

Code No: RR311002

RR

Set No. 2

III B.Tech I Semester Examinations, November 2010

ELECTRONIC EQUIPMENT DESIGN

Common to Instrumentation And Control Engineering, Electronics And  
Instrumentation Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. (a) List and explain the factors effecting the design of audio transformers.  
(b) Explain the types of tests to be conducted on AF transformers. [8+8]
2. (a) What do you mean by MTTF, MTBF and Mean life.  
(b) Derive the interrelationships between the above terms. [8+8]
3. Briefly explain about screen and frame preparation. [16]
4. What is an electronic counter? Explain the five modes of operation in detail. [16]
5. Write about PCB layout check related
  - (a) General Consideration
  - (b) Mechanical considerations
  - (c) Electrical considerations. [4+6+6]
6. (a) Explain the basic principle of operation of a magnetic amplifier with the help of its characteristic curves.  
(b) List the applications of magnetic amplifier and explain any one application in detail with the help of its circuit diagram. [8+8]
7. (a) What is fatigue? What are the types of fatigue? How is thermal fatigue different from the other types of fatigue? How can the effect of thermal fatigue on the instruments be reduced?  
(b) How does external pressure affect the performance of the instrument? How can this effect be reduce. [10+6]
8. Differentiate between logic timing analyzer and logic state analyzer. Give the details of the controls in a typical logic analyzer. [16]

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Set No. 4

III B.Tech I Semester Examinations, November 2010

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Instrumentation Engineering

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  - (b) Mechanical considerations
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III B.Tech I Semester Examinations, November 2010

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Common to Instrumentation And Control Engineering, Electronics And  
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Set No. 3

III B.Tech I Semester Examinations, November 2010

ELECTRONIC EQUIPMENT DESIGN

Common to Instrumentation And Control Engineering, Electronics And  
Instrumentation Engineering

Time: 3 hours

Max Marks: 80

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All Questions carry equal marks

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