

DSE-(A)3-Theory of Equation

Answer any three question:-

- Q1. Write general properties of Polynomials?
- Q2. Derive Symmetric functions.
- Q3. Explain Newton's theorem.
- Q4. Write Sturm's theorem.

DSE-4(A)-Mathematical modeling

Answer any three question:-

- Q1. Explain Michaelis-Menten kinetics.
- Q2. Write a short notes on linear models and growth models.
- Q3. Derive Introduction to discrete models.
- Q4. What is linear stability analysis.

UG-semester-VI Exam-23 (20-23)

Internal Exam-23 (Math)

Math core-13 (Metric spaces &

complex analysis)

Answer any three questions:-

Q1. Definition and examples of metric spaces.

Q2. Explain cantor's theorem.

Q3. What is analytic functions and Example of analytic functions?

Q4. Derive Cauchy-Riemann equations.

core-14 (Ring theory and linear algebra-II)

Answer any three questions:-

Q1. Write short notes on factorization of polynomials.

Q2. Derive Cayley-Hamilton theorem.

Q3. What is Bessel's inequality.

Q4. Write Inner product spaces.