## **Specific to Computer Application:**

**Discrete Mathematics** : Set, Posets, Relations, Recurrence relations, Functions,

Combinatories, Lattices, Boolean Algebra

Numerical Methods : Numerical solution of linear and non-linear equations,

Interpolation, Numerical Differentiation & Integration, Numerical solution of ordinary and partial differential

equations

Statistical Methods : Theory of Probability, Binomial, Poisson & Normal

Distributions, Correlation and Regression, Tests of

Hypothesis.

Optimization : Linear programming and its solution, Project

Management: CPM & PERT, Queuing models, Inventory models, Assignments & Transportation

Problems, Dynamic Programming

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.

**Data Mining** : Data integration models and algorithms, Graphical

models, Information extraction and retrieval, Forecasting and smart e-business, , Text and Web

data mining.

Middleware Technologies : Exposure to Markup languages, HTML,DHTML,

VRML, SGML, XML etc. CGI, Applets & Servlets , Distributed objects, object request brokers,

component technology ,CORBA .