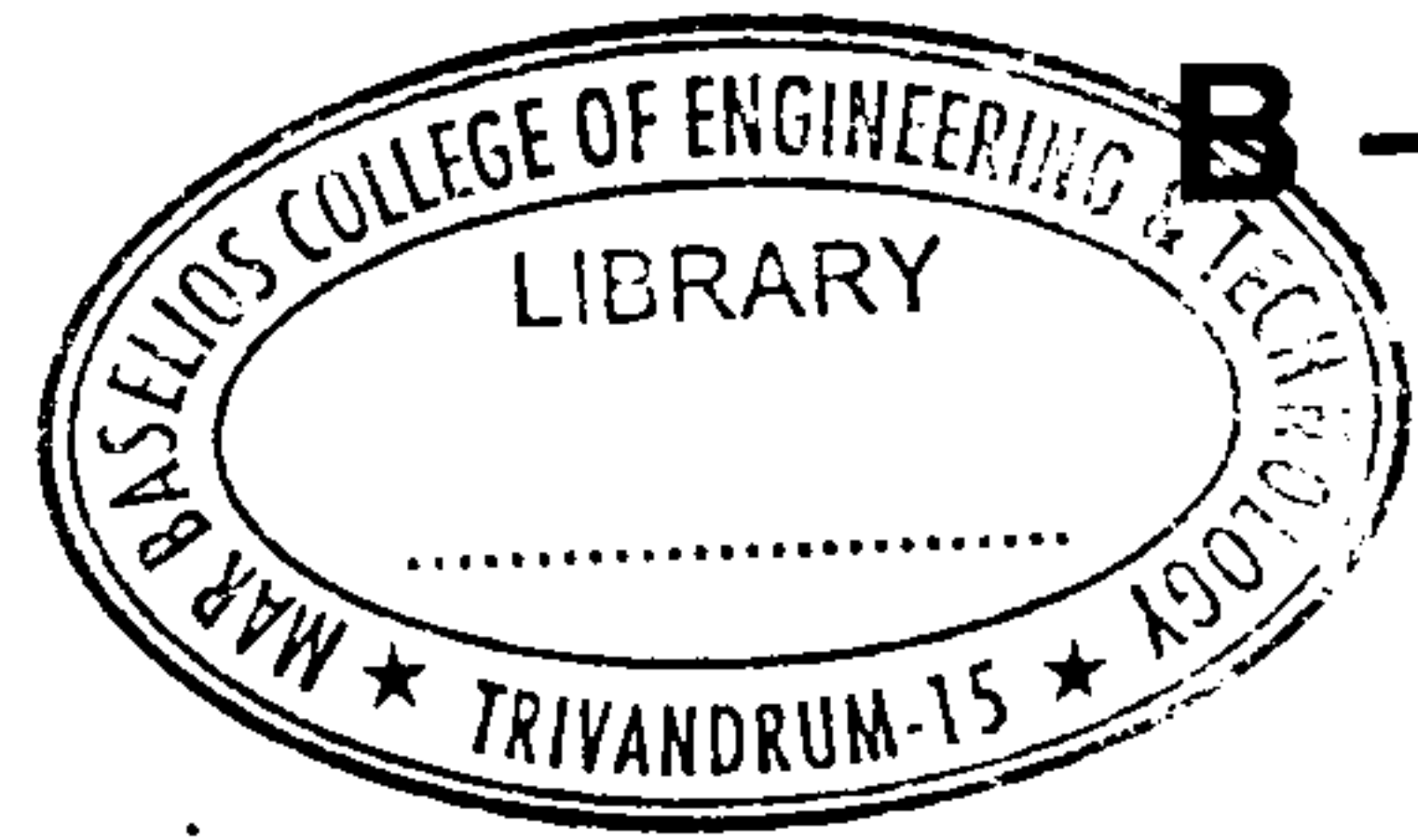




(Pages : 2)



B – 2650

Reg. No. :

Name :

**Eighth Semester B.Tech. Degree Examination, December 2016
(2008 Scheme)
08.816 : BIOMEDICAL ENGINEERING (T)**

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions :

(10×4=40 Marks)

1. Draw and explain human respiratory system.
2. What are the applications of EEG signal ?
3. Explain how the blood pressure is measured ?
4. What is biometric amplifiers ?
5. Write the short notes on Electrical safety.
6. What are the risks involved in PET imaging ?
7. What is the application of X-ray in medicine ?
8. What are the components of Biotelemetry system ?
9. What is M-scan used in ultrasonic imaging ?
10. What is Bioinformatics ?

PART – B

Answer **any two** questions from **each** Module. **Each** carry **10** marks : **(20×3=60 Marks)**

Module – 1

11. What is the transducer ? Explain any three transducer used in bio-medical applications.
12. What are characteristics of bio-electric amplifiers ? Explain.
13. With the block diagram, explain the working of ultrasonic blood flow meter.

P.T.O.



Module – 2

14. Explain how the action potential are propagated through nerves.
15. Explain the working of ventilator. Why it is needed ?
16. Describe the instrumentation for measuring brain function.

Module – 3

17. Explain the steps involved in capturing MRI.
18. Explain : A-scan, B-scan used in ultrasonic imaging.
19. What are the limitations of :
 - a) CT
 - b) MRI and
 - c) PET scan ?

