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P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution affiliated to VTU, Belagavi)
Seventh Semester, B.E. - Information Science and Engineering
Semester End Examination; Jan. / Feb. - 2021
Information and Network Security

Time: 3 hrs   *Max. Marks: 100*

Note: Answer **FIVE** full questions, selecting **ONE** full question from each unit.

UNIT - I

1 a. Explain the importance of policy management during corporate mergers and divestitures. Also discuss about five security policies that must be implemented in all corporate to remain viable. **10**

  b. With a neat diagram, discuss about major process step involved in developing the blueprint for the information security program. **10**

2 a. Discuss about the major steps involved in contingency planning. **10**

  b. Discuss about SESAME and VPN in detail. **10**

UNIT - II

3 a. Why use an IDPS? List and explain at least ten terminologies that are used in IDPS. **10**

  b. Discuss about Network-based and Host-based IDPS in detail. **10**

4 a. Discuss about Public Key Infrastructure (PKI) and Digital Signature. **10**

  b. Discuss about various kinds of Attacks on Cryptosystems. **10**

UNIT - III

5 a. How are security attacks classified both in X.800 and RFC2828? **10**

  b. Discuss about Kerberos version 4 message exchanges. **10**

6 a. With the help of operational description and notation, discuss about PGP in detail. **10**

  b. Discuss about five header fields and content types in MIME. **10**

UNIT - IV

7 a. Discuss about IPsec architecture and its applications. **10**

  b. Discuss about processing model for outbound and inbound packets in IP security. **10**

8 a. Discuss about encapsulating security payload packet format in detail. **10**

  b. Discuss about basic combination of security association with different cases in detail. **10**

UNIT - V

9 a. Discuss about SSL architecture in detail. **10**

  b. Give a comparison of various kinds of threats along with its consequences and countermeasure on the web. **10**

10 a. Define Virus. Discuss about Virus structure along with a simple Virus program. **10**

  b. Discuss about Worms in detail. **10**

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