

BACHELOR IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

SECOND YEAR – SEMESTER - IV

PAPER IV – IMPLANTABLE HEARING DEVICES

Q.P. Code: 802364

Time: Three Hours

Maximum : 50 Marks

Answer All questions

I. Elaborate on:

(1 x 10 = 10)

1. Audiological and non-audiological candidacy criteria and contraindications for cochlear implant in children.

II. Write notes on:

(5 x 5 = 25)

1. Types and components of bone anchored hearing aid.
2. Counseling for middle ear implants.
3. Differentiate bilateral, bimodal and hybrid cochlear implant.
4. Cochlear implant mapping.
5. Factors affecting cochlear implant outcome in children.

III. Short answers on:

(5 x 3 = 15)

1. ESRT – Expand and explain.
2. Candidacy for brainstem implant.
3. Auditory pyramid in auditory verbal therapy.
4. Promontory stimulation.
5. Fine structure processing strategy.

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SECOND YEAR – SEMESTER - IV

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Q.P. Code: 802364

Time: Three Hours

Maximum : 50 Marks

Answer All questions

I. Elaborate on: **(1 x 10 = 10)**

1. Types and components of cochlear implant with its maintenance and trouble shooting of the device.

II. Write notes on: **(5 x 5 = 25)**

1. Need of implantable hearing devices.
2. Bone anchored hearing aids vs middle ear implants – merits and demerits.
3. Factors affecting cochlear implant outcome in adults.
4. Post mapping audiological evaluation in cochlear implant.
5. Role of audiologist in intra-operative monitoring cochlear implant.

III. Short answers on: **(5 x 3 = 15)**

1. EABR – Expand and explain.
2. Surgical complications in cochlear implant.
3. Audiological findings in auditory neuropathy spectrum disorders.
4. Team members and their role in cochlear implant auditory verbal therapy.
5. Differentiate hearing aid and cochlear implant.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0321]

MARCH 2021

Sub. Code: 2364

(AUGUST 2020 EXAM SESSION)

BACHELOR IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

SEMESTER - IV (Regulation 2017-2018)

PAPER IV – IMPLANTABLE HEARING DEVICES

Q.P. Code : 802364

Time: Three hours

Answer ALL Questions

Maximum: 50 Marks

I. Elaborate on:

(1 x 10 = 10)

1. Explain Auditory Verbal Therapy in step by step manner with suitable examples.

II. Write notes on:

(5 x 5 = 25)

1. Team involved in implantable hearing devices.
2. Factors related to the selection of cochlear implant device.
3. Signal coding strategies in cochlear implant.
4. Types and components of middle ear Implant.
5. Objective measures in post cochlear implant children.

III. Short answers on:

(5 x 3 = 15)

1. Optimisation of hearing aid in contralateral ear for cochlear implantee.
2. Malformations of the cochlea.
3. Draw a neat diagram of bone anchored hearing aid and label its parts.
4. Advantages of bilateral cochlear implant.
5. Complications in brainstem implant.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0222]

**FEBRUARY 2022
(AUGUST 2021 EXAM SESSION)**

Sub. Code: 2364

**BACHELOR IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY
SEMESTER - IV (Regulation 2017-2018)
PAPER IV – IMPLANTABLE HEARING DEVICES
*Q.P. Code : 802364***

Time: Three hours

Answer ALL Questions

Maximum: 50 Marks

I. Elaborate on: **(1 x 10 = 10)**

1. Audiological evaluation for candidacy, surgical approaches, risks, contra indications and complications for cochlear implants.

II. Write notes on: **(5 x 5 = 25)**

1. Draw a neat diagram to illustrate the components of BAHA and mention its types.
2. Different signal coding strategies in cochlear implants.
3. Importance of pre-implant counseling.
4. Optimization of hearing aid on contralateral ear.
5. Role of objective and subjective measures in cochlear implant mapping.

III. Short answers on: **(5 x 3 = 15)**

1. Electrically evoked Stapedial Reflex Threshold.
2. Bimodal cochlear implants.
3. Informed consent.
4. Candidacy criteria for middle ear implants.
5. Mid brain implants.

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[AHS 0423]

APRIL 2023

Sub. Code: 2364

**BACHELOR IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY
SEMESTER IV – (Regulation 2017-2018 onwards)
PAPER IV – IMPLANTABLE HEARING DEVICES**

Q.P. Code: 802364

Time: Three Hours

Answer ALL Questions

Maximum: 50 Marks

I. Elaborate on: **(1 x 10 = 10)**

1. Draw a neatly labeled diagram and explain Internal and External components of the Cochlear Implant along with the types of Electrodes.

II. Write notes on: **(5 x 5 = 25)**

1. Team involved in Auditory Brainstem Implant.
2. Factors affecting outcomes in Implantable Devices.
3. Highlight the points in Pre-Cochlear Implant Counseling.
4. Audiological evaluation for BAHA Candidacy.
5. Assessment of outcome benefits in Cochlear Implant.

III. Short answers on: **(5 x 3 = 15)**

1. Complications in Middle Ear Implants.
2. Promontory stimulation.
3. Aided Audiogram.
4. Mid brain Implants.
5. Auditory Discrimination.

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[AHS 0424]

APRIL 2024

Sub. Code: 2364

BACHELOR IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY
SEMESTER IV – (Regulation 2017-2018 onwards)
PAPER IV – IMPLANTABLE HEARING DEVICES
Q.P. Code: 802364

Time: Three Hours

Answer ALL Questions

Maximum: 50 Marks

I. Elaborate on: **(1 x 10 = 10)**

1. Audiological and Non Audiological candidacy criteria for Auditory Brainstem Implant in Children.

II. Write notes on: **(5 x 5 = 25)**

1. Components and functioning of CI.
2. Contraindication of BAHA.
3. Team members involved in selection of IHDs.
4. Objective measures of Cochlear implant function.
5. Troubleshooting of CI.

III. Short answers on: **(5 x 3 = 15)**

1. Bone bridge.
2. Intra operative monitoring of CI.
3. Aided audiometry.
4. Need for follow up.
5. Auditory training.

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[AHS 1125]

NOVEMBER 2025

Sub. Code: 2364

BACHELOR IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

SEMESTER IV – (Regulation 2017-2018 onwards)

PAPER IV – IMPLANTABLE HEARING DEVICES

Q.P. Code: 802364

Time: Three Hours

Answer ALL Questions

Maximum: 50 Marks

I. Elaborate on:

(1 x 10 = 10)

1. Audiological evaluation for Candidacy, Contraindications and Complications for Cochlear Implants.

II. Write notes on:

(5 x 5 = 25)

1. Team involved in Implantable Hearing Devices
2. Draw a neat diagram to illustrate the components of BAHA and mention its types.
3. Different Signal Coding Strategies in Cochlear Implants.
4. Hybrid Cochlear Implants.
5. Role of objective and subjective measures in Cochlear Implant Mapping.

III. Short answers on:

(5 x 3 = 15)

1. Mid Brain Implants.
2. Electrically Evoked Stapedial Reflex Threshold.
3. Candidacy criteria for Middle Ear Implants.
4. Auditory Brain Stem Implant.
5. Bimodal Cochlear Implants.
