# FAIRFIELD Institute of Management & Technology

(Affiliated to GGSIP University, New Delhi)

Grade Institute by DHE, Govt. of NCT Delhi, Affiliated to GGSIP University Delhi and Approved by Bar Council of India & NCTE

BCA: 2<sup>nd</sup> Semester

**MATHEMATICS-IV** 

Exam Code: 202

## **OBJECTIVE**

- To enable professional undergraduate students to understand the importance of Knowledge about mathematical probability & familiar with various numerical techniques. OUESTIONS
- 1) Discuss Permutation and Combination with examples.
- 2) Explain Binomial Theorem with the help of example
- 3) Discuss Probability, Conditional Probability, and Baye's Theorem with the help of example.
- 4) Explain Mean & Standard Deviation with example?
- 5) Discuss Mathematical Expectation with example?

# **PROCEDURE**:

For completing the assignment students should refer to the books mentioned in syllabus and they can take help from internet. The assignment should be handwritten and properly filled. Students should make assignment in the following manner:

- 1. Cover page
- 2. Objectives
- 3. Index
- 4. Content
- 5. Conclusion
- 6. References
- 7. Softcopy AND Hardcopy
- 8. Give proper headings and subheadings
- 9. Explain every topic in points and using diagrams.
- 10. Put Examples

## **OUTCOME**:

After doing this assignment, students will come to understand the importance of mathematics in computer science.

# **REFERENCE BOOKS:**

### **TEXT BOOKS:**

- [T1] S.S. Sastry, "Numerical Analysis"; Prentice Hall of India, 1998.
- [T2] Meyer, P.L.. Introductory Probability and Statistical Applications, Oxford (1970) 2<sup>nd</sup> ed.
- [T3] Johnson, R., Miller, I. and Freunds, J., Miller and Freund's "Probability and Statistics for Engineers, Pearson Education(2005) 7<sup>th</sup> ed.

#### **REFERENCE BOOKS:**

[R1] Mathew, J.H., Numerical Methods for Mathematics, Science and Engineering, Prentice Hall Inc.J (2002).

[R2] Walpole, Ronald E., Myers, Raymond H., Myers, Sharon L. and, Keying Ye, Probability and Statistics for Engineers and Scientists, Pearson Education (2007) 8th ed.