

SPPU-TE-COMP-CONTENT – KSKA Git

Total No. of Questions : 4]

SEAT No. :

P9646

[Total No. of Pages : 1

Oct-22/TE/Insem-645

T.E. (Honors/Minors)

INFORMATION AND CYBER SECURITY (2019 Pattern) (Semester-I) (310401)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4.
- 2) Neat diagram must be draw wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data if necessary.
- 5) Use of scientific calculator is permitted.

- Q1)** a) What is Policy and Mechanism in computer security? [5]
b) Explain in detail goals of security. [5]
c) What is protection state? How access control model can be used as a model for protection state. [5]

OR

- Q2)** a) What is assurance? What basis for used for determining “how much” to trust a system? [5]
b) What are basic components of computer security? [5]
c) What is threat? How security services counter threats to the security of system? [5]

- Q3)** a) How extended Euclidean Algorithm can be used to calculate greatest common divisor? [5]
b) What is Transposition Cipher? Use Transposition Cipher to encrypt the plain text “We Are The BEST” use key “HEAVEN” [5]
c) Is DES algorithm block cipher? List and explain strengths of DES algorithm. [5]

OR

- Q4)** a) Differentiate between substitution and transposition techniques. [5]
b) Describe block cipher design principles. [5]
c) What is modulus? List different properties of Congruences. [5]

