

CO D 21 C 02 Advanced Computing Techniques

UNIT 1

Pattern Recognition: Pattern Recognition Systems; Data Pre-Processing Techniques; Feature Generation, Selection and Dimensionality Reduction; Classification, Prediction and Clustering; Accuracy Measures and Metrics.

UNIT 2

Digital Image Processing: Problems and Applications, Image Representation and Modeling, Image Transforms, Image Enhancement, Image Analysis and Computer Vision.

UNIT 3

Security Services and Mechanisms: Cryptography, Cryptographic Protocols and Standards; Network Security; Web and OS Security; Database Security.

UNIT 4

Data Mining: Classification, Prediction and Clustering through Frequent Itemset Mining and Association Mining, Mining using Spatial Data, Multimedia Data, Text Data and Web Data.

UNIT 5

Computing Paradigms – Parallel and Distributed Processing, Grid and Cloud Computing, Web-Based Applications, Security Objectives, Threats to Cloud Infrastructure.

References

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