E 263

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2003.

Third Semester

Information Technology

IF 243 — DISPLAY SYSTEMS ENGINEERING

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the formats of motion pictures?

2. Give the advantages of the yellow–minus yellow system.

3. What is called purkinje or mesopic region?

4. What is the use of colorimeter?

5. How the maximum camera frequency is determined?

6. Mention the characteristics of the electronic test patterns.

7. What are the ways of producing stereo signals?

8. Give the expression for the compression ratio.

9. What is MLP?

10. Explain the term screen burn.

PART B — (5 × 16 = 80 marks)

11. (i) With a neat block diagram explain the working of a typical DVD video system. (8)

    (ii) Discuss on VCR – TV Link procedure. (8)

12. (a) (i) Explain in detail, the terms used to describe HDTV system. (8)

    (ii) What are the advantages and disadvantages of broad blue systems? (8)

Or

  (b) (i) How to use TFT – LCD display system? Explain with necessary diagram. (8)

    (ii) Compare NTSC, PAL and SECAM television systems. (8)

13. (a) (i) With a neat diagram, explain color triangle. (8)

    (ii) Explain the principle of working of IR emitters. (8)

Or

  (b) (i) Explain the interlaced scanning field method in a typical television system. (8)

    (ii) Discuss on need and applications of alphanumeric displays. (8)

14. (a) (i) Explain in detail how to assess color reproduction. (12)

    (ii) Discuss on Flicker and its effects. (4)

Or

  (b) Describe in detail zone pattern signal applications. (16)

15. (a) (i) With diagram explain the function of Eustachian tube. (8)

(ii) Explain the diffraction grating in detail. (8)

Or

(b) (i) Distinguish between spherical waves and plane waves. (8)

(ii) How pincushion effect is corrected in a CRT? (8)

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