

## **Syllabus and Structure of Second In-semester Examination**

### **Syllabus**

#### pdf files

Communication Systems By Carlson- pages 214 to 217 (except phase-shift discriminators)  
William Hayt, John Buck-Engineering Electromagnetics, 8th Edition, pages 301 to 302 (excluding section 10.1), 304 to 327  
Reflection Coefficients and VSWR of selected loads  
Peter Rizzi, pages 69 to 72 (except Wave Propagation in Coaxial Line).  
George Kennedy Book Pages 194, 196 and 197 (only figures 7.6, 7.7 and 7.9)  
Peter Rizzi, pages 79 to 81  
Practice Problems and examples on Transmission Line Theory.  
Dennis Roddy and Coolen Book, pages 118 to 125, 130 to 133 (except section 4.10).  
Dennis Roddy and Coolen Book, Page 135 (Only equation 4.11.1), page 138 (Only equation 4.13.2)  
Dennis Roddy and Coolen Book, pages 147, 148, 287 to 289  
Dennis Roddy and Coolen Book, pages 289 to 291 and 364 to 367. **In Lectures on 26 and 27 Feb.**  
Practice Problems and examples on Transmission Line Theory and Noise. **In Lecture on 2<sup>nd</sup> March.**

### **Structure**

Answer all questions on regular answer books.  
Closed Books and Closed Notes Examination  
Scientific Calculator is Required During Examination  
Weightage of Examination = 27%  
Dates– 3<sup>rd</sup> to 6<sup>th</sup> March 2020  
Duration of Examination – 2 Hours  
Each question will consist of a, b, c, d,...which can be answered in one-line or few-lines or detailed-answers.  
Each question may include short quiz-type questions (concept based), design, analysis, problems and derivations.  
Each question is of 20 marks.  
Question 1 – FM Detector and Noise,  
Question 2 – Noise in AM Systems, Noise in FM Systems and Introduction to Transmission Line Theory.  
Question 3 – Transmission Line Equations, Lossy, Lossless and Low-Loss Lines

#### Question 4 – Wave Reflection, VSWR, SWRs, Standing Wave Patterns of Different Loads