

Q.P.Code: 104015

Reg. No.:.....

First Year BASLP Degree Examinations - September 2016

BIOMEDICAL INSTRUMENTATION AND ACOUSTICS

Time : 3 hrs

Max marks : 80

- Answer all questions
- Draw diagram wherever necessary

Essays

(4x10=40)

1. Draw the block diagram of a digital hearing aid and explain the role of A to D and D to A converter in it.
2. Explain the parts of a Computer with a block diagram
3. Explain how binary digits of '1' and '0' are recorded on a compact disk. Illustrate how the recorded information is read out.
4. Explain the need of display devices such LEDs and LCDs in audiology. Illustrate how these devices work. Compare its merits and demerits.

Short notes

(5x5=25)

5. Dynamic loudspeaker
6. AC voltage stabilizer
7. Memory devices used in a computer
8. Audiometer
9. Filters

Answer briefly

(5x3=15)

10. Compare the merits and demerits of digital signal processing over analog signal processing
11. Illustrate how a flip-flop can store a binary digit.
12. Name the instrument used to measure sound and explain how this instrument works.
13. Why it is essential to have a UPS to connect a personal computer
14. How a transistor does works as an amplifier.
