BC-3876

BCA (Semester-VI) Exam.–2015

Computer Network Security

Time : Three Hours
Maximum Marks : 75

Note :- Attempt questions from all the sections.

SECTION - A

(Short Answer Type Questions)

Note : Attempt **any ten** questions. Each question carries 3 marks. 10x3=30

1.   Explain any three types of security attacks.

2.   Discuss any to security services.

3.   Explain the concept of digital signature.

4.   What is directory authentication service?

5.   What problem was Kerberos designed to address?

6.   What is replay attack?

7. What is the concept authentication header? Explain.

8. Discuss any two techniques of key management.

9. Explain secured socket layer.

10. What is electronic transaction? Explain.

11. What is the concept of dual signature? Explain.

12. What services are provided by IPSec?

13. Explain any two types of intruders.

14. What is honeypot? Define.

15. Define any two techniques used to avoid guessable passwords.

SECTION - B

(Long Answer Type Questions)

Note : Attempt **any three** questions. Each question carries 15 marks.   15×3=45

1. Explain

  (a) Cipher Text

  (b) Cryptanalysis

(c) Authentication

(d) Public key and private key

(e) Denial of service

2. (a) List three approaches to secure user authentication in a distributed environment.

   (b) What is the purpose of the X.509 standard?

3. Write short notes on the following :

   (a) ESP

   (b) Security Association

   (c) Transport Mode

4. (a) What protocol comprise SSL?

   (b) What is the difference between an SSL connection and an SSL session?

5. Explain the architecture of SMMP VII.

6. (a) What is a digital immune system?

   (b) What are two common techniques used to protect a password file?

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BCA (Semester-VI) Exam.–2016

Computer Network Security

Time : Three Hours
Maximum Marks : 75

Note : Attempt questions from all sections.

SECTION - A

(Short-answer Type Questions)

Note : Attempt **any ten** questions. Each question carries 3 marks.   10×3=30

1. Define attack? Also State ist types.

2. What do you understand by Security services? Explain any one service.

3. What is Cryptanalysis? Also State two most common approches for Cryptanalysis.

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4. What is kerberos? Explain its use.

5. What are the principal services provided by PGP?

6. What services are provided by IP Security?

7. Explain Oakley Key Determination protocol.

8. What protocols comprise secure socket layers?

9. What do you understand by SNPVZ?

10. List & briefly define three classes of intruders?

11. What is a honeypot?

12. What is design principles of firewall? Also state its type.

13. What are the threats related to viruses? Explain briefly.

14 What do you understand by the model of internetwork security?

15. Define Access control in context with network security?

SECTION - B

(Long Answer type questions)

Note : Attempt **any 3** questions. Each question carries 15 marks. (15x3=45)

1. Explain the following terms.

   a) Security Mechanisms

   b) Public Key Encryption

2. a) Discuss the various measures to prevent the unauthentic access.

   b) Explain X-509 Authentication service.

3. a) What are three broad categories of applications of public key cryptosystem.

   b) Briefly explain the techniques used by firewells to control access and enforce security policy.

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4. a) What is the role of encryption in the operation of a virus?

   b) List and briefly define the principal categories of Secure electronic, Transaction?

5. a) Describe the properties of digital signature.

   b) Describe with the help of diagrams the conventional model of Encryption & Decryption.

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BCA (Semester-VI) Exam.–2017
COMPUTER NETWORK SECURITY

Time : Three Hours
Maximum Marks : 75

Note : Attempt questions from all sections.

SECTION - A
(Short-answer Type Questions)

Note :   Attempt **any Ten** questions. Each question carries 3 marks.   10×3=30

1.   Differentiate attack with threat with example.

2.   Discuss 'Denial of Service' attack with example.

3.   How encryption is useful in authentication?

4.   What are the two basic functions used in encryption algorithm?

5.   Explain Shanon's theory of Confusion and Diffusion.

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6. What kinds of attacks are addressed by message authentication code?

7. What is the difference between direct and arbitrated digital signature.

8. What are three threats associated with user authentication over Network or Internet?

9. How does PGP use the concept of trust?

10. Give examples of applications of IPSec.

11. List and briefly define any two parameters that define an SSL session state.

12. List and briefly define three classes of intruders.

13. List and briefly explain three design goals for a firewall.

14. What is the concept and techniques of password guessing?

15. What is virus? Explain with example?

SECTION - B

(Long Answer type questions)

Note : Attempt **any Three** questions. Each question carries 15 marks.   15x3=45

1. Explain the following -

   (a) Traffic Padding

   (b) Poly Alphabetic Cipher

   (c) Avalanche Effect

   (d) Euler's Theorem

   (e) Key Exchange

2. Explain Kerberos V5 in detail.

3. Write short notes on the following-

   (a) SNMP

   (b) Configuration Management

   (c) Honey pot

4. (a) What are the five principal services provided by PGP.

   (b) What is the utility of detached signature?

5. Explain the following-

    (a) RSA algorithm

    (b) Hash Function

6. (a) Discuss the rechniques used by firewall to access control.

    (b) What are two common techniques used to protect a password file?

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BC - 3877

BCA VI Sem. Examination-2016
Computer System Analysis
Design and Implementation

Time : 3 Hours   Maximum Marks : 75

Note : Attempt questions from all sections.

SECTION - A
(Short-answer Type Questions)

Note : Attempt **any ten** questions. Each question carries 3 marks.   3×10=30

1. What are the components of system?

2. What do you mean by integration?

3. Differentiate between open and close system.

4. Define Data Dictionary.

5. What do you mean by structure English?

6. Explain behavioral feasibility.

7. Differentiate between tenaible & intenaible cost.

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8. Explain Database Design.

9. Draw DFD of banking system.

10. Explain events and state.

11. Write the short note on software package evaluation.

12. What do you mean by project scheduling?

13. Explain JAD in detail

14. What do you mean by interdependence of system?

15. Explain logical design of system.

SECTION - B

(Long-answer Type Questions)

Note :　Attempt **any three** questions. Each question carries 15 marks.　　　　3×15=45

1. Describe the system Devlopment Life Cycle.

2. What do you understand by 'CASE TOOLS'? Explain the following tools.

    (i) Diagram Tools.

   (ii) Configuration Management Tools

   (iii) Prototyping Tool

   (iv) Quality Assurance Tool

3. Define the following :

   (i) ISO and capability maturity model for organizational growth.

   (ii) Measurement of software quality and Productivity.

4. Write the short note on the following :

   (i) Software constructor

   (ii) Object oriented Methodology for application development.

5. Explain the following term –

   (i) Interview & Presentation skills.

   (ii) Group dynamics

6. Define the following :

   (i) Categories of software package

   (ii) Software quality matrix

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BCA (Semester-VI) Examination–2017

Computer System Analysis Design and Implementation

Time : Three Hours
Maximum Marks : **75**

Note : Attempt questions from all sections.

SECTION - A

(Short-answer Type Questions)

Note :   Attempt **any ten** questions. Each question carries 3 marks.   10x3=30

1. What is document configuration? Why is it needed?

2. What are the characteristics of a good test case?

3. Differentiate between technical feasibility and operational feasibility of a project.

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4. List any two common errors that are made while drawing dataflow diagram.

5. Why do we need to design software architecture?

6. What is purpose of system testing?

7. What is week entity? Give an example.

8. What is system? Explain characteristics and types of system.

9. What are different methodologies of system design?

10. List and explain considerations for the input design?

11. What is meant by analyst/user interface?

12. What is decision tree?

13. What is the significance of data dictionary?

14. What is post implementation?

15. Draw a labeled DFD of a Library Automation System.

SECTION - B

(Long Answer type questions)

Note : Attempt **any three** questions. Each question carries 15 marks.   15x3=45

1. (a) Show how the following relationships represented in E-R model with suitable examples.

   (i) Ont-to-one   (ii) One-to-many

   (iii) Many-to-many

   (b) Summarize the advantages of using CASE tools in systems analysis and design

2. Explain system development life cycle (SDLC) in detail. How cost/benefit analysis plays an important role in SDLC?

3. Explain various types of feasibility studies that the analyst should consider.

4. Write short notes on the following :

   (a) System requirement specification

   (b) Data dictionaries

5. What are the security issues in a computer system? How does an organization prevent its database from security concerns? Illustrate with an example.

6. What is prototyping? Briefly explain the benefits of prototyping in software development.

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BC-3878

BCA (Semester-VI) Exam.–2015

E-Commerce

Time : Three Hours
Maximum Marks : 75

Note :- **Attempt questions from all the sections.**

SECTION - A

(Short Answer Type Questions)

Note : Attempt **any ten** questions. Each question carries 3 marks. 10×3=30

1. Write the future scope of electronic markets.

2. Differentiate between e-commerce & e-business.

3. Explain web application architecture.

4. Give the differences among Internet, Intranet & Extranet.

5. "The social web provides entirely new ways to deal with consumers." Explain.

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6. How HTTP works? Explain.

7. Which protocol is used to send files & e-mails? Explain it.

8. What are the security measures to be considered for e-commerce system?

9. Discuss the prospect of electronic payment system.

10. Explain EAN coding system for EDI.

11. What do you mean by B2B Electronic commerce? Explain.

12. Describe various security schemes in electronic payment system.

13. Discuss E-governance in detail.

14. Explain the role & Support of e-commerce in jobs & employment sites.

15. What is Firewall? State the functions of firewall in e-commerce.

SECTION - B

(Long Answer Type Questions)

Note : Attempt **any three** questions. Each question carries 15 marks.   3×15=45

1. Explain porter's value chain model in detail with all functions of the model.

2. What is E-commerce? Explain its components with example. Also discuss business models with suitable example.

3. What do you understand by e-payment system? Also explain the modes of transactions with example.

4. Write short note on :

   (a) EDI

   (b) RSA

   (c) TCP/IP

   (d) Copyright

   (e) IPR

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5. Describe the complete life cycle for the development of online-e-commerce system using any of the existing e-commerce system.

6. Explain the following terms :

   (a) Internet security

   (b) Client / server technology

   (c) Internet protocols

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BC - 3878

BCA VI Semester Examination-2016

E. Commerce

Time : 3 Hours   Maximum Marks : 75

Note: Attempt questions from all sections.

SECTION - A

(Short-answer Type Questions)

Note :   Attempt **any ten** questions. Each question carries 3 marks.   3×10=30

1.   Define E- Commerce.

2.   Draw a framework of Electronic Commerce.

3.   What is B2C? Discuss its activities.

4.   What is e-marketing?

5.   What is the role of a firewall?

6.   List the functional requirements of selling on the web.

7.   How do private and public key encryption work?

8. List the major legal issues of e-commerce.

9. Describe biometric controls.

10. Describe the security schemes adopted in SSL and SET.

11. Define Digital signature and Digital Envelope.

12. How do the architectures of the internet, intranet and extranet differ from one another?

13. Define EDI.

14. What is Internet Indecency? Explain.

15. Define how one can protect one self against cookies.

SECTION - B
(Long-answer Type Questions)

Note : Attempt **any three** questions. Each question carries 15 marks.   3×15=45

1. What is supply chain? Explain porter's value chain model.

2. How do log files indicate who has visited a site and what they were looking at? In what ways do you think the log files at a website violate your privacy? Explain.

3. Define Ethics. What are the four categories of Ethics as they apply to IT and EC?

4. Discuss the four security requirements for safe electronic payments. Also describe the pros and cons of secret key encryption and public key encryption and their complementary use.

5. List the Business models of B2B Electronic Commerce. Describe the relationship between B2B EC with supply chain management, procurement management, electronic marketing, internet and extranet.

6. What is SET? Explain different types of authentication techniques, process and methodologies for authentication of an electronic banking or Service.

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BC - 3878

BCA (VI-Semester) Examination–2017

E-Commerce

Time : Three Hours   *Maximum Marks : 75*

Note : Attempt questions from all sections.

SECTION - A

(Short-answer Type Questions)

Note : Attempt **any ten** questions. Each question carries 3 marks.   10x3=30

1. What is an E-Commerce?

2. Differentiate between B2B and B2C.

3. Define EDI.

4. What is trade cycle? Explain various phases of trade cycle.

5. What are the roles and types of firewalls for intranets and extranets?

6. What do you understand by DNS?

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7. What is tunneling? Explain its use in VPN.

8. What is SET?

9. Discuss the concept of e-cash and e-cheques.

10. Explain digital signature and also explain how does it works?

11. What is search Engine? Explain its use in online marketing and promotion.

12. Describe EFT and its relationship with debit cards.

13. Define intellectual property.

14. Define Cookies.

15. List the key client/server protocols for the internet

SECTION - B
(Long Answer type questions)

Note : Attempt **any three** questions. Each question carries 15 marks. 15x3=45

1. Discuss the role of e-commerce in business, service, learning and community.

2. Define EDI with its components and features. Explain two data standards used in EDI and different types of costs involved in EDI.

3. Discuss the role of social media in E-commerce industry.

4. Explain various types of risks associated with electronic payment system. Discuss in detail.

5. How can you protect your E-Commerce systems? Explain different types of threats to e-Commerce systems. Also explain some common e-commerce security tools.

6. Explain the various design principles used in developing e-commerce websites. Explain various website design tips that a developer should consider during the development of e-commerce websites.

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BC-3879

BCA (Semester-VI) Exam.–2015

Knowledge Management

Time : Three Hours
Maximum Marks : **75**

Note :- Attempt questions from all the sections.

SECTION - A

(Short Answer Type Questions)

Note : Attempt **any ten** questions. Each question carry 3 marks.   3×10=30

1. What are the general features of an expert system?

2. What are the characteristics of OLTP?

3. Explain the different type of information system.

4. What is the difference between procedural and non-procedural DML?

5. How is the Dataware house is different from database.

6. Explain the components of GDSS (Group decision support system).

7. What is Data Mart?

8. Explain the importance of data cleaning.

9. Explain TACIT and EXPLICT Knowledge.

10. Differentiate classification and Predition.

11. Explain knowledge dissemination.

12. Explain Cognitive Science and Robotics.

13. Differentiate OLAP and OLTP.

14. Explain Data Cube.

15. What is Multimedia Mining?

SECTION - B

(Long-answer Type Questions)

Note : Attempt **any three** questions. Each question carries 15 marks.   15×3=45

1. What are the elements of knowledge management?

2. What is data Mining? Explain the Application of data mining.

3. Explain the Database system Architecture with diagram.

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4. Explain Expert system, its components and application of expert system.

5. Describe the architecture of dataware house with block diagram.

6. Explain the Pillars of knowledge management.

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BC-3879

BCA (SEMESTER-VI) EXAM.-2016

Knowledge Management

Time : Three Hours

Maximum Marks : 75

Note : Attempt questions from all sections.

SECTION - A

(Short-answer Type Questions)

Note : Attempt **any ten** questions. Each question carries 3 marks.   3×10=30

1. Define the data warehouse.

2. What is Warehouse scheme? Explain in brief .

3. Explain the data warehouse architecture with suitable diagram.

4. What is Metadata? Explain the types of Meta data?

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5. What is Data Mining? How data mining is different from KDD?

6. Discuss the application of data mining in banking industry.

7. How can you link data mining with a DBMS ?

8. Explain the different steps of KDD (Knowledge Discovery in Database).

9. What is a knowledge? Explain the importance of knowledge management.

10. What is a Spatial Data Mining? Explain in brief.

11. Explain in brief the limitations of data mining.

12 What is a design support system? Explain.

13. Explain backend process of data warehousing

14. What is a Learning? Differentiate between supervised and unsupervised learning.

15. What is a Business intelligence? How data mining can be helpful in Business intelligence.

SECTION - B

(Long Answer type questions)

Note :　Attempt **any three** questions. Each question carries 15 marks.　　　　　(15x3=45)

1.　What is OLAP? Explain the different OLAP operations with example.

2.　Explain the difference data mining technique.

3.　What is an Expert system?. Explain the different components of a expert system

4.　Explain the different methods of knowledge management system.

5.　What is clustering? What are the different clustering techniques?

6.　Explain the following

　　(a) Differentiate between ROLAP and MOLAP.

　　(b) Data Cube

　　(c) Web mining