

Q.P. Code: 102389

Reg. No.:.....

**First Semester M.Sc. Audiology Degree Regular/Supplementary
Examinations September 2023**

A 102: Technology in Audiology

Time: 3 hrs

Max marks: 80

- *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 table/diagrams/flow charts wherever necessary*

Essays

(5x16=80)

1. Briefly explain the functions performed by the operating system in the operation of a computer. List out the names of four operating systems. With a block diagram describe the operation of a DC power supply. Highlight the role of filter in the performance of this power supply.
2. How is amplitude modulation different from frequency modulation. Mention the merits of frequency modulation due to which it is preferred for assistive listening devices. Explain the concept of satellite communication. Illustrate with a diagram how a tele-rehabilitation system can be implemented through internet.
3. With a diagram illustrate the principle of operation of any one type of speech processing strategy used in cochlear implants. List the different types of short time analysis techniques. Explain any one technique in detail.
4. Explain the protocol and procedure for measuring traffic noise. With a diagram of the equipment set up, explain the procedure for measuring reverberation time of audiometric test room.
5. Explain the basic principle of Magnetic Resonance Imaging system. How is 'SPECT' advantageous over 'PET scan' in imaging. Explain the technology behind SPECT.
