

[LB 0212]

AUGUST 2012

Sub. Code: 2316

B.Sc. AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

SECOND YEAR

PAPER VI – PAEDIATRIC AUDIOLOGY

Q.P. Code: 802316

Time : Three Hours

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on:

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|--|---|---------|----|
| 1. The need for hearing screening in school children and the tests used. | 7 | 20 min. | 10 |
| 2. The signs/symptoms, screening tests used to assess Central Auditory Processing Disorders in children. | 7 | 20 min. | 10 |
| 3. Auditory development from 0-2 years. | 7 | 20 min. | 10 |

II. Write notes on:

- | | | | |
|--|---|---------|---|
| 1. Reinforcement audiometry techniques used to assess hearing in infants. | 4 | 10 min. | 5 |
| 2. Screening for hearing loss using High Risk Register. | 4 | 10 min. | 5 |
| 3. Auditory Brainstem Response in children. | 4 | 10 min. | 5 |
| 4. Causes of hearing loss in children. | 4 | 10 min. | 5 |
| 5. Treacher Collins Syndrome. | 4 | 10 min. | 5 |
| 6. Signs and symptoms of Functional Hearing Loss and tests to assess it in children. | 4 | 10 min. | 5 |
| 7. Tympanometry and Acoustic Reflex testing in children with middle ear pathologies. | 4 | 10 min. | 5 |
| 8. Responses of a fetus to sound stimulus. | 4 | 10 min. | 5 |

III. Short Answers on:

- | | | | |
|---|---|--------|---|
| 1. Hearing loss as a “Handicap”. | 2 | 4 min. | 3 |
| 2. Speech Recognition Threshold. | 2 | 4 min. | 3 |
| 3. Noise levels in the Intensive Care Unit. | 2 | 4 min. | 3 |
| 4. Normal Auditory localization responses noted in a 6 month old infant. | 2 | 4 min. | 3 |
| 5. Tangible Reinforcement Operant Conditioning Audiometry (TROCA). | 2 | 4 min. | 3 |
| 6. Binaural Synthesis and Binaural Separation. | 2 | 4 min. | 3 |
| 7. Use of Ear Canal Physical Volume Test. | 2 | 4 min. | 3 |
| 8. Oto acoustic emission and Auditory Brainstem Response findings in Auditory Neuropathy. | 2 | 4 min. | 3 |
| 9. Ear symptoms in a child with Down Syndrome. | 2 | 4 min. | 3 |
| 10. Neuroplasticity in the brain. | 2 | 4 min. | 3 |

[LD 0212]

AUGUST 2013

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SECOND YEAR

PAPER VI – PAEDIATRIC AUDIOLOGY

Q.P. Code: 802316

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Embryological development of inner ear.
2. The importance of early identification and intervention of hearing loss.
3. The objective and subjective evaluation for functional hearing loss in children.

II. Write notes on:

(8 x 5 = 40)

1. The importance of case history.
2. Glendnonald Auditory Screening procedure & early speech perception test.
3. The procedure involved in visual reinforcement audiometry.
4. The concept of universal hearing screening.
5. The importance of TEOAE & DPOAE in hearing screening.
6. The symptoms of auditory processing disorders in children.
7. The Non- Genetic causes of hearing loss.
8. The stimulus and recording parameters required for threshold estimation through ABR.

III. Short Answers on:

(10 x 3 = 30)

1. Crib-o-gram.
2. Congenital perinatal infections.
3. Pseudohypacusis & write down the behavioural signs of it.
4. BC speech audiometry.
5. Importance of follow up in hearing screening.
6. Speech detection test in children.
7. Ushers syndrome.
8. Importance of tympanometry in hearing screening.
9. Tangible reinforcement operant conditioning audiometry.
10. Define central auditory processing. What are the processes involved in it.

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Q.P. Code: 802316

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. The importance of OAE and ABR in neonatal hearing screening.
2. The various tests to obtain speech threshold in children.
3. How to evaluate a 3 month old infant with a high risk for hearing loss.

II. Write notes on:

(8 x 5 = 40)

1. Role of early identification and intervention with specific reference to sensorineural hearing loss.
2. Importance of school screening.
3. The test and materials used to obtain speech reception threshold in children.
4. Tests available to evaluate a child with Non-organic hearing loss.
5. The pros and cons of visual reinforcement audiometry?
6. What is acoustic reflex threshold? Write down the usefulness of reflexometry in hearing screening.
7. Phylogeny of inner ear.
8. Monaural low redundancy speech test.

III. Short Answers on:

(10 x 3 = 30)

1. Apgar Score.
2. Clinical features of waardenburg syndrome.
3. Neo natal hearing.
4. The type of behavioural responses for 7-9 month old infant.
5. The modes of operant conditioning?
6. Optimal period. Why is it important?
7. The clinical application of ABR in children.
8. The clinical characteristics of transient evoked to acoustic emission.
9. Early speech perception test.
10. Difference between sensitivity and specificity.

[LF 0212]

AUGUST 2014

Sub.Code :2316

**B.Sc. AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY
SECOND YEAR
PAPER VI – PAEDIATRIC AUDIOLOGY**

Q.P. Code: 802316

Time: Three hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Discuss the use of high risk registers while screening hearing loss.
Write a note on any one register developed in India.
2. Explain the following : a) CORA b) TROCA.
3. Explain functional hearing loss in children with its signs and symptoms.
Detail any two tests to find functional hearing loss in children.

II. Write notes on:

(8 x 5 = 40)

1. Describe the development of inner ear.
2. Discuss the role of ABR in screening and diagnosis of hearing loss in children.
3. Describe the principle behind VRA. Explain its procedure in detail.
4. Early identification of conductive hearing loss is important.
Justify this statement.
5. Write in detail about the behavioural screening tests used in audiology clinic.
6. Discuss the concept of universal hearing screening.
7. Discuss the factors affecting speech audiometry results in children.
8. What are the signs and symptoms of Central Auditory Processing Disorder? Mention any two screening tests used for it.

III. Write answers on:

(10 x 3 = 30)

1. Pre Natal hearing behaviour.
2. Auditory behavior development from 0 – 3 months.
3. Bottle feeding tests.
4. Advantages of VRA over BOA.
5. Write in short about the procedure of conditioning audiometry in children.
6. What is the procedure to screen hearing sensitivity during school screening program?
7. Compare and contrast: Behavioural hearing screening tests Vs Objective hearing screening tests.
8. Mention the advantages of inclusion of ABR in testing paediatric population.
9. Mention the objective screening tests and its implications.
10. Write short notes on Speech Recognition Threshold (SRT).

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Q.P. Code: 802316

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Write an essay on development of auditory behavior till the age of 2 years.
2. Discuss the role of ABR and OAE in screening and diagnosis of hearing loss.
3. Explain CAPD and its symptoms. What are the screening procedures used for CAPD?

II. Write notes on:

(8 x 5 = 40)

1. Describe the structures of the ear that develop from the 1st and 2nd branchial arches.
2. How would you use information regarding development of the auditory system in counselling parents?
3. Justify the need of early identification of sensori neural hearing loss in children.
4. Detail the high risk registers used for hearing screening program.
5. Explain the application of Immittance Audiometry in hearing screening programs.
6. Explain the screening procedure for middle ear effusion during school screening programs.
7. Write notes on: a) CORA b) TROCA.
8. Explain functional hearing loss in children with its signs and symptoms.

III. Short Answers on:

(10 x 3 = 30)

1. Prenatal hearing behaviour.
2. Usher's syndrome.
3. Aural palpabrel reflex.
4. Behavioural Observation Audiometry.
5. Write about frequency spectrum of noise makers used for behavioural screening tests.
6. Mention few assessment procedures for functional hearing loss in children.
7. Mention any two group screening test.
8. Write in short about the procedure of play audiometry.
9. Mention few speech tests developed in India.
10. Glendonald Auditory Screening Procedure (GASP).

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Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Prenatal hearing with supportive studies.
2. Any 2 speech tests for children.
3. Embryology of external ear with appropriate diagrams.

II. Write notes on:

(8 x 5 = 40)

1. Define individual screening. Explain its merits and demerits.
2. One reinforcement audiometry.
3. Auditory behavior from 0-1 year.
4. Signs and symptoms of central auditory processing disorders.
5. JCIH.
6. Behavioral observation audiometry.
7. Explain one test to assess hearing in a 2 year old child with bilateral atresia.
8. Conditioned play audiometry.

III. Short Answers on:

(10 x 3 = 30)

1. Instrument and tests used for school screening.
2. SRT in children.
3. Crib-o-gram.
4. Localisation.
5. Prenatal causes for hearing loss.
6. Handheld Tympanometers.
7. Auditory myelination.
8. Mass media screening.
9. HRR for Indian population.
10. Neonates vs Infants.

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Q.P. Code: 802316

Time : Three Hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on:

(3 x 10 = 30)

1. Development of auditory behavior from 0-2 years.
2. Two tests to identify functional hearing loss in children.
3. Explain one objective test to estimate hearing threshold in a 2 year old child.

II. Write Notes on:

(8 x 5 = 40)

1. Embryology of middle ear.
2. High risk registers.
3. Differentiate between individual vs group screening.
4. TROCA.
5. Factors affecting speech audiometry in children.
6. Application of OAE in paediatric population.
7. Use of objective test in identification of hearing loss among school children.
8. Importance of early identification of hearing loss.

III. Short Answers on:

(10 x 3 = 30)

1. Speech detection threshold in children.
2. Scan-c test.
3. First arch syndrome.
4. Automated auditory brainstem response.
5. Birth asphyxia.
6. Nu-chip.
7. Seating position of a child in BOA.
8. Name 3 tests to identify hearing loss in 1 year old child.
9. Modifications in VRA.
10. Factors affecting ARB in children.

[LJ 0816]

AUGUST 2016

Sub. Code: 2316

**B.Sc. AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY
SECOND YEAR
PAPER VI – PAEDIATRIC AUDIOLOGY**

Q.P. Code: 802316

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Compare and contrast school screening program using Immittance and Pure tone audiometry.
2. Prenatal hearing with supportive studies.
3. Highlight the signs and symptoms of CAPD children. Explain any 2 tests to identify them.

II. Write notes on:

(8 x 5 = 40)

1. Factors affecting speech audiometry.
2. Use of OAE in neonatal hearing screening.
3. Visual reinforcement audiometry.
4. Swinging story test.
5. Embryological development of middle ear.
6. Importance of Universal new born hearing screening.
7. Auditory behavioral responses in 0-1 year infants.
8. Parameter settings for evaluating Pediatric population in BERA.

III. Short answers on:

(10 x 3 = 30)

1. Embryo vs fetus.
2. Causes for functional hearing loss in children.
3. JCIH.
4. Stimuli used for BOA.
5. Name 3 modifications used in speech tests for children.
6. MAST.
7. Hand held tympanometers.
8. Name 3 factors affecting BERA results in Pediatric population.
9. Speech detection threshold.
10. Natal causes for hearing loss.

[LK 0217]

FEBRUARY 2017

Sub. Code: 2316

**B.Sc. AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY
SECOND YEAR
PAPER VI – PAEDIATRIC AUDIOLOGY**

Q.P. Code: 802316

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Non-formal auditory screening tests for children.
2. Evaluate a 1 year 6 months old child with objective tests for hearing.
3. Embryological development of Inner ear with neat diagram.

II. Write notes on: **(8 x 5 = 40)**

1. B.C. Speech audiometry.
2. Use of impedance in school screening.
3. Protocol for universal newborn hearing screening.
4. Development of ossicles.
5. One test to identify CAPD.
6. Asses an 8 year old child with functional hearing loss.
7. VRA.
8. ABR findings in pediatric population.

III. Short answers on: **(10 x 3 = 30)**

1. Pre auricular tags.
2. Clicks vs tone bursts.
3. Preparation of a child for ABR.
4. Types of probe tones in Immittance and its applications in children.
5. Birth asphyxia.
6. HRR for Indian population.
7. Crib-o-gram.
8. WIPI.
9. First arch syndrome.
10. Localisation.

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Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Need for studying embryology. Write about the embryology of the inner ear with neat diagrams.
2. Signs and symptoms of functional hearing loss in children. Write about any 2 tests to assess functional hearing loss.
3. Factors affecting speech audiometry.

II. Write notes on:

(8 x 5 = 40)

1. Importance of follow up procedures.
2. Behaviors observed in children during assessment.
3. Need for Early Hearing Detection and Intervention with evidences.
4. Temporal processes in CAPD.
5. OAE findings in young children.
6. Speech audiometry tests developed in India.
7. High Risk Register (HRR).
8. Crosscheck principle.

III. Short answers on:

(10 x 3 = 30)

1. BC speech audiometry.
2. ESPT.
3. UNHS methods.
4. Mass media screening.
5. What should be the frequency of the probe tone used in infants? Why?
6. Incidence and prevalence.
7. Triad features of Mondini's dysplasia.
8. Minimum Response Levels (MRL).
9. Ling 6 sound test.
10. APGAR scores.

BACHELOR IN AUDIOLOGY & SPEECH LANGUAGE PATHOLOGY

SECOND YEAR

PAPER VI – PAEDIATRIC AUDIOLOGY

Q.P. Code: 802316

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Prenatal hearing with supporting evidences.
2. Signs and symptoms of CAPD in children. Write about any 2 tests to assess CAPD in children.
3. School screening and its importance in Paediatric Audiology.

II. Write notes on:

(8 x 5 = 40)

1. BOA and VRA techniques.
2. Basic embryology of human fetus.
3. Malformations of the external ear with neat diagrams.
4. Fetal alcohol syndrome and its relation to hearing loss.
5. APGAR scores and its importance.
6. ABR findings in children.
7. Development of localization in infants.
8. Need for test battery approach.

III. Short answers on:

(10 x 3 = 30)

1. Sensitivity Vs specificity.
2. Neural plasticity.
3. Triad features of Waardenburg syndrome.
4. Automated ABR.
5. Name any 3 HRR.
6. Aplasia, dysplasia and hypoplasia.
7. Syndrome.
8. Pedigree chart.
9. Autosomal recessive trait.
10. Symptoms of functional hearing loss.

[LN 0818]

AUGUST 2018

Sub. Code: 2316

BACHELOR IN AUDIOLOGY & SPEECH LANGUAGE PATHOLOGY

SECOND YEAR

PAPER VI – PAEDIATRIC AUDIOLOGY

Q.P. Code: 802316

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. High Risk Register and Universal Newborn Hearing Screening.
2. Various conditioning tests available to assess hearing sensitivity in children.
3. Write about any 5 cochlear malformations with diagrams.

II. Write notes on:

(8 x 5 = 40)

1. ABR protocol for infants.
2. Critical period hypothesis and neural plasticity.
3. Waardenburg syndrome and its features.
4. Immittance audiometry in children.
5. Crib – o – gram vs Auditory Response Cradle.
6. Embryological development of the external ear.
7. Hearing development till 2 years of age.
8. Importance of speech audiometry.

III. Short answers on:

(10 x 3 = 30)

1. Difference between spondees and trochees.
2. Why warble tone is used in assessing infants?
3. School screening procedures.
4. ALGO system.
5. Decision matrix.
6. Auditory Behavior Index.
7. Causes of congenital SNHL.
8. Autosomal dominant trait.
9. Difference between DP and TEOAE in children.
10. S- TORCH.

BACHELOR IN AUDIOLOGY & SPEECH LANGUAGE PATHOLOGY

SECOND YEAR

PAPER VI – PAEDIATRIC AUDIOLOGY

Q.P. Code: 802316

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. The importance of early identification and intervention of hearing loss.
2. The development of auditory behaviours from 0-2 years.
3. a) New born screening for hearing loss.
b) The various signs and symptoms observed in functional hearing loss in children.

II. Write notes on:

(8 x 5 = 40)

1. Two tests used to identify Central Auditory Processing Disorders.
2. Application of OAE in paediatric population.
3. Embryology of external ear with neat diagrams.
4. VRA and its modification.
5. Factors affecting ABR in children.
6. School screening instrumentation.
7. Speech recognition test developed in India.
8. Individual hearing screening vs group hearing screening test.

III. Short answers on:

(10 x 3 = 30)

1. Play audiometry.
2. Causes of hearing loss in children.
3. Swinging story test.
4. Glendonald Auditory Screening Procedure (GASP).
5. Early Speech Perception Test (EST).
6. Hearing loss in Waardenburg Syndrome and Ushers syndrome.
7. Pre- Natal hearing behaviours.
8. Aural Palpabrel Reflex.
9. HRR in Indian population.
10. Sensitivity and specificity.

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SECOND YEAR

PAPER VI – PAEDIATRIC AUDIOLOGY

Q.P. Code: 802316

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. The role of ABR and OAE in screening and diagnosis of hearing loss.
2. The protocol utilised for 4 months old infant with a high risk for hearing loss.
3. The evaluation procedure used for 2 year old child.

II. Write notes on:

(8 x 5 = 40)

1. Mass media hearing screening test.
2. High Risk Register for Indian population.
3. Compare and contrast BOA and VRA techniques.
4. Development of auditory behaviour from 0-6 months
5. APGAR score and it`s implication.
6. Immittance audiometry in children.
7. Speech recognition threshold in children.
8. Factors determining the use of BC Speech Audiometry.

III. Short answers on:

(10 x 3 = 30)

1. Speech test developed in Indian context.
2. First arch syndrome.
3. Neural plasticity.
4. Five important causes of hearing loss in children.
5. CORA vs TROCA.
6. Test used in identifying functional hearing loss in children.
7. Individual hearing screening test.
8. Symptoms of CAPD.
9. Pedigree chart.
10. Universal hearing screening.
