

Analog Communication

Written by Administrator

Friday, 06 November 2009 14:47 -

Subject Code		:
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IA Marks		: 25
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No. of Lecture Hrs/Week		: 04
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Exam Hours		: 03
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Total no. of Lecture Hrs.		: 52
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Exam Marks		: 100
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PART - A

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Unit - 1

Random Process: Random variables: Several random variables. Statistical averages:
Function of Random variables, moments, Mean, Correlation and Covariance function:
Principles of autocorrelation function, cross – correlation functions. Central limit theorem,
Properties of Gaussian process.

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7 Hours

Unit - 2

Amplitude Modulation: Introduction, AM: Time-Domain description, Frequency – Domain description. Generation of AM wave: square law modulator, switching modulator. Detection of AM waves: square law detector, envelop detector. Double side band suppressed carrier modulation (DSBSC): Time-Domain description, Frequency-Domain representation, Generation of DSBSC waves: balanced modulator, ring modulator. Coherent detection of DSBSC modulated waves. Costas loop.

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7 Hours

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Reference books:

1. **Modern digital and analog Communication systems** B. P. Lathi, 3rd ed 2005
Oxford University press.

2. **Communication Systems**, Harold P.E, Stern Samy and A Mahmond, Pearson Edn,
2004.

Communication Systems: Singh and Sapre: Analog and