U.S.N

P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution affiliated to VTU, Belgaum)
Eighth Semester, B.E. - Computer Science and Engineering
Semester End Examination; June/July - 2015
Network Security and Cryptography

Time: 3 hrs   Max. Marks: 100

*Note: Answer any **FIVE** full questions, selecting at least **TWO** full questions from each part.*

PART - A

1. a.	Explain critical characteristics of information.	8
b.	Identify the components of an information system, explain.	5
c.	Explain security systems development life cycle.	7
2 a.	What is SETA? Explain three elements of SETA.	6
b.	Explain major steps in contingency planning with neat sketch.	14
3 a.	Write a note on Honey pots, Honey nets and padded cell systems. Explain advantages and disadvantages of honey pot.	10
b.	Explain processing modes of fire walls.	10
4 a.	Write a note on attacks on cryptosystems.	5
b.	With reference to the Polyalphabetic cipher and key as "OHYES". Encrypt the message "THANKSALOT" and Decrypt the message " WAGWKLLYWQ".	12
c.	What is Caesar cipher, give example?	3

PART - B

5 a.	List and define categories of security attacks with neat sketch. Give example.	10
b.	Write general format of X.509 certificate, briefly describe the elements of X.509.	10
6. a.	Write general format of PGP messages.	6
b.	Is multipurpose internet mail extensions is intended to address some of the problems and limitations of the use of simple mail transfer protocol, if so list any four limitations of SMTP scheme.	6
c.	Explain Authentication and confidentiality operations of PGP.	8
7 a.	Explain basic combinations of security associations.	10
b.	Write a note on Encapsulating security payload packet format.	10
8 a.	Explain services and operation of secure socket layer.	10
b.	Write a note on transfer layer security	10

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