

(20518)

Roll No.

BCA-VI Sem.

18026

B. C. A. Examination, May 2018

Computer Network Security

(BCA-601)

(New)

Time : Three Hours

[Maximum Marks : 75

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Attempt all the *five* questions. Each question carries 3 marks. Very short answer is required.

3×5=15

1. Specify the components of encryption algorithm.
2. What are the roles of public and private key ?

3. What are the advantages and disadvantages of secret key encryption ?
4. Difference between HTTP and HTTPS protocol.
5. Name four factors needed for a secure network.

Section-B

(Short Answer Questions)

Attempt any *two* questions out of the following three questions. Each question carries 7½ marks. Short answer is required. 7½×2=15

6. What are security protocols ? Discuss five benefits of IPSec as a security protocol.
7. Compare Substitution and Transposition cipher techniques.
8. Explain the operation of Secure Socket Layer in detail.

Section-C

(Detailed Answer Questions)

Attempt any *three* questions out of the following five questions. Each question carries 15 marks.

Answer is required in detail. $15 \times 3 = 45$

9. What do you mean by firewalls ? Discuss the need of firewall in VPN along with its types.
10. Discuss the role of digital signatures in modern communication. Also discuss the differences between digital certificates and digital signatures in authentication.
11. What is Kerberos ? Explain Kerberos authentication system.
12. Explain the type of encryption/decryption method. Differentiate symmetric and asymmetric encryption.

13. Compare and contrast (5*3):
 - (a) Cryptography and Cryptanalysis
 - (b) SNMPV1 and SNMPV3
 - (c) Active and Passive Attack.

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Roll No.

BCA-VI Sem.

18028

B. C. A. Examination, May 2018

E-COMMERCE

(BCA-603)

(New)

Time : Three Hours

[Maximum Marks : 75

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Attempt all the *five* questions. Each question carries 3 marks. Very short answer is required not exceeding 75 words. $3 \times 5 = 15$

1. What do you understand by electronic data interchange ?

2. Draw flow chart to explain Porter's value chain model.
3. Name any three B2B models used in e-commerce.
4. Differentiate between Internet and Extranet.
5. What are the methods to secure electronic payment system ?

Section-B

(Short Answer Questions)

Attempt any *two* questions out of the following three questions. Each question carries $7\frac{1}{2}$ marks. Short answer is required not exceeding 200 words. (

$7\frac{1}{2} \times 2 = 15$

6. Explain with example the "first mover advantage" in e-commerce.
7. Write a note on "Electronic Funds Transfer".

8. What are the consequences of cyber attacks ?

Section-C

(Detailed Answer Questions)

Attempt any *three* questions out of the following five questions. Each question carries 15 marks.

Answer is required in detail. $15 \times 3 = 45$

9. What is the common name of "Network of Networks" ? Explain it in detail.

10. Highlight the strategic implications of IT in e-commerce.

11. Explain the following :

- (i) Free-speech
- (ii) Internet indecency
- (iii) Censorship.

12. What is the impact of shifting from traditional to internet based EDI ?

13. Citing the names of applications used, explain the different types of chatting on the web.

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Roll No.

BCA - VI Sem.

18027

B. C. A. Examination, May 2018

Information System Analysis Design &

Implementation

(BCA-602)

(New)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Attempt all the *five* questions. Each question carries 3 marks. Very short answer is required not exceeding 75 words. 3×5=15

1. List the advantages of prototype model of software development. 3

(2)

2. Mention the importance of requirement analysis in a software development life cycle. 3
3. State the benefits of E-R diagram. 3
4. Describe the disadvantages of Waterfall model. 3
5. List the different software size estimation techniques. 3

Section-B

(Short Answer Questions)

Attempt any *two* questions out of the following three questions. Each question carries 7½ marks. Short answer is required not exceeding 200 words.

$7\frac{1}{2} \times 2 = 15$

6. Answer the following : 7½
 - (a) Describe the key concept of object oriented programming.

Or

 - (b) Estimate the responsibilities of a software project manager.

7. Answer the following : 7½

(a) What do you mean by size of software ? Why does a project manager need to estimate the size of a project ?

Or

(b) Determine the advantage of using Spiral software development model instead of waterfall model.

8. Explain the following : 7½

- (i) Class
- (ii) Object
- (iii) Attribute.

Section-C

(Detailed Answer Questions)

Attempt any *three* questions out of the following five questions. Each question carries 15 marks.

Answer is required in detail. 15×3=45

9. What is the significance of structure analysis in software development life cycle ? 15

10. What do you mean by project scheduling ? Assume that a software development group has been asked to build a real-time controller for a medical diagnostic instrument that is to be introduced to the market in nine months. After careful estimation and risk analysis, the software project manager comes to the conclusion that the software, as requested, will require 14 calendar months to create with available staff. How does the project manager proceed ? 15

11. Discuss the various levels of classical waterfall model. 15

12. How is software design different from software coding ? 15

13. Answer the following : 15

- (a) Line of code
- (b) Function points
- (c) Egoless programming
- (d) CASE tools
- (e) Decision tree.

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BCA- VI Sem.

18029

B. C. A. Examination, May 2018

KNOWLEDGE MANAGEMENT

(BCA-604)

(New)

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

Attempt all the *five* questions. Each question carries 3 marks. Very short answer is required.

3×5=15

1. What is the difference between tacit and explicit knowledge ? Give an example.

(2)

2. Write down the application of knowledge management.
3. What is a classification tree ?
4. What do you mean by knowledge management appreciation ?
5. Explain decision support system.

Section-B

(Short Answer Questions)

Attempt any *two* questions out of the following three questions. Each question carries 7½ marks. Short answer is required. 7½×2=15

6. Briefly explain infrastructural requirement for KM system.
7. Describe the differences and similarities among data mining, and business intelligence. How are they related ?

8. Explain about the types of knowledge with neat diagram.

Section-C

(Detailed Answer Questions)

Attempt any *three* questions out of the following five questions. Each question carries 15 marks. Answer is required in detail. $15 \times 3 = 45$

9. Discuss and differentiate knowledge management tools and techniques.
10. How the knowledge is created in an organization ? Explain the steps involved in knowledge creation. What are the challenges faced by organization in building a knowledge management system in an organization ?
11. What is expert system ? How and where it works ? Also explain the benefits and limitations of expert system.

12. What is Groupware in the E-World ? Explain about Groupware technologies.
13. Write short notes on any three of following : 5×3
- (a) OLAP
 - (b) Association rules
 - (c) Knowledge management strategies
 - (d) Decision-making architecture.