## COMPUTER ENGINEERING DEPARTMENT

## PhD Comprehensive Examination Syllabus

## July 2020

## Research area specific topics

The following is the syllabus for PhD comprehensive examination to be held in the month of July 2020.

Sr. No.	Research area specific topics	Content
1	Information Security	Security Attributes, Mechanisms, Attacks. Types of Encryption Mechanisms, Authentication Mechanisms, Access Control Techniques, Designing a Security Protocol, Security Protocols in TCP/IP Protocol Stack. Design of AES, Galois fields and the related mathematics. Types of Privacy and Mechanisms.
2	Image Processing	Image Enhancement, Histogram, Image Filters, Image Transforms: DCT and Fourier Transform, Frequency and Time domain processing, Image Morphological operators