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BCVS-N-378 A-21

B.C.A V Semester Degree Examination

COMPUTER SCIENCE

Data communication & Networks

Paper - DSE -3(a)

(New)

Time : 3 Hours Maximum Marks : 80

SECTION-A

I. Answer **All** the following questions. Each carries **2** marks. **(10×2=20)**

1. What is computer networks?
2. Expand OSI.
3. What is FDM?
4. Define data link.
5. Define Repeaters.
6. What is Routing?
7. Define Transport layer.
8. Expand LAN.
9. Name all the layers in OSI model.
10. Define Internet.

SECTION - B

II. Answer any **Four** of the following. Each carries **5** marks. **(4×5=20)**

11. Discuss network Topology.
12. What is Error correction? Explain.
13. Explain link state Routing algorithm.
14. Explain quality of service.
15. Write the uses of session layers.
16. What is Real - Time conferencing? Explain.

[Contd....

SECTION - C

III. Answer any **Four** of the following. Each carries **10** marks. **(4×10=40)**

17. What is TCP/IP model? Explain.
18. Explain Transmission media.
19. Describe Data link protocols.
20. Discuss Broadbank ISDN.
21. Explain network layer addressing.
22. Write note on
    a. Presentation layer
    b. TDM

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BCVS-N-369 A-21

B.C.A V Semester (CBCS) Degree Examination

COMPUTER SCIENCE

Information Security

Paper : SEC -2 (a)

(New)

Time : 2 Hours Maximum Marks : 40

SECTION- A

I. Answer **All** questions. Each carries **2** marks. **(5×2=10)**

1. What are the elements of Information Security?
2. Write data privacy versus protection.
3. Differentiate between block cipher and steam cipher.
4. Specify the components of encryption algorithm.
5. Mention the various ways of producing authenticator.

SECTION - B

II. Answer any **Two** questions. Each carries **5** marks. **(2×5=10)**

6. What are the goals of information security? Explain.
7. Write the differences between symmetric and asymmetric cryptography.
8. In a RSA algorithm, a participant A uses two prime numbers p = 13 and q = 17 to generate her public and private keys. If the public key of A is 35, then find the private key of A.

SECTION - C

III. Answer any **Two** questions. Each carries **10** marks. **(2×10=20)**

9. Name common authentication types? Explain which type of authentication is most secure?
10. What is program threat? Explain any three types of program threats.
11. Explain in detail Data Encryption Standard (DES).

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B.C.A. V Semester (CBCS) Degree Examination

COMPUTER SCIENCE

Software Testing

Paper - SEC - 1(b)

(New)

Time : 2 Hours Maximum Marks : 40

SECTION- A

I. Answer All questions. Each carries 2 marks. (5×2=10)

1. Define term testing?
2. What is verification and validation.
3. Define path?
4. Write the formula for cyclomatic computing?
5. Define System testing.

SECTION - B

II. Answer any Two questions. Each carries 5 marks. (2×5=10)

6. Explain V - shaped life - cycle model.
7. Discuss system testing briefly.
8. What is graph matrix? Explain.

SECTION - C

III. Answer any Two questions. Each carries 10 marks. (2×10=20)

9. What is Black - box testing? Explain boundary value analysis technique.
10. Write the steps envolved in basis path testing? What are advantages of basis path testing.
11. Explain control flow testing process

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BCVS-N-372 A-21

B.C.A. V Semester Degree Examination

COMPUTER SCIENCE

Python Programming

Paper - DSE -1(a)

(New)

Time : 3 Hours Maximum Marks : 80

SECTION-A

I. Answer **all** questions. Each carries **2** marks. **(10×2=20)**

1. What is Python?
2. Define variable in Python?
3. What is generator?
4. What is default parameter?
5. Define modules in Python?
6. What is regular expression?
7. What is exception handling?
8. Define class? Write its example.
9. What is debugging?
10. What is network?

SECTION - B

II. Answer any **Four** questions. Each carries **5** marks. **(4×5=20)**

11. Explain the features of Python.
12. What is data formatting? Explain.
13. Write a note on packages in Python.
14. What is file - handling? Explain four different modes for opening a file?
15. Write the differences between testing and debugging.
16. Explain inheritance in Python.

SECTION - C

III. Answer any **Four** questions. Each carries **10** marks. **(4×10=40)**

17. Explain the different types of operators in python with examples.
18. What is looping? Explain loop control structures with example.
19. Explain comprehensions in Python.
20. What is user defined function? What are its advantages? Explain with an example.
21. Explain python modules.
22. Write a note on GUI programming in python.

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BCVS-N-375 A-21

B.C.A. V Semester Degree Examination

COMPUTER SCIENCE

Web Technologies

Paper : DSE 2(a)

(New)

Time : 3 Hours Maximum Marks : 80

SECTION-A

Answer All the following questions. (10×2=20)

1. a) Define HTML.
   b) What is Multimedia?
   c) What is the use of event object in HTML? → 1
   d) Expand CSS. → 2
   e) What is input output Buffering?
   f) Expand SQL. → 2
   g) Name different kinds of looping statements in Javascript. → 2
   h) Write Bootstrap components.
   i) What is Bootstrap Jumbotron?
   j) What is the use of Jumbotron?

7+16.

SECTION - B

Answer any **Four** of the following. (4×5=20)

2. Write the basic elements of HTML.
3. What is CSS? Explain with example. → 4
4. Explain javascript function. → 4
5. Explain logical operators in javascript. → 4.
6. Explain Bootstrap grid system.
7. Write the Bootstrap basic table.

16

4 + 4 + 4 = 12.

SECTION - C

Answer any **Four** of the following. (4×10=40)

8. Explain HTML colour coding method with example.
9. Explain graphical elements in HTML.
10. Explain CSS and Its types with example.
11. Describe DHTML & its advantages.
12. Discuss invoking function in javascript with example.
13. Write note on.
    a) SQL
    b) HTML DOM