

**07-Elec-A1 – Circuits**

Nilsson, James W. and Susan Riedel, Electric Circuits, 7<sup>th</sup> Edition. Prentice Hall, 2004.  
Alexander, Charles and Mathew Sadiku, Fundamentals of Electric Circuits, 3<sup>rd</sup> Edition. McGraw Hill, 2007.  
Schwarz and Oldham, Electrical Engineering: An Introduction, 2<sup>nd</sup> Edition. Oxford University Press, 1993.

**07-Elec-A2 – Systems and Control**

Dorf, Richard C. and Robert H. Bishop, Modern Control Systems, 10<sup>th</sup> Edition. Addison-Wesley, 2004.  
Nise, Norman S., Control Systems Engineering, 4<sup>th</sup> Edition, Wiley, 2003.

**07-Elec-A3 – Signals and Communications**

Haykin, Communication Systems, 4<sup>th</sup> Edition, John Wiley & Sons Canada Ltd., 2000.  
Or  
Haykin, Simon & Michael Moher, Introduction to Analog and Digital Communication Systems, 2<sup>nd</sup> Edition, John Wiley & Sons, 2006.  
Lathi, B.P., Signal Processing and Linear Systems. Oxford University Press, 2000. ISBN: 13-97801952191173  
or  
Haykin, Simon & Barry Van Veen, Signals and Systems, 2005 Interactive Solutions Edition, 2<sup>nd</sup> Edition, John Wiley & Sons Canada Ltd., 2005.  
.

**07-Elec-A4 - Digital Systems and Computers**

Brey, Barry, The Motorola Microprocessor Family: 68000, 68008, 68010, 68020, 68030, and 68040: Programming and Interfacing with Applications. Saunders College Publishing, 1995.

**07-Elec-A5 – Electronics**

Sedra and Smith, Microelectronic Circuits, 5<sup>th</sup> Edition. Oxford University Press, 2003.

**07-Elec-A6 – Power Systems and Machines**

Chapman, Stephen, Electric Machinery and Power System Fundamentals, McGraw Hill, 2001.  
Wildi, Theodore, Electrical Machines, Drives, and Power Systems, 6th Edition, Prentice Hall, 2005.

**07-Elec-A7 – Electromagnetics**

Hayt, William H. and John A. Buck, Engineering Electromagnetics. McGraw Hill, 2006. ISBN: 0073104639.

**07-Elec-B1 - Digital Signal Processing**

Ifeachor, Emmanuel, and Barrie Jervis, Digital Signal Processing, a Practical Approach, 2<sup>nd</sup> Edition. Prentice Hall, 2001.  
Mitra, Sanjit, Digital Signal Processing, a Computer-Based Approach, 3<sup>rd</sup> Edition. McGraw Hill, 2006.

**07-Elec-B2 - Advanced Control Systems**

Dutton, Ken, Steve Thompson, and Bill Barraclough, The Art of Control Engineering. Prentice Hall, 1997.

Nise, Norman, Control Systems Engineering. John Wiley, 2005.

**07-Elec-B3 – Digital Communications Systems**

Couch, Leon W., Digital and Analog Communication Systems, 7<sup>th</sup> Edition. Prentice Hall, 2007. ISBN: 013-142420.

Lathi, B. P., Modern Digital and Analog Communication Systems, 3<sup>rd</sup> Edition. Oxford University Press, 1998, ISBN13: 978-0-19-511009-8.

Sklar, Bernard, Digital Communications Fundamentals and Applications, 2<sup>nd</sup> Edition, Prentice Hall, 2001.

**07-Elec-B4 – Information Technology Networks**

Leon-Garcia, Alberto, and Indra Widjaja, Communication Networks, 2<sup>nd</sup> Edition. McGraw-Hill, 2003.

Freeman, Roger L., Telecommunication System Engineering, 4<sup>th</sup> Edition. John Wiley & Sons Canada, Ltd. 2004.

Rappaport, Theodore S., Wireless Communications: Principles and Practice, 2<sup>nd</sup> Edition. Prentice Hall, 2001.

**07-Elec-B5 - Advanced Electronics**

Sedra and Smith, Microelectronic Circuits, 5<sup>th</sup> Edition. Oxford University Press, 2003.

Horowitz, Paul, and Winfield Hill, The Art of Electronics, 2<sup>nd</sup> Edition. Cambridge University Press, 1989.

**07-Elec-B6 - Integrated Circuit Engineering**

Rabaey, Jan A., Anantha Charndrakasan and Borivoje Nikolic, Digital Integrated Circuits, 2<sup>nd</sup> Edition. University of California, Berkeley, Prentice-Hall, 2003. ISBN# 01-0130909963.

**07-Elec-B7 - Power Systems Engineering**

Glover, J. Duncan, and Mulukutla Sarma, Power System Analysis and Design, 3<sup>rd</sup> Edition. Thomson Learning, 2002.

Grainger, John and William Stevenson Jr., Power System Analysis. McGraw Hill, 1994.

**07-Elec-B8 - Power Electronics and Drives**

Rashid, Muhammad H., Power Electronics: Circuits, Devices and Applications, 3<sup>rd</sup> Edition. Prentice-Hall, 2003.

Mohan, N, Undeland, T, Robbins, W, Power Electronics – Converters, Applications, and Design. John Wiley, 2003, ISBN 0-471-22693-9.

Sen, P C., Principles of Electric Machines and Power Electronics, 2<sup>nd</sup> Edition. Wiley, 1996.

**07-Elec-B9 - Electromagnetic Field, Transmission Lines, Antennas, and Radiation**

Ulaby, Farwaz, Fundamentals of Applied Electromagnetics, 5<sup>th</sup> Edition. Prentice Hall, 2007. ISBN: 013-2413264.

**07-Elec-B10 - Electro-Optical Engineering**

Yariv, Amnon, and Pochi Yeh, Photonics: Optical Electronics in Modern Communication, 6<sup>th</sup> Edition. Oxford University Press, 2006.