

Q.P.Code: 104015

Reg. No.:.....

First Year BASLP Degree Examinations - September 2013

BIOMEDICAL INSTRUMENTATION AND ACOUSTICS

Time : 3 hrs

Max marks : 80

- Answer all questions
- Draw diagram wherever necessary

Essays

(4x10=40)

1. Explain the working principle of an immittance audiometer with a neat block diagram.
2. Explain how sound is recorded on to a magnetic tape with supporting diagrams.
3. Define sound pressure level and explain how it is calculated & measured. State the unit with which it is measured.
4. Explain the working of :
 - Potentiometer
 - Transistor
 - Semiconductor diode
 - Servo controlled stabilizer

Short notes

(5x5=25)

5. FIR and IIR systems
6. LCD
7. Computer peripherals
8. Artificial larynx
9. Acoustic impedance

Answer briefly

(5x3=15)

10. Illustrate how a digital signal is converted to analog signal.
11. Role of a pre-amplifier and a power amplifier
12. Role of a hard disk in the functioning of personal computer
13. Illustrate the principle of working of a condenser microphone
14. Highlight the need of an enclosure for a loudspeaker.
