

Total No. of Questions : 4]

SEAT No. :

**PD104**

[Total No. of Pages : 1

**[6410]-425**

**T.E. (AI & DS) (Insem)**

**CYBER SECURITY**

**(2019 Pattern) (Semester - II) (317530)**

**Time : 1 Hour]**

**[Max. Marks : 30**

**Instructions to the candidates:**

- 1) Attempt Q.1 or Q.2, Q.3 or Q.4.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Use of electronic pocket calculator is allowed.

- Q1)** a) Draw and explain operational security model for network security. [6]  
b) Write difference between security and privacy. [5]  
c) Explain passive and active attack. [4]

**OR**

- Q2)** a) Define the following term with example. [6]  
i) Symmetry ii) Asymmetry  
b) List and explain various elements of information security. [5]  
c) What are the different threats and vulnerabilities in case of cyber security? [4]

- Q3)** a) Explain One Time Pad with example. [6]  
b) Difference between AES and DES. [5]  
c) Use the transposition cipher to encrypt the message "GEEKS FOR GEEKS" use key "HACK". [4]

**OR**

- Q4)** a) What is block cipher? Explain counter mode of block cipher. [6]  
b) Explain Play fair Cipher with example. [5]  
c) Explain DES Algorithm. [4]

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