

**Mid-sem ATKT Syllabus FYBCOM, FYIT, FYCS(Discrete Maths)**

1. **FYBCOM SEM I (Mathematical and Statistical Techniques I )**  
Commission and Brokerages, Discounts, permutation and combinations, Mean, Median, Mode, Standard deviation.
2. **FYBCOM SEM II (Mathematical and Statistical Techniques)**  
Derivatives and Applications. Simple and Compound interests, Pearson's coefficient of correlation, Spearman's coefficient of correlation, Index numbers, Moving averages Method, North-West corner method rule.
3. **FYCS SEM I ( discrete Mathematics)**  
Functions, Relations, Recurrence relations, Graphs, Trees, Counting principles, permutations and combinations.
4. **FYCS SEM II ( Calculus)**  
Derivative of a function, upward and downward concave, Absolute maximum and minimum, Newton's method, Numerical integration, Euler's method, Partial derivatives, Gradient.
5. **FYIT SEM I ( Discrete Mathematics )**  
Set theory, logic of compound statement, sequences, Relations, Graphs, Trees, Probability.
6. **FYIT SEM II (Numerical and Statistical Techniques )**  
Errors, solutions of algebraic transcendental equations, Interpolation, Gauss-Siedel method, Numerical integration and integration, Random variables.



HOD,  
Department of Mathematics