First Semester M.Sc Speech Language Pathology Degree Regular/Supplementary Examinations January 2022

SLP 104: Technology in Speech Language Pathology

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. Which are the major elements of a computer network. How do you classify computer networks based on physical capacity.

2. Describe balanced armature technology used for hearing aid receivers. State and explain the essential characteristics of Headphones.

3. What is the role of a power amplifier. How does it influence the performance of the signal processing system. How do you convert a speech signal in time domain to frequency domain. Mention the challenges involved.

4. Which are the two distinct sub areas of speaker recognition. Compare the two in terms of their principle of operation and applications.

5. Illustrate with a block diagram, the basic principle of operation of an fMRI Imaging system. How is 'SPECT' advantages over 'PET' in imaging. Explain the technology of a PET scan system.

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