BCA: I- Semester   **MATHEMATICS-I**   **Exam Code: 101**

OBJECTIVE: To enable professional undergraduate students to understand the importance of mathematics in computer science.

QUESTIONS
1) Discuss Dependence of Vectors, Eigen -Vectors of a Matrix,
2) What is the Intermediate Value Theorem? Give Example.
3) Explain the term differentiation with the help of example.
4) Explain Expansion of Functions (Maclaurin's & Taylor's) with the help of an example.
5) Explain the terms Gamma and Beta Functions with the help of an 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:
[T1] Kresyig E., "Advanced Engineering Mathematics", 5th Edition, John Wiley & Sons, 1999.
[T2] Babu Ram, "Engineering Mathematics", Pearson Education.