



**Avinashilingam Institute for Home Science and Higher Education for Women  
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)  
Re-accredited with A++ Grade by NAAC. Recognized by UGC Under Section 12B  
Coimbatore - 641 043, Tamil Nadu, India**

**Continuous Internal Assessment II – April 2025  
IV Semester**

**Class : II UG  
Branch : BASLP**

**Time : 2 Hours  
Max. Marks : 60**

**22BASD04 DSE IV: Implantable Hearing Devices**

**Course Outcomes:**

- CO1:** To assess candidacy for bone anchored hearing devices, middle ear implants, cochlear implants, and ABI  
**CO2:** To select the appropriate device depending on the audiological and non-audiological findings  
**CO3:** To handle post-implantation audiological management  
**CO4:** To assess the benefit derived from implantation  
**CO5:** To counsel the parents/care givers during different stages of implantation

**Part A  
Choose the Correct Answer**

**6 x 1 =6**

1. The material commonly used for the BAHA implant is: CO3K1
  - a) Stainless steel
  - b) Titanium
  - c) Plastic
  - d) Aluminum
2. The primary benefit expected after BAHA implantation is: CO3K1
  - a) Improved speech perception in noise
  - b) Restoration of normal cochlear function
  - c) Regeneration of auditory nerve fibers
  - d) Elimination of all background noise
3. The structure stimulated by an auditory brainstem implant is: CO4K1
  - a) Cochlear nucleus
  - b) Spiral ganglion
  - c) Tympanic membrane
  - d) Middle ear ossicles
4. The preferred surgical approach for ABI placement is: CO4K1
  - a) Translabyrinthine
  - b) Endoscopic tympanoplasty
  - c) Canal wall down mastoidectomy
  - d) Stapedectomy
5. The primary goal of auditory-verbal therapy (AVT) is: CO5K1
  - a) Developing listening and spoken language skills
  - b) Enhancing sign language proficiency
  - c) Training in lip-reading only
  - d) Encouraging reliance on non-verbal communication
6. The best way to prevent moisture damage to the processor is: CO5K1
  - a) Using a drying kit or dehumidifier
  - b) Keeping the device in a sealed plastic bag
  - c) Storing it in direct sunlight
  - d) Cleaning it with a wet cloth daily

**Part B**

**3 x 6 = 18**

**Answer ALL questions**

**Each answer should not exceed 400 words or two pages**

- 7a. Describe the types and components of a bone-anchored hearing device (BAHD). CO3K2  
Or
- 7b. Outline the audiological evaluations required to determine candidacy for a bone-anchored hearing device. CO3K2
- 8a. Outline the primary indications and contraindications for auditory brainstem implantation. CO4K2  
Or
- 8b. Describe the key components and function of an auditory brainstem implant (ABI). CO4K2
- 9a. Outline the factors influencing cochlear implant outcomes in adults and children. CO5K2  
Or
- 9b. Discuss the common troubleshooting steps for implantable hearing devices CO5K2

**Part C**

**3 x 12 = 36**

**Answer ALL questions**

**Each answer should not exceed 800 words or four pages**

- 10a. Discuss the audiological criteria, contraindications, and assessment process for selecting candidates for a bone-anchored hearing device. CO3K3  
Or
- 10b. Compare bone-anchored hearing devices with conventional hearing aids in terms of function, candidacy, and outcomes. CO3K3
- 11a. Discuss the rehabilitation process and expected outcomes after auditory brainstem implantation. CO4K3  
Or
- 11b. Analyze the candidacy criteria, surgical procedure, and postoperative care required for auditory brainstem implant patients. CO4K3
- 12a. Describe the role of auditory-verbal therapy (AVT) in post-implant rehabilitation. CO5K3  
Or
- 12b. Explain the differences in implant outcomes between prelingually and postlingually deafened individuals, considering various influencing factors. CO5K3

\*\*\*\*\*

No. Of Copies: 19

Name of the Staff: Ms.Anjana.R

