

BACHELOR OF TECHNOLOGY (CBCS) (2020 COURSE)
B.Tech.Sem - VI Computer Science & Engineering : WINTER : 2023
SUBJECT : CRYPTOGRAPHY & NETWORK SECURITY

Day : Monday

Time : 10:00 AM-01:00 PM

Date : 20-11-2023

W-24329-2023

Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Draw neat labeled diagrams **WHEREVER** necessary.

Q.1 What are the substitution cipher techniques? Explain play-fair cipher with suitable example. (10)

OR

Q.1 Explain following Transposition cipher techniques. (10)

- i) Rail fence
- ii) multiple columnar transposition technique
- iii) single columnar

Q.2 What are different Block cipher operation modes? Explain in detail. (10)

OR

Q.2 Explain Rc4 Algorithm with suitable Diagram. (10)

Q.3 What is message Authentication? Explain with suitable Diagram. (10)

OR

Q.3 Explain secure Hash Algorithm (SHA). (10)

Q.4 Explain SSL (Secure Socket Layer) in detail. (10)

OR

Q.4 Explain security in GSM and 3G. (10)

Q.5 Explain secure electronic transaction (SET) protocol. (10)

OR

Q.5 Explain firewall Design Principles. (10)

Q.6 Explain the following: (10)

- i) Virtual elections
- ii) Single sign on

OR

Q.6 Explain Cross Site Scripting Vulnerability. (10)