

Q.P. Code: 104015

Reg. No.:.....

First Year BASLP Degree Supplementary Examinations March 2017

BIOMEDICAL INSTRUMENTATION AND ACOUSTICS

Time : 3 hrs

Max marks : 80

- Answer all questions
- Draw diagram wherever necessary

Essays

(4x10=40)

1. Discuss the advantages of a condenser microphone compared to other types.
With supporting diagrams, illustrate how a condenser microphone converts sound pressure variations to electrical signal.
2. Briefly explain the role of a sound level meter in calibrating an audiometer.
Explain the importance of calibration in diagnostic audiology.
3. Explain the parts of a Computer with a block diagram.
4. State and explain the tasks performed by RAM in the functioning of a computer

Short notes

(5x5=25)

5. Oscillators
6. Immittance meter
7. Servo controlled AC voltage stabilizer
8. Artificial ear
9. Speech spectrograph

Answer briefly

(5x3=15)

10. Differentiate sound pressure level and sound power level.
11. With a block diagram explain how an uninterrupted power supply (UPS) functions.
12. Convert the hexa decimal number FA to its equivalent binary number
13. Illustrate the equipment setup required to calibrate a pure tone audiometer in air conduction mode.
14. Explain the role of analog to digital converter in digital hearing aids.
