

Code No: NR310403

NR

Set No. 2

III B.Tech I Semester Examinations, November 2010

T V ENGINEERING

Electronics And Communication Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. (a) With a diagram explain the working of plumbicon.  
(b) Bring out the drawbacks of plumbicon.  
(c) Suggest remedies for different problems of plumbicon. [6+5+5]
2. (a) Draw the the visual exciter of TV transmitter and explain the functions.  
(b) Give the Aural exciter section of the TV transmitter and explain. [8+8]
3. (a) What do you understand by active and blanking periods in horizontal and vertical scanning? Give the periods of nominal, active and retraced intervals of horizontal and vertical scanning as used in the 625 line system.  
(b) Discuss about equalising pulses. [8+8]
4. (a) Distinguish between additive and subtractive color mixing? Which method is used in the color television ?  
(b) What is compatibility and explain the requirement.  
(c) Which colors have the greatest brightness? Why? [6+5+5]
5. (a) Explain the functional requirement of the head end processor with the help of a block schematic in cable TV.  
(b) What is multiplexing in color TV and explain how it is used? [8+8]
6. (a) Define aspect ratio, contrast, brightness and resolution.  
(b) How is flicker eliminated by using interlaced scanning?  
(c) Derive the video bandwidth requirement for 625 line system. [4+6+6]
7. (a) Sketch and label the current waveforms that might flow in the deflection yoke to produce a full raster. Explain the basic principles of generating such waveforms.  
(b) How does impedance of driving source affect the wave shapes? [8+8]
8. (a) Explain the various methods for contrast control, brightness control and stabilization in video output circuit.  
(b) Explain the principle and operation of DC restorer circuit with neat diagram and waveforms . [8+8]

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Code No: NR310403

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Set No. 4

III B.Tech I Semester Examinations, November 2010

T V ENGINEERING

Electronics And Communication Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions

All Questions carry equal marks

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1. (a) What do you understand by active and blanking periods in horizontal and vertical scanning? Give the periods of nominal, active and retraced intervals of horizontal and vertical scanning as used in the 625 line system.  
(b) Discuss about equalising pulses. [8+8]
2. (a) Sketch and label the current waveforms that might flow in the deflection yoke to produce a full raster. Explain the basic principles of generating such waveforms.  
(b) How does impedance of driving source affect the wave shapes? [8+8]
3. (a) Distinguish between additive and subtractive color mixing? Which method is used in the color television ?  
(b) What is compatibility and explain the requirement.  
(c) Which colors have the greatest brightness? Why? [6+5+5]
4. (a) With a diagram explain the working of plumbicon.  
(b) Bring out the drawbacks of plumbicon.  
(c) Suggest remedies for different problems of plumbicon. [6+5+5]
5. (a) Define aspect ratio, contrast, brightness and resolution.  
(b) How is flicker eliminated by using interlaced scanning?  
(c) Derive the video bandwidth requirement for 625 line system. [4+6+6]
6. (a) Explain the functional requirement of the head end processor with the help of a block schematic in cable TV.  
(b) What is multiplexing in color TV and explain how it is used? [8+8]
7. (a) Draw the the visual exciter of TV transmitter and explain the functions.  
(b) Give the Aural exciter section of the TV transmitter and explain. [8+8]
8. (a) Explain the various methods for contrast control, brightness control and stabilization in video output circuit.  
(b) Explain the principle and operation of DC restorer circuit with neat diagram and waveforms . [8+8]

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Set No. 1

III B.Tech I Semester Examinations, November 2010

T V ENGINEERING

Electronics And Communication Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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8. (a) With a diagram explain the working of plumbicon.  
(b) Bring out the drawbacks of plumbicon.  
(c) Suggest remedies for different problems of plumbicon. [6+5+5]

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Set No. 3

III B.Tech I Semester Examinations, November 2010

T V ENGINEERING

Electronics And Communication Engineering

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions

All Questions carry equal marks

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1. (a) Define aspect ratio, contrast, brightness and resolution.  
 (b) How is flicker eliminated by using interlaced scanning?  
 (c) Derive the video bandwidth requirement for 625 line system. [4+6+6]
2. (a) Sketch and label the current waveforms that might flow in the deflection yoke to produce a full raster. Explain the basic principles of generating such waveforms.  
 (b) How does impedance of driving source affect the wave shapes? [8+8]
3. (a) Explain the various methods for contrast control, brightness control and stabilization in video output circuit.  
 (b) Explain the principle and operation of DC restorer circuit with neat diagram and waveforms. [8+8]
4. (a) Distinguish between additive and subtractive color mixing? Which method is used in the color television?  
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 (c) Suggest remedies for different problems of plumbicon. [6+5+5]

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