



Syllabus for Written Test and/or Interview for Ph.D. program in Department of Electrical Engineering:

The examination aims to evaluate the basic mathematical skills of the candidates along with their knowledge in their chosen research area. The written exam shall have two parts: Part A (Mathematics) and Part B (Research area chosen by the candidate in his/her application as listed in the advertisement).

Part A

Mathematics

Linear Algebra, Calculus, Differential Equations, Complex Variables, Probability and Statistics, Numerical Methods

Part B

Microwave

Electromagnetics (from syllabus of GATE EC 2018)

Microelectronics/Nanotechnology

Electronic Devices, Analog Circuits, and Digital Circuits (from syllabus of GATE EC 2018)

Communication/Optical Communication

Signals and Systems, Communications, and Electromagnetics (from syllabus of GATE EC 2018)

Power Systems

Power Systems (from syllabus of GATE EE 2018)

Image Processing

Signals and Systems (from syllabus of GATE EC 2018) and Fundamentals of Image Processing