Total No. of Questions : 5]

SEAT No :

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[5333]-102
M.Sc.
COMPUTER SCIENCE
CS - 102 : Advanced Networking
(2011 Pattern) (Semester-I)

Time : 3 Hours] ***[Max. Marks : 80***

Instructions to the candidates:

1) ***Neat diagrams must be drawn whenever necessary.***
2) ***Figures to the right indicate full marks.***
3) ***All questions are compulsory.***

Q1) Answer all of the following: **[8×2=16]**

a) Explain Digital Signature.

b) What is cryptography?

c) Define plain text and chiper text.

d) The value of HLEN is an IP diagram is 7. How many option bytes are present.

e) What is virus? State the phases of a virus life-time.

f) State how SHTTP is different from SLL.

g) Which are the key participant in SET.

h) How to create strong password.

Q2) Attempt any four of the following: **[4×4=16]**

a) Explain different strategies of tranbation from IPV4 to IPV6.

b) What is frame Relay? Discuss its advantages.

c) Explain various applications of multimedia.

d) Considering the problem of recovering from host crashes. If the interval between writing and sending an acknowledgement or vice versa, can be made relatively small, what are the two best sender-receiver strategies for minimizing the chance of a protocol failure?

e) Explain various types of certificate.

P.T.O.

Q3) Attempt any four of the following: **[4×4=16]**

a) Explain BGP in Brief?

b) Explain key transformation & expansion permutation process in DES.

c) What is attack? Explain active and passive attacks.

d) Explain AM & ESP protocol used in IP Sec.

e) List two different technologies used to connect two remote devices in point to point WAN. Explain any one in details.

Q4) Attempt any four of the following: **[4×4=16]**

a) Explain SIP IS there any drawback to prevent using SIP for video? Justify.

b) Given two prime numbers P = 17 & Q = 29 find out N, E, D in an RSA encryption process.

c) Write a short note on "Attacks: A technical view".

d) What are typical contents of a digital certificate?

e) What is transposition? Explain various transposition techniques.

Q5) Attempt any four of the following: **[4×4=16]**

a) Explain How 3-D secure protocol is used to provide security to the credit card on the Internet.

b) Explain the need & working of password based authentication?

c) Explain structure of routter.

d) Explain the steps in various round of AES.

e) Explain three protocol scenarios for connection establishment using three way handshake.

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