

IES COLLEGE OF TECHNOLOGY, BHOPAL

B.E. (6th SEM) Assignment -1

Digital Signal Processing (EC-603)

Date of issued: 06/01/2014

Date of Submission:20/01/2014

Q.1	Discuss and prove the different property of discrete time signal.	
Q.2	Determine whether the system is linear shift invariant, causal and stable: (1) $y(n)=x(n+7)$ (2) $Y(n)=n x(n)$ (3) $Y(n)=x^3(n)$	
Q.3	Define and prove the following property of DTS: (1)Linearity (2) Time Invariance (3) causality	
Q.4	Determine whether the DSP system described by the following equation are time invariant: (a) $y(n)=a n x(n)$ (b) $y(n)=a x(n-1)+b x(n-1)$	
Q.5	check the BIBO stability for the impulse response of a digital system given by: $h(n) = a^n u(n)$	

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B.E. (6th SEM) Assignment -1

Industrial Electronics (EC-601)

Date of issued:06/01/2014

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Q.1	What do you mean by rectifier? Explain its classification.	
Q.2	Define the term filter. Also explain different types of filters.	
Q.3	Write a short note on (a). Bleeder resistor, (b). power supply	
Q.4	Define regulated power supply with its classification.	
Q.5	Write a note on switch mode converter.	

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B.E. (6th SEM) Assignment -1

CMC (EC-602)

Date of issued:06/01/2014

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Q.1	Write the Operation of Cellular System.	
Q.2	What do you mean by Frequency Reuse Technique? Make Understand by $K=1,2,3$, and $K=7$ Frequency Reuse Cluster.	
Q.3	What is Handover/Handoff? And write the types of Handover.	
Q.4	Explain Performance Criteria for Cellular System.	
Q.5	What is Cell Splitting Technique in Cellular System?	

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B.E. (6th SEM) Assignment -1

Antenna & Wave Propagation (EC-604)

Date of issued:06/01/2014

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Q.1	What is Antenna? Why it's radiate?	
Q.2	Explain retarded potential for small current element	
Q.3	Explain Yagi-Uda Antenna with radiation pattern	
Q.4	Which all are the parameters for Antenna?	
Q.5	What is Radiation pattern? Explain main lobe and side lobe.	

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B.E. (6th SEM) Assignment -1

VLSI Circuit & System (EC-605)

Date of issued: 13/01/2014

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Q.1	Explain the following terms: a) Hierarchy b) regularity c)modularity d)Locality	
Q.2	Discuss in detail transistor as a switch.	
Q.3	What do you mean by VLSI Design flow?	
Q.4	Explain latches and register in detail.	
Q.5	Discuss design entry, synthesis and functional simulation in VLSI.	