)

Sixth Semester B.Sc. Computer Science Degree Examination

Model Question Paper

CS 1643 E-COMMERCE & E-GOVERNANCE

Time 3hrs   Max Marks :80

SECTION A (Very Short Answer)

One word to maximum one sentences, Answer all questions

1.Define e-Commerce.

2.Define B2B.

3.Differenciate e-money and e-payment.

4.Define e-risk.

5.What is e-government.

6.what is outsourcing?

7.What is a credit card.

8.What is EFT?

9.What is M-Commerce?

10.Define web banner.

                                                                          (10x1=10 Marks)

SECTION –B (short Answer)

Not to exceed **one** paragraph, Answer any **eight** questions. Each question carries **2 marks**

11.What is LBS?

12.Explain the different biometrics in Indian scenario.

13.List down the steps of online shopping?

14.What is virtual space?

15.Compare digital payment and e-payment.

16.Write about outsourcing and on site work.

17. What are the application requirements of e-governance?

18. What is G2E?

19. Write a note on open source software.

20. Differenciate debit and credit card.

21 What are the main security issues in e-commerce?

22 Explain the functions of web server?

(8 x 2=16 Marks)

SECTION-C (Short Essay)

Not to exceed 120 words, answer any six questions. Each question carries 4 Marks.

23. What are the obstacles in e-Governance?

24. What are the different payment systems in e-commerce?

25. Explain cyber banking.

26. Explain PPP model in e-Governance.

27. Explain four phases of e-Government.

28. Write a note on biometric and digitization.

29. What are the features of smartcard?

30. Discuss market opportunity in e-business.

31. Write a note on e-commerce and auction.

(6 x 4=24 Marks)

SECTION-D (Long Essay)

Answer any **two** questions. Each question carries **15 marks**

32. Write a detailed note on classification of e-commerce.

33. Describe architecture of e-governance.

34. Discuss about e-payment systems.

35. What do you mean by biometrics? Discuss the different types of biometrics.

(2 x 15=30 Marks)

Sixth Semester B.Sc. Computer Science/BCA Degree Examination

Model Question Paper

CS 1661.3/CP1643– DATA MINING AND DATA WAREHOUSING

Time 3hrs   Max Marks :80

SECTION A (Very Short Answer)

One word to maximum one sentences, Answer all questions

1. Define data mining.

2. What do you mean by knowledge?

3. What is '*Big Data*'?

4. Expand OLAP.

5. Define metadata.

6. What is the use of data cleaning?

7. What is data mart?

8. Define data warehouse.

9. What do you mean by data transformation?

10. Expand PAM.

                                                            (10x1=10 Marks)

SECTION –B (short Answer)

Not to exceed **one** paragraph, Answer any **eight** questions. Each question carries **2marks**

11. How data differ from information?

12. Why do we need data reduction?

13. List any four features of data warehouse.

14. What do you meant by pre-processing data?

15. What is multidimensional data model? Give examples.

16. Write any four Characteristics of Clustering Techniques.

17. What is histogram?

17. Differentiate classification and prediction.

18. What is the use of Decision Trees?

19. What do you mean by clustering?

20. What is sampling?

21. Write any four requirements for cluster analysis.

(8 x 2=16 Marks)

SECTION-C (Short Essay)

Not to exceed 120 words, answer any six questions. Each question carries 4 Marks.

22. Differentiate between OLTP and OLAP.

23. Explain market basket analysis.

24. An airport security screening station wants to determine if passengers are criminals or not. To do this, the faces of passengers are scanned and kept in a database. Is this a classification or prediction task? Justify

25. Where do we use linear regression? Explain linear regression.

26. What is the significance of tree pruning in decision tree algorithms?

27. How density based clustering varies from other methods?

28. Explain apriori algorithm.

29. What are the types of data available in Cluster Analysis?Explain.

(6 x 4=24 Marks)

SECTION-D (Long Essay)

Answer any **two** questions. Each question carries **15 marks**

30. a) What is Data Mining? Explain different kinds of data that can be mined.

   b) Discuss data preprocessing and data preprocessing cycle in detail.

31. a) Explain data cubes in multidimensional data model.

   b) Explain association rule with example.

32. Write short note on

   a) Baye's theorem   b) Naive Bayesian classifier   c) Lazy learner

   d) K-Nearest neighbor method   e) Rule based classification

35. a)What is Clustering? What are the different clustering methods? Describe the partitioning methods of clustering in detail.

b) Discuss outlier detection in clustering in detail.

(2 x 15 = 30 Marks)