#### UNIT - 6

Non - separable multidimensional wavelets, wavelet packets. Wavelets Transform and Data Compression: Introduction, transform coding, DTWT for image compression (i) Image compression using DTWT and run-length encoding.

### UNIT-7

(i) Embedded tree image coding (ii) compression with JPEG audio compression (iii) Audio masking, (iv) Wavelet based audio coding.

#### UNIT-8

CONSTRUCTION OF SIMPLE WAVELETS: Construction of simple wavelets like Harr and DB1. Other Applications of Wavelet Transforms: Introduction, wavelet de-noising, speckle removal, edge detection and object isolation, Image fusions, Object detection by wavelet transforms of projections.

### **TEXT BOOK:**

1. Wavelet transforms- Introduction to theory and applications, Raghuveer M.Rao and Ajit S. Bapardikar, Person Education, 2000.

## **REFERENCE BOOKS:**

- 1. **Wavelet transforms,** Prasad and Iyengar, John Wiley India Pvt. Ltd, 2007.
- 2. Wave-let and filter banks, Gilbert Strang and Nguyen Wellesley Cambridge press, 1996
- 3. Insight into WAVELETS from theory to practice, K.P. Soman and K.L. Ramchandran, Eastern Economy Edition, 2008

# MODELING AND SIMULATION OF DATA NETWORKS

Subject Code	: 10EC766	IA Marks	: 25
No. of Lecture Hrs/Wee	ek:04	Exam Hours	: 03
Total no. of Lecture Hr.		Exam Marks	: 100

**UNIT-1&2** 

**DELAY MODELS IN DATA NETWORKS:** Queuing Models, M/M/1, M/M/m, M/M/ $\infty$ , M/M/m/m and other Markov System, M/G/1 System, Networks of Transmission Lines, Time Reversibility, Networks of Queues.

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