

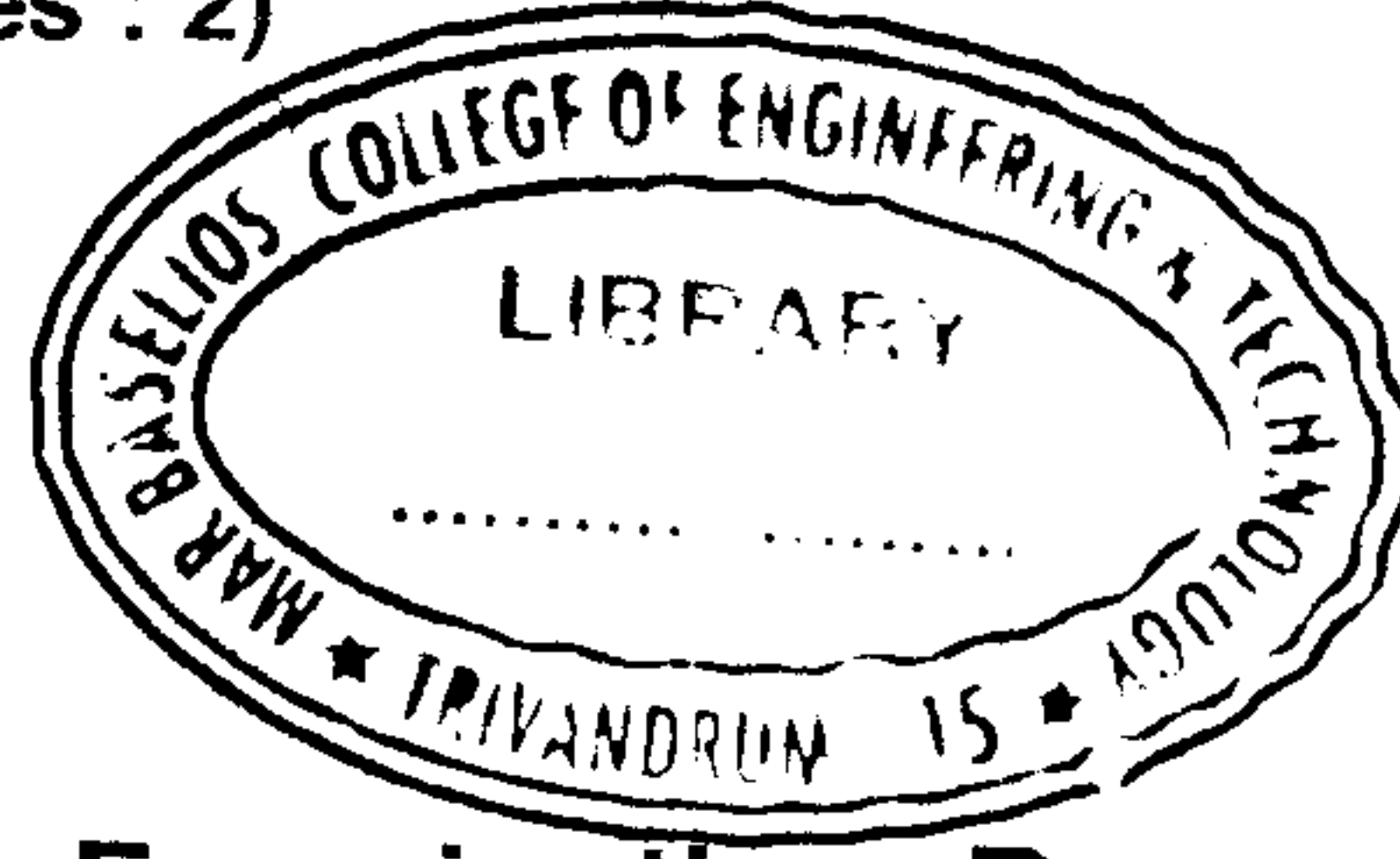


(Pages : 2)

F – 2920

Reg. No. :

Name :



**Eighth Semester B.Tech. Degree Examination, December 2018
(2013 Scheme)**

13.802 : ENTERTAINMENT ELECTRONICS TECHNOLOGY (T)

Time : 3 Hours

Max. Marks : 100

PART – A

(Answer **all** questions. **Each** question carries **2** marks.)

1. Mention the characteristic features of a good microphone.
2. State the necessity of baffles and enclosures in loud speakers.
3. What are cross over networks ? Mention its application.
4. Draw the block diagram of Hi-Fi reproducing system.
5. What is audio compression ? Mention its advantages.
6. Define the term aspect ratio. Why we use 4 : 3 aspect ratio ?
7. Name the modulation schemes used for transmission of audio and video signals in TV.
8. State the functions of quantizer and encoder. Where are these applied ?
9. What is the principle behind LCD technology ?
10. Mention the merits of DLP projection system.

P.T.O.



PART – B

(Answer **any one** 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 the features of moving coil, condenser and electric microphones. 10
12. a) Explain the construction and working principle of cone type and horn type loud speakers. Also compare their performances. 14
 b) Write a note on multi-way speaker systems. 6



Module – II

13. a) Explain the methods of optical recording of sound on film. 10
 b) Discuss about the essential requirements of a good public address system. 10
14. a) What are the factors to be considered while designing a good auditorium ? 10
 b) Define the term acoustic reverberation. What are the factors on which the reverberation time depends ? Derive a relation for it. 10

Module – III

15. a) What is a composite video signal ? Sketch it and label all the elements. 10
 b) Draw the block diagram and explain digital broadcast TV receiver. 10
16. a) Explain the RGB and YUV representation of video signals with expressions. 10
 b) Explain CCTV system with block schematic diagram Mention its applications. 10

Module – IV

17. a) Briefly explain the technological advances in 3D TV systems. 10
 b) Describe the basic elements required for a home theatre. Discuss the design considerations for the system. 10
18. a) Compare plasma TV, LCD TV and OLED TV. 10
 b) Explain how pictures are generated in rear projection system and front projection system. Compare their performance with DLP system. 10