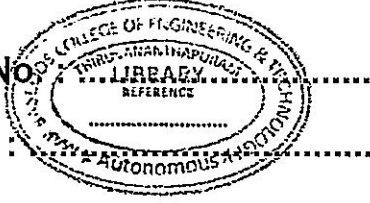


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Reg. No.

Name :



**Eighth Semester B.Tech. Degree Examination, April 2022**

**13.802 — ENTERTAINMENT ELECTRONICS TECHNOLOGY (T)**

**(2013 Scheme)**

Time : 3 Hours

Max. Marks : 100

PART – A

(Answer all questions. Each question carries 2 marks)

1. How impedance matching can be achieved in electronic circuits?
2. State the necessity of baffles and enclosures in loud speakers.
3. Draw the block diagram of Hi-Fi reproducing system.
4. What is vestigial side band modulation? Give its application.
5. Define channel coding. Why it is used?
6. Define composite video signal? Mention its function.
7. How chrominance signal is represented? Give expressions.
8. Mention the advantages of compression techniques? Define the term compression ratio.
9. Define the terms sampling and quantization.
10. Mention the technology behind HDTV.

(10 × 2 = 20 Marks)

P.T.O.



## PART – B

(Answer any one full question from each module. Each question carries 20 marks)

### Module – I

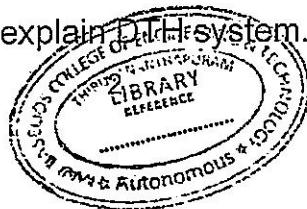
11. (a) Explain the principle, construction and characteristics of condenser microphone. 10
- (b) Compare features of various types of microphones. 10
12. (a) Explain the construction and working principle of cone type and horn type loud speakers. 10
- (b) With circuit and characteristic curves, explain the need and application of cross over networks. 10

### Module – II

13. (a) With diagrams, explain the method of optical recording on compact disc. 10
- (b) Discuss about the essential requirements of a good public address system. 10
14. (a) What are the factors on which the reverberation time depends? Derive a relation for the same. 10
- (b) Explain various digital audio processing methods. Mention its advantages. 10

### Module – III

15. (a) With neat block diagram, explain digital broadcast TV receiver. 10
- (b) Describe the working and characteristics of vidicon camera tube. 10
16. (a) Explain CCTV system with block schematic diagram. Mention its applications. 10
- (b) With neat block diagram, explain DTH system. 10

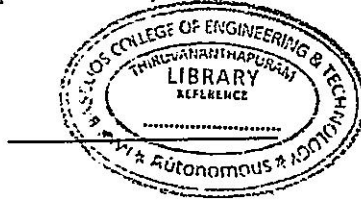


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### Module – IV

17. (a) Compare plasma TV, LCD TV and OLED TV. 10
- (b) Explain the principle of LCD technology. Discuss about transmissive and reflective type projection systems. 10
18. (a) Write a note on home theatre. What are the factors to be considered for designing a home theatre? 10
- (b) Explain how pictures are generated in rear projection system and front projection system. Compare their performance with DLP system. 10



(4 × 20 = 80 Marks)

