

## **Specific to IT**

**Web technology & E Commerce:** Electronic Commerce and physical Commerce, Different type of e-commerce, e-commerce scenarios, advantages of e-commerce. Business models: Feature of B2B e-commerce, Business models, Integration. E-Services: category of e-services, Web- enabled services, Matchmaking services, information-selling on the web. Internet payment system , SET Protocol for credit card payment , E-Governance ,WAP Architecture.

**Information Theory Coding :** Information Measures, Review probability theory, Random variables, Processes, Mutual Information, Entropy, Uncertainty, Shannon's theorem, redundancy, Huffman Coding, Discrete random Variable. Gaussian random variables, Bounds ,Linear block codes , cyclic codes ,BCH codes , Reed-Solomon codes, space time codes, concatenated codes, turbo coding and LDPC codes .

**Mobile & Pervasive Computing:** Mobile computing , Adaptability , Mobility Management ,Context –Aware Computing and its applications , Introduction to Ad Hoc and Sensor Networks , Approaches to Security

**Data Mining:** Data integration models and algorithms, Graphical models, Information extraction and retrieval, Forecasting and smart e-business, Sensor and Bioinformatics data mining, Text and Web data mining.

**Multimedia and Animation :** High Performance computing; Visualization; Rendering; Animation; Image and video retrieval; motion capture; point based methods.

**Middleware Technologies:** Exposure to Markup languages, HTML,DHTML, VRML, SGML, XML etc. CGI, Applets & Servlets , Distributed objects, object request brokers, component technology ,CORBA .