

**Q P Code: 125015**

**Reg. No.....**

**First Semester BASLP Degree Regular/Supplementary Examinations**  
**May 2025**  
**Electronics and Acoustics**

**Time: 3 Hours**

**Max Marks: 75**

- *Answer all questions to the point neatly and legibly* • *Do not leave any blank pages between answers* • *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together* • *Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

**Essays** **(4x10=40)**

1. Differentiate between analog and digital signals. Give two examples and explain how analog signals are converted into digital signals.
2. What are sound transducers. How do they help in measuring and recording sound. Also, explain the different types of microphones and how each one is used
3. Explain the structure and functioning of the Internet and Intranet. Differentiate between them with examples.
4. Explain the working principles of audiometers and their role in assessing hearing loss.

**Short Notes** **(5x5=25)**

5. Write a short note on UPS (Uninterruptible Power Supply) and its role in medical equipment.
6. Define pitch and loudness. How are Sone, Phon and equal loudness contour used to measure loudness perception.
7. List and explain different types of memory devices and storage media used in computers.
8. Describe the basic block diagram and working of a digital hearing aid.
9. What are logic gates. Draw basic symbols and truth tables for AND, OR, and NOT gates.

**Answer Briefly** **(5x2=10)**

10. What is the function of an isolation transformer in a power supply system.
11. Signal to Noise Ratio.
12. Define Local Area Network (LAN).
13. Speech Spectrograph
14. Mention any two characteristics of sound.

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