

# ANALOG ELECTRONIC CIRCUITS (Common to EC/TC/EE/IT/BM/ML)

Written by Administrator  
Friday, 06 November 2009 14:13 -

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**Sub Code**

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**06ES32**

**IA Marks**

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**25**

**Hrs/ Week**

:

**04**

**Exam Hours**

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**UNIT 1:**

**Diode Circuits:** Diode Resistance, Diode equivalent circuits, Transition and diffusion capacitance, Reverse recovery time, Load line analysis, Rectifiers, Clippers and clampers. (Chapter 1.6 to 1.14, 2.1 to 2.9)

**6 Hours**

**UNIT 2:**

**Transistor Biasing:** Operating point, Fixed bias circuits, Emitter stabilized biased circuits, Voltage divider biased, DC bias with voltage feedback, Miscellaneous bias configurations, Design operations, Transistor switching networks, PNP transistors, Bias stabilization. (Chapter 4.1 to 4.12)

**7 Hours**

**UNIT 3:**

**Transistor at Low Frequencies:** BJT transistor modeling, Hybrid equivalent model, CE Fixed bias configuration, Voltage divider bias, Emitter follower, CB configuration, Collector feedback configuration, Hybrid equivalent model. (Chapter 5.1 to 5.3,







1. **“Electronic Devices and Circuit Theory”**, Robert L. Boylestad and Louis Nashelsky, PHI/Pearson Education, 9<sup>TH</sup> Edition.

**REFERENCE BOOKS:**

1. **‘Integrated Electronics’**, Jacob Millman & Christos C. Halkias, Tata - McGraw Hill, 1991 Edition
2. **“Electronic Devices and Circuits”**, David A. Bell, PHI, 4<sup>th</sup> Edition, 2004

**Question Paper Pattern:** Student should answer FIVE full questions out of 8 questions to be set each carrying 20 marks, **selecting at least TWO questions from each part**