Exam Code: 323502   **Paper Code: 2288**

Programme: Post Graduate Diploma in Computer Applications (Semester - II)

Course Title: Introduction to Cyber Security

Course Code: PCAL-2111 (Opt – I)

Time Allowed: 3 Hours   **Max. Marks: 80**

Note: Attempt five questions in all, selecting atleast one question from each section. Fifth question may be attempted from any section. Each question carries equal marks. (16)

Section A
1. What do you understand by the term Information Security? Explain the pillars of Information Security.
2. Write a note on:
   a. Wi-Fi Security
   b. Email Security

Section B
3. Write steps to implement an Android Security and IOS Security on mobile phone?
4. A. Explain Counter cyber security initiatives in India?
   B. What are the basic security tips for windows?

Section C
5. Explain the security guidelines for e-wallet and POS?
6. What is social engineering? Explain types of social engineering in detail.

Section D
7. What do you understand by term Firewall? Explain its types. How a firewall can be implemented?
8. Write a note on:
   a. Web application Security
   b. Digital Infrastructure Security

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Exam Code: 323502   Paper Code: 2289

Programme: Post Graduate Diploma in Computer Applications
Semester II
Course Title: Network Concepts
Course Code: PCAL-2112

Time Allowed: 3 Hours   Max. Marks: 80

Note: Attempt five questions, selecting one question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

(Section A)

Q1) Explain OSI Reference Model along with functionalities of all its layers. (16)

Q2) Explain various network topologies along with their advantages and disadvantages. (16)

(Section B)

Q3) Explain the working of various internetworking devices in detail. (16)

Q4) How analog signals are converted to digital data? Explain with the help of Pulse Code Modulation. (16)

(Section C)

Q5) What is multiplexing? Explain its types in detail with suitable examples. (16)

Q6) Explain:-
a) CRC
b) Hamming Code for error correction (2 X 8 = 16)

(Section D)

Q7) What do you mean by IP addressing scheme? What are various notation for representing IPv4 addresses? Explain classful IPv4 addressing scheme with example. (16)

Q8) a) What do you mean by public key cryptography? Give examples.
    b) Differentiate between lossy and lossless compression techniques.
                                             (2 X 8 = 16)

Exam Code: 323502

Paper Code: 2290

Programme: Post Graduate Diploma in Computer Applications (Semester – II)

Course Title: Database Management System

Course Code: PCAL-2113

Examination Time: 3 hours

Theory Marks: 80

Note: Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks.

Section – A

Q1. What is DBA, What are the different Roles and Responsibilities of DBA.

Q2. a) What is Data Independence Explain its types.

b) What is Normalization, Explains various forms of Normalization.

Section – B

Q3. Explain Following with their roles in DBMS with Example.

    A. Use of DDL Statement

    B. Use of DML Statement

    C. Use DCL Statement

Q4. What is select clause in SQL, Explain the usage of select statement in DBMS with example.

Section – C

Q5. Explain Following Functions in Database with Query statement example.

    a) Aggregate Functions   b) Date & Time Function

    c) Character Function   d) Miscellaneous Function

Q6. a) What is the Role of subquery? Explain with example.

b) Explain Security in database with the help of Views with example.

Section – D

Q7. a) Give details of PL/SQL execution architecture.

b) What Is a Trigger? How Do You Use It.?

Q8. Explain role of control statement in DBMS, Explain with the help of Example.

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