ASSIGNMENT-1
BRANCH: EC
SEM: 6TH
LAST DATE OF SUBMISSION: 12/02/2015

IES COLLEGE OF TECHNOLOGY, BHOPAL
BE (6TH SEM) ASSIGNMENT- 1

Date of Assign: 27/01/2015   **Date of submission:-12/02/2015**

Q.1	Explain Power supply performance parameters of power supplies.
Q.2	Explain rectifiers (half wave, full wave), filters (capacitor, inductor, inductor-capacitor, pi filter).
Q.3	Explain bleeder resistor, voltage multipliers.
Q.4	Explain Regulated power supplies. 1. series 2. shunt voltage regulators, 3.fixed 4. adjustable voltage regulators 5. Current regulator.
Q.5	Explain switched regulator (SMPS) & comparison of linear and switched power supply.

IES COLLEGE OF TECHNOLOGY, BHOPAL
B.E. (6th SEM) ASSIGNMENT-1
CMC (EC-602)

Date of Assign: 27/01/2015   **Date of submission:-12/02/2015**

Q.1 Q.2 Q.3 Q.4	What is the use of frequency reuse in cellular mobile communication? Draw the structure of basic cellular system. Write down note on co-channel interference. How can be co-channel interference be reduced?	2 2 2 2
Q.5 Q.6 Q.7 Q.8	Explain Performance Criteria for Cellular System. Write necessity of call splitting and its types. Explain hand off mechanism with proper diagram. What MTSO System?	3 3 3 3
Q.9 Q.10	Write the Operation of Cellular System. Describe basic cellular system in detail.	7 7

IES COLLEGE OF TECHNOLOGY, BHOPAL
B.E. (6th SEM) Assignment -1
Digital Signal Processing (EC-603)

Date of Assign: 27/01/2015   **Date of submission:-12/02/2015**

Q.1	Discuss DTFT and its limitation.	3
Q.2	Determine whether the system is linear shift invariant, causal and stable: (1)$y(n)=nx(n)$ (2) $Y(n)=x^3(n)$ (3) $y(n)=x(n)\sin(n\pi/2)$.	7
Q.3	Define and prove the following property of DTS: (1)Linearity (2) Time Invariance (3) Convolution	2 2 2
Q.4	For the system described by difference equation $y(n)=3/8y(n-1)+1/4y(n-2)+x(n)$	7
Q.5	A discrete-time signal x(n)is given as $x(n)=a^n u (-n+1)$ represents graphical and obtain its DTFT?	7