



Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD (now MoE)

Re-accredited with 'A++' Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Arrear Examination – May 2025 I Semester

Batch : 2024
Major : Audiology and Speech Language Pathology

Time: 3 Hours
Max. Marks: 100

22BASC01 Communication Sciences

Course Outcomes:

- CO1: Basic concepts of speech, language and communication
CO2: Bases of speech and language
CO3: Basic concepts of acoustics
CO4: Basic concepts of hearing sensitivity
CO5: Historical aspects and scope of audiology and speech language pathology

Part A

10 x 1= 10

Choose the Correct Answer

- 1 Language is best defined as: CO1K1
 - a. A system of arbitrary vocal symbols used for communication
 - b. The ability to produce speech sounds
 - c. A set of gestures used to convey meaning
 - d. The ability to perceive and interpret auditory signals

- 2 Speech is considered an overlaid function because: CO1K1
 - a. It develops after other biological functions
 - b. It shares the same structures used for breathing and swallowing
 - c. It requires conscious effort for articulation
 - d. It is controlled only by the left hemisphere of the brain

- 3 A prerequisite for speech and language development does not include: CO2K1
 - a. Cognitive abilities
 - b. Proper nutrition
 - c. Adequate auditory perception
 - d. Sufficient muscle strength in the arms

- 4 The speech chain primarily describes CO2K1
 - a. The neurological pathway for speech production
 - b. The sequence of events from speech production to perception
 - c. The linguistic rules governing speech sounds
 - d. The role of genetics in language acquisition

- 5 Factors that influence bilingual language development include CO3K1
 - a. Age of language exposure
 - b. Cultural context
 - c. Social interactions
 - d. All of the above

- 6 The unit used to measure sound intensity is CO3K1
 - a. Pascal
 - b. Hertz
 - c. Decibel
 - d. Newton

- 7 Frequency is best defined as: CO4K1
 - a. The number of cycles of a sound wave per second
 - b. The amount of energy carried by a sound wave
 - c. The distance between two consecutive peaks of a sound wave
 - d. The perception of loudness in human hearing

- 8 Minimum audible pressure (MAP) is measured using: CO4K1
 - a. Free-field testing
 - b. Headphones
 - c. Bone conduction
 - d. Tympanometry

- 9 The threshold of pain for human hearing is considered to be: CO5K1
 - a. 40 dB SPL
 - b. 100 dB SPL
 - c. 120-140 dB SPL
 - d. 160 dB SPL

- 10 A branch of audiology does not include: CO5K1
 - a. Pediatric audiology
 - b. Forensic audiology
 - c. Psychoacoustics
 - d. Speech therapy

3 x 6 = 18

Part B

Answer ALL questions

Each answer should not exceed 400 words or two pages

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|---|-------|
| 11.a. Discuss the Pre-requisites and factors affecting speech-language development.
(or) | CO1K1 |
| 11.b. Discuss the Speech Chain. | CO1K1 |
| 12.a. Explain Social and cognitive bases of speech and language.
(or) | CO2K1 |
| 12.b. Explain Neurological and genetic bases of speech and language. | CO2K1 |
| 13.a. Explain Acoustic energy and power.
(or) | CO3K1 |
| 13.b. Differentiate between Bel and Decibel and comment on its clinical applications. | CO3K1 |
| 14.a. Discuss Hearing range–intensity and frequency.
(or) | CO4K1 |
| 14.b. Explain Sensation levels, Threshold of pain, Most comfortable levels. | CO4K1 |
| 15.a. Enumerate on Interdisciplinary nature of speech-language pathology.
(or) | CO5K1 |
| 15.b. Discuss the branches of audiology. | CO5K1 |

Part C

3 x 12 = 36

Answer ALL questions

Each answer should not exceed 800 words or four pages

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| 16.a. Explain Speech as an overlaid function.
(or) | CO1K1 |
| 16.b. Discuss the Normal development of speech and language. | CO1K1 |
| 17.a. Discuss the Overview of speech production–speech sub-systems.
(or) | CO2K1 |
| 17.b. Explain Acoustic theory of speech production. | CO2K1 |
| 18.a. Explain the concepts of decibel Sound pressure level, decibel hearing level and decibel intensity level.
(or) | CO3K1 |
| 18.b. Discuss the characteristics and applications of decibels in acoustics. | CO3K1 |
| 19.a. Discuss the Up-down and staircase procedure of estimating minimum audible levels.
(or) | CO4K1 |
| 19.b. Explain minimum audible pressure and field, Missing side Band related issues. | CO4K1 |
| 20.a. Enumerate on various scopes in Audiology and Speech Language Pathology.
(or) | CO5K1 |
| 20.b. Discuss about historical aspects in Audiology and Speech Language Pathology. | CO5K1 |
