Sri Lakshmi Narayana Institute of Medical Sciences

Date 02/07/2017

From
Dr.K.R.Jothikumar,
Professor and Head,
otorhinolaryngology,
SLIMS
Bharath Institute of Higher Education and Research,
Puducherry.

To
The Dean,
SLIMS
Bharath Institute of Higher Education and Research,
Puducherry.

Sub: Permission to conduct value-added course: : Hands on training on Audiological Evaluation Using Pure Tone Audiometry reg.

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled: Simulation Based Training In Audiology on July 2017 to Dec 2017. We solicit your kind permission for the same.

Kind Regards

Dr.K.R. Jothikumar

FOR THE USE OF DEANS OFFICE

Names of Committee members for evaluating the course:
The Dean:
The HOD:
The Expert:

`

The committee has discussed about the course and is approved.

Dean

(Sign&Seal)

DEAN
Prof.K.BALAGURUNATHAN,M.S
(General surgeon)
SRI LAKSHMI NARAYANA
INSTITUTE OF MEDICAL SCIENCES
OSUDU PONDICHERRY

Dr.R. VENKATARAMANAN, MS
Reg. No: 72549
Professor ENT
Sri Lakshmi Narayana Institute of Medical Sciences
Osudu, Kudapakkam, Puducherry-605 502

SUBJECT EXPERT
(Sign &Seal)

Seal & Signature of the HOD
PROFESSOR & HOD
DEPARTMENT OF E.N.T
Sri Lakshmi Narayana Institute of Medical Sciences
PONDICHERRY - 605 502

OFFICE OF THE DEAN
Sri Lakshmi Narayana Institute of Medical Sciences
OSUDU, AGARAM VILLAGE, VILLIANUR COMMUNE, KUDAPAKKAM POST,
PUDUCHERRY - 605 502.
[Recognised by Medical Council of India, Ministry of Health letter No. U/12012/249/2005-ME (P -II) dt. 11/07/2011]
[Affliated to Bharath University, Chennai - TN]

Ref. No. SLIMS/Dean Off/VAC/024 **Date:03/07/17**

From
The Dean
Sri Lakshmi Narayana Institute of Medical sciences,
Pondicherry – 605502

To
The Registrar,
Bharath Institute of Higher Education and Research,
Chennai - 600073.

Respected Sir

Sub: Request for permission and approval of Syllabus for certificate course (Value Added course) for the academic year 2017-18 - Reg
Ref: Requesting letter received from Departments

*****

With reference to the above, herewith forwarding the proposed list of Value-added courses for necessary permission and approval of syllabus to conduct the same.

This is for your kind information and needful action.

Thankingyou

Yours faithfully

[**DEAN]**

DEAN
Prof.K.BALAGURUNATHAN,M.S
(General surgeon)
SRI LAKSHMI NARAYANA
INSTITUTE OF MEDICAL SCIENCES
OSUDU PONDICHERRY

Encl's:

1. Requesting letter received from department
2. Syllabus of thecourse
3. Details of faculty handlingcourse

Sri Lakshmi Narayana Institute of Medical Sciences,

Puducherry

VALUE ADDED COURSE : Hands on training on Audiological Evaluation Using Pure Tone Audiometry

COURSE CO-ORDINATOR DETAILS

Faculty Name: Dr. Kalaiarasi. R

Email ID:e n t s l i m s @ g m a i l . c o m

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Ref. No. BHIER/ VAC/B-02 **Date:05.07.2017**

From

The Registrar,
Bharath Institute of Higher Education and Research,
Chennai - 600073.

To

The Dean
Sri Lakshmi Narayana Institute of Medical sciences,
Pondicherry – 605502

Sir / Madam,

Sub: Approval of Syllabus to conduct certificate course (Value Added course) for the academic year 2017-2018 – Reg.

Ref: Ref. No. SLIMS/Dean Off/VAC /024 Dated: 03.07.2017

*****

With reference to the above, it is to inform that the proposal submitted to conduct Value Added Course has been accepted and approved by BIHER, council meeting. List of the VAC are mentioned below for the academic year 2016– 2017. The abstract of the VAC course completion detail should be submitted to the Registrar office.

Thanking you Yours faithfully

REGISTRAR

OFFICE OF THE DEAN
Sri Lakshmi Narayana Institute of Medical Sciences
OSUDU, AGARAM VILLAGE, VILLIANUR COMMUNE, KUDAPAKKAM POST,
PUDUCHERRY - 605 502.
[Recognised by Medical Council of India, Ministry of Health letter No. U/12012/249/2005-ME (P -II) dt. 11/07/2011]
[Affliated to Bharath University, Chennai - TN]

Circular

.

07/07/2017

Sub: Organising Value-added Course: Hands on training on Audiological Evaluation Using Pure Tone Audiometry **reg.**

With reference to the above mentioned subject, it is to bring to your notice that SLIMS,**Bharath Institute of Higher Education and Research**, is organising **"Hands on training on Audiological Evaluation Using Pure Tone Audiometry"**. The course content and registration form is enclosed below.

The application must reach the institution along with all the necessary documents as mentioned. The hard copy of the application should be sent to the institution by registered/ speed post only so as to reach on or before 15/07/2017. Applications received after the mentioned date shall not be entertained under any circumstances.

DEAN

DEAN
Prof.K.BALAGURUNATHAN,M.S
(General surgeon)
SRI LAKSHMI NARAYANA
INSTITUTE OF MEDICAL SCIENCES
OSUDU PONDICHERRY

Encl: Copy of Course content

VALUE ADDED COURSE

1. Name of the programme &Code

Hands on training on Audiological Evaluation Using Pure Tone Audiometry– A value added course for the medical students.

.

&ENT 05

2. Duration &Period

30 hrs & July 2017-Dec 2017

3. Information Brochure and Course Content of Value Added Courses

Enclosed as Annexure- I

4. List of students enrolled

Enclosed as Annexure- II

5. Assessment procedures:

Pre test and post test which includes 10 mcqs - *Enclosed as Annexure- III*

6. Certificate model

Enclosed as Annexure- IV

7. No. of times offered during the same year:

1 time July 2017- Dec 2017

8. Year of discontinuation:2018

9. Summary report of each program year-wise

Value Added Course- July 2017- Dec 2017					
Sl. No	**Course Code**	**Course Name**	**Resource Persons**	**Target Students**	**Strength & Year**
1	ENT 05	Hands on training on Audiological Evaluation Using Pure Tone Audiometry	1.Dr.Venkataramanan 2. Dr. Sreedhar.B 3.Dr. kalaiarasi.R	3rd year MBBS students	9 students & 2017

10. Course FeedBack

Enclosed as Annexure- V

RESOURCEPERSON

1. **Dr.K.R.Jothikumar**
2. **Dr.R.Venkataramanan**

COORDINATOR

Dr.R.Kalaiarasi

COURSE PROPOSAL

1. NAME OF THE PROGRAMME

Hands on training on Audiological Evaluation Using Pure Tone Audiometry– A value added course for the medical students.

2. AIM

Training the students in Hands on training on Audiological Evaluation Using Pure Tone Audiometry

3. OBJECTIVES

a) To teach the students how to use Pure tone audiometry for audiological evaluation and to interpret the same
b) Hands on training on PTA in normal subjects and patients with hearing loss

4. METHODOLOGY

Students who are interested in participating in value added course are enrolled and the course is conducted for them during the non college hours for a period of 30 hours from July 2017 – Dec 2017 . This course is conducted every 6 months.

Course Audience: 3rd year MBBS students

Course Coordinator: Dr. Kalaiarasi .R

Course Faculties with Qualification and Designation:

1.Dr.K.R. jothikumar

2.Dr. Sreedhar.B

3.Dr. R. Venkataramanan

Schedule followed during the course

No	Topic	Title	Duration	Date and time
1	Hands on training on Audiological Evaluation Using Pure Tone Audiometry	Introduction on pure tone audiometry	2hrs	4pm-6pm(7/7/17)
		Self recordingcomputerised audiometry -lecture	3hrs	4pm-6pm(16/8/17),4pm-5pm(18/8/17)
		Interpretation of audiograms	4hrs	4pm-6pm(12/9/17),4pm-6pm(14/9/17)
		Limitations and fallacies	4hrs	4pm-6pm(13/10/17),4pm-6pm(15/10/17)
		Other tests using PTA	5hrs	4pm-6pm(23/10/17),4pm-6pm(17/10/17,4pm-5pm(4/11/17)
		Demonstration of pure tone audiometry in normal subjects and patients with hearing loss	6hrs	4pm-6pm(9/11/17),4pm-6pm(15/11/17),4pm-6pm(21/11/17)
		Hands on training on PTA in normal subjects and patients with hearing loss & DOPS	6hrs	4pm-6pm(2/12/17),4pm-6pm(6/12/17),4pm-6pm(10/12/17)
		TOTAL	30HRS	

REFERENCE BOOKS: 1) SCOTT BROWN 7th edition

2) ANIRBAN BISWAS 1st edition

PURE TONE AUDIOMETRY

INTRODUCTION

- Pure tone audiometry is used to measure auditory threshold of an individual
- The instrument used in this measurement is known as the audiometer
- This is a subjective investigation, the accuracy of which is dependent on the response of the patient

AUDIOMETER

- This has been defined by International Electrochemical Commission 1976 as an instrument used to measure the acuity of hearing and auditory threshold.
- There are two types of audiometers: subjective and objective ones.
- Pure tone audiometer – subjective
- Impedance / BERA - Objective

PURE TONES

- Simplest of all sounds
- Specific and single frequency
- Described by their frequency, amplitude, phase and duration
- Pure tone amplitude is quantified in decibel
- Pure tone audiometry provides information about the type of hearing loss and also helps in quantifying frequency specific threshold elevation.
- Increase in stiffness of middle ear causes low frequency hearing loss, where as increase in mass effect of middle ear causes high frequency hearing loss

FEATURES OF AN AUDIOMETER

- It generates pure tone
- Frequency of the tone generated can be selected
- Intensity of the tone generated can be selected
- It has the ability to route tonal stimuli to either ear
- Tone generated may be of intermittent / continuous type. This is controlled by the presence of an interrupter switch

TYPES OF PURE TONE AUDIOMETERS

- Type I audiometer – Full fledged audiometer
- Type II audiometer – Does not have speakers hence free field audiometry is not possible with this.
- Type III audiometer – Portable audiometer without speech audiometry facility
- Type IV audiometer – Basic screening audiometer. Has only ear phones

TYPE I AUDIOMETER

- Most comprehensive equipment
- It can measure air conduction thresholds between 125 – 8,000 Hz and bone conduction threshold ranging between 250 – 6000 Hz
- Maximum intensity for air conduction threshold is 120 dB and bone conduction maximum intensity is about 50 dB lower than this value. Bone oscillators produce distortions above this level.

COMPONENTS OF AN AUDIOMETER

- Oscillator
- Interrupter switch
- Equalization circuit
- Output power amplifier
- Hearing level attenuator
- Output transducers

OSCILLATOR

- This generates pure tones
- Its accuracy ranges between +/- 3% within the specified frequency range
- Frequencies generated include 125, 250, 500, 750, 1000, 1500, 2000, 3000, 4000, 6000, and 8000 Hz.
- These sounds are electronically generated

INTERRUPTER SWITCH

- Tones should be either switched on or off.
- Continuous tone undergoes decay
- Patient fatigability should also be considered
- It controls the duration of signal presented to the patient
- It is typically in off position when pure tones are presented and can be turned on only on pressing the button.
- It is typically in on position for speech signal

EQUALIZATION CIRCUIT

- This contains resistors which help in equalization of sound generated
- Human threshold for various frequencies are variable
- Human ear is highly sensitive to 2Khz frequency
- It is insensitive to high and low frequencies.

OUTPUT POWER AMPLIFIER

- Signals produced by oscillator needs to be amplified
- This amplifier produces very little distortion
- It has a good signal to noise ratio

HEARING LEVEL ATTENUATOR

- It controls the level of signal from the audiometer within 110-120 dB
- The intensity can be varied in steps of 5 dB
- Attenuator steps should be very accurate

OUTPUT TRANSDUCERS

- Ear phones
- Bone vibrator
- Loud speaker

HEAD PHONES

- Used to test pure tone Air conduction thresholds
- These are supra-aural ear phones
- Should always be calibrated before use
- This type of supra aural ear phones are easy to calibrate
- It has a flat frequency response
- Delivers high output sounds

BONE VIBRATORS

- These have a limited dynamic frequency range
- At low frequencies vibrators show distortions ▪

Pure tone bone conduction thresholds can me measured

- Placed over mastoid process (8-15 dB lower thresholds)

LOUD SPEAKERS

- Used in free field audiometry
- Used to test infants and children
- Can be used to perform behavioral audiometry

CALIBRATION

- Used to define audiometric zero
- Calibration involves calibration of audiometer, ear phones and bone vibrators
- Can be performed using human volunteers and artificial ears

PROTOCOLS

- Should be tested in sound proof room
- Claustrophobic patients should be handled with care
- Patients with collapsed ear canal should be tested using special ear phones
- Malingerer’s should be tested only by an audiologist
- Pt should be seated comfortably
- Otoscopy should be done prior to audiometry
- Test procedure should be fully explained to the patient
- Glasses / ear rings should be removed

PLACEMENT OF HEAD PHONES

- Red head phone is placed over right ear
- The diaphragm is placed over ear canal
- It should fit snugly
- Head band should not be tight

FAMILIARIZATION

- Testing is begun at 1000 Hz and 30 dB
- At this frequency the testee is likely to have residual hearing. At this frequency testing retesting response is reliable
- Testing usually begins with the examinee’s self reported better ear, to decide whether masking is necessary for testing the other ear
- Pulsed tone is used

HUGHSON - WESTLAKE ASCENDING TECHNIQUE

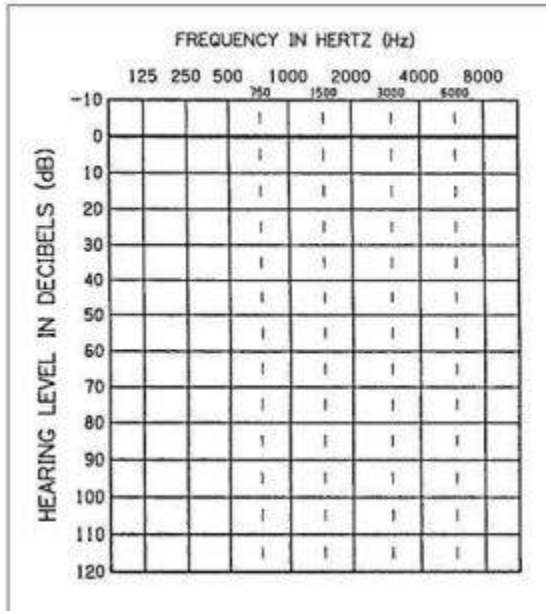
- Up 5 and down 10 method
- Tones of short duration is used
- Better ear is tested to decided whether masking is necessary
- Started at 1000 Hz at a level above threshold. This frequency is selected because it is an important frequency
- In pts with profound hearing loss the test should be started with 250 Hz because these patients have residual hearing only in low frequencies
- Stimulus is started at 0 dB and increased in steps of 10 dB till the patient responds
- On positive response the volume is decreased by 10 dB. If the pt responds it is decreased by 10 dB and repeated till he does not respond
- On no response the intensity is increased by 5 dB till the pt confirms hearing the tone
- This should be repeated till the pt gives positive response in two out of three attempts at the same dB level
- Tone presented should last between 1-3 seconds

PLOTTING

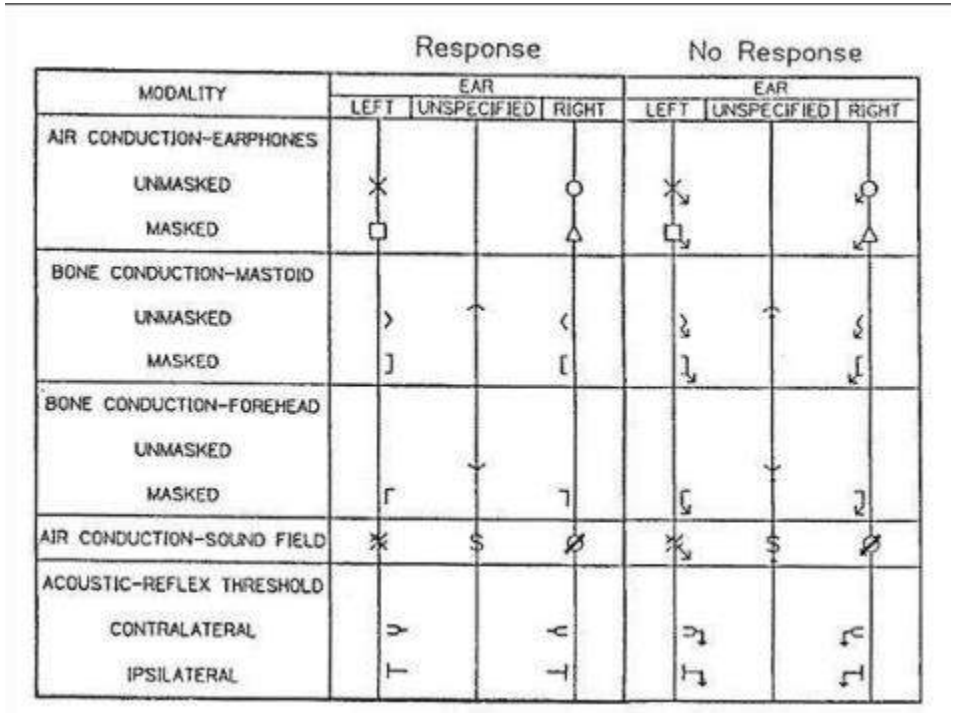
- The readings are plotted with red color indicating right side and blue colour on left side

AUDIOGRAM CHART

chart



Legend



DEGREE OF HEARING LOSS

Degree of Loss	Northern and Downs (2002)	Goodman (1965)	Jerger and Jerger (1980)
None	<16	>26	<21
Slight	16-25		
Mild	26-30	26-40	21-40
Moderate	30-50	41-55	41-60
Moderately severe		56-70	
Severe	51-70	71-90	61-80
Profound	>70	>90	>80

[a]Although all three references cited differ in the value accepted as a profound loss, a loss of 90 dB HL or more is widely accepted as representing a qualitative as well as a quantitative boundary between hearing and deafness.

FACTORS AFFECTING RELIABILITY

- Poor test instructions
- Improper headphone placement
- Rhythmic tone presentation
- Clues from examiner

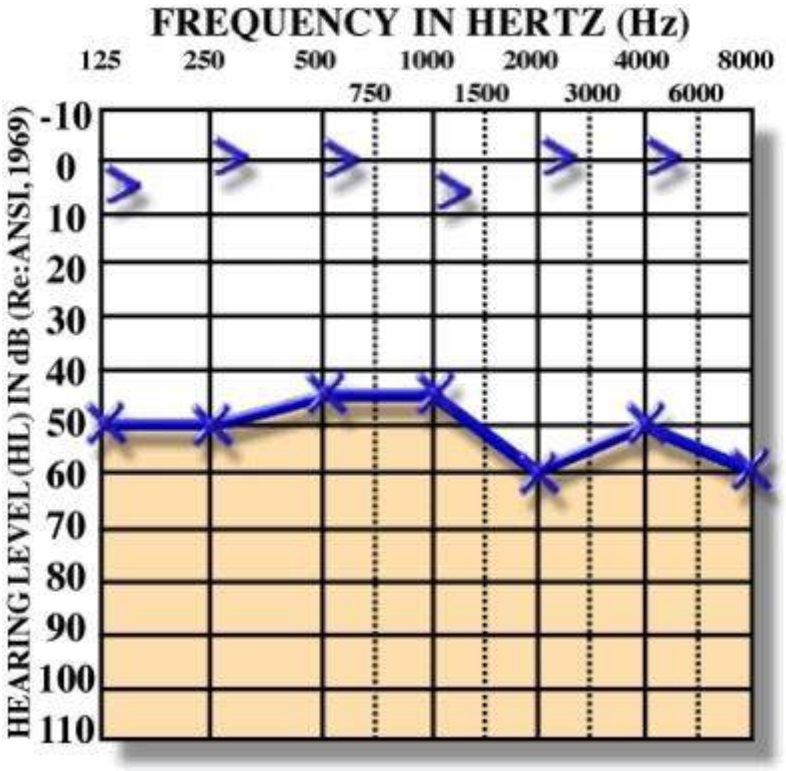
ENVIRONMENTAL FACTORS AFFECTING RELIABILITY

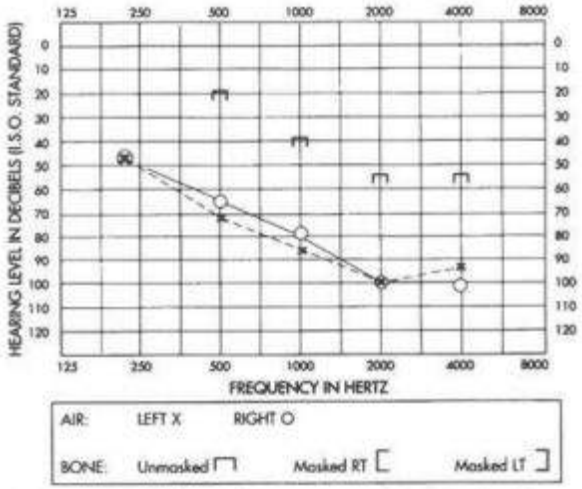
- Excessive background noise
- Poor ventilation
- Poor lighting
- Invalid equipment calibration

COMPARISON OF AUDIOGRAMS

Term	Description
Flat	<5-dB rise or fall per octave
Gradually falling	5- to 12-dB increase per octave
Sharply falling	15- to 20-dB increase per octave
Precipitously falling	Flat or gradually sloping, then threshold increasing at 25 dB or more per octave
Rising	>5-dB decrease in threshold per octave
Peaked or saucer	20-dB or greater loss at the extreme frequencies, but not at the mid frequencies
Trough	20-dB or greater loss in the mid frequencies (1,000-2,000 Hz), but not at the extreme frequencies (500 or 4,000 Hz)
Notched	20-dB or greater loss at one frequency with complete or near-complete recovery at adjacent octave frequencies

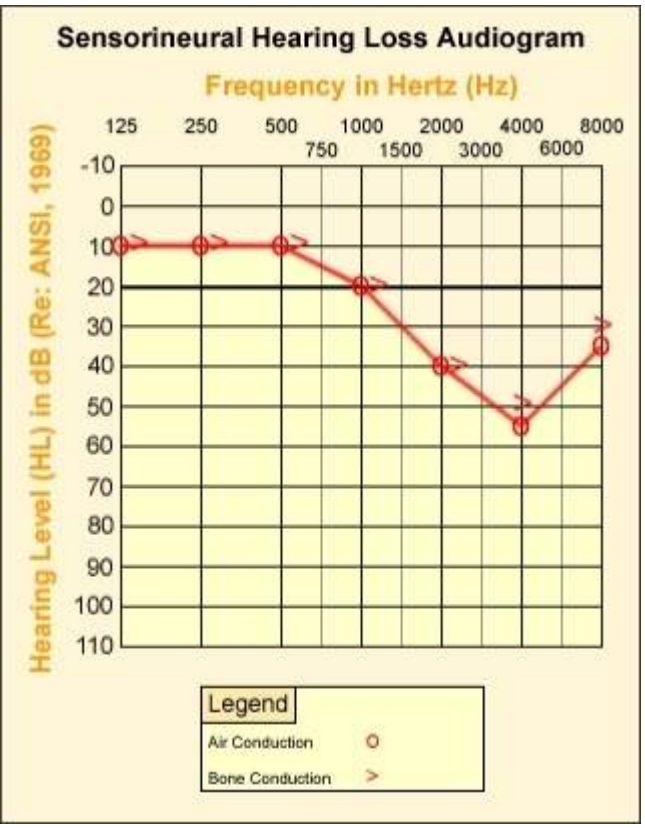
TYPES OF AUDIOGRAM

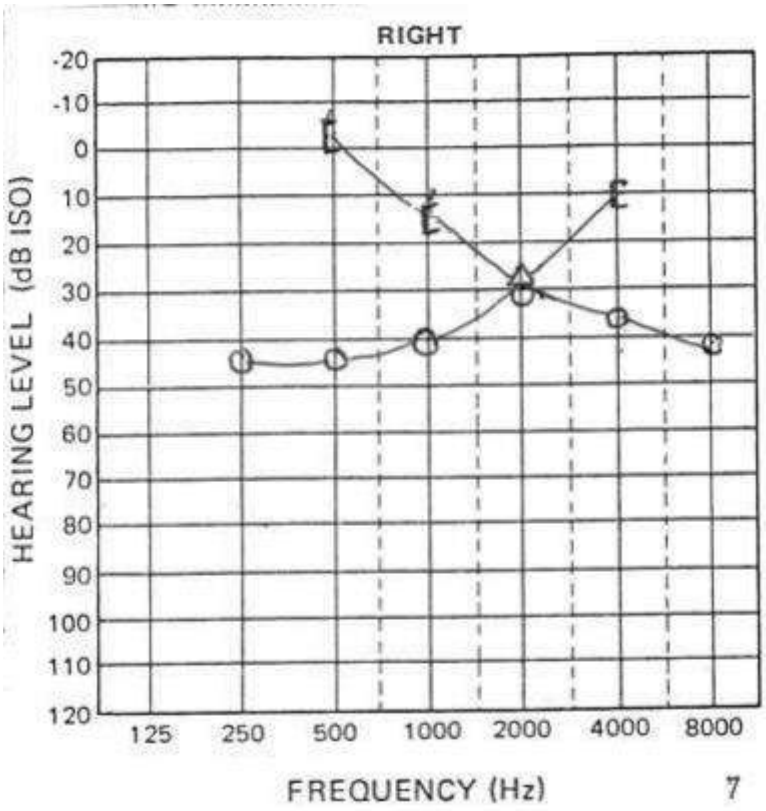




An example of a moderate to profound mixed hearing loss.

SOME AUDIOGRAM TYPES





Annexure 2
Bharath Institute of Higher Education and Research
SLIMS

1	U14MB246	GAUTHAM. B
2	U14MB247	GOKUL. S
3	U14MB248	GUBENDIRAN. R.
4	U14MB249	HARIJAN BALASUBRAMANIAM KANNADASAN
5	U14MB250	HEMALATHA. K
6	U14MB251	HEMANTHKUMAR.T
7	U14MB252	HEMASH. P.A
8	U14MB253	HEMASRI. C
9	U14MB254	ILAMMATHI. K

ANNEXURE 3

SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

PUDUCHERRY

TOPIC: Hands on training on Audiological Evaluation Using Pure Tone Audiometry **(ENT 05)**

STUDENT NAME:

UNIVERSITY NO:

1. Threshold for moderate hearing loss
a.26-40db b.56-70 db
c.41-55 db d.>90db

2. Subjective test of hearing is:
a.pure tone audiometry b.OAE
c.BERA D.impedance audiometry

3.Weber Test in Conductive Deafness
a.Sound louder in normal ear b.sound louder in diseased ear
c.heard wih equal intensity in both ears d.inconclusive test

4.Tough shaped curve audiogram seen in
a. congenital SNHL b. Otitis media with effusion
c. ototoxicity d. menieres disease

5.positive rinne test is seen in
a.otosclerosis b.csom
c.impacted wax d.presbycusis

6. In pure tone audiogram the symbol X is used to mark:
a.Air conduction in RE b.Air conduction in LE
c.Bone conduction in RE d.no response in air conduction in right ear

7. high frequency audiometry is used in
a. otosclerosis b. ototoxicity
c. non organic hearing loss d. menier's disease

8. SISI is specifically for
a. acoutic trauma b. otosclerosis
c. meniers disease d. facial nerve palsy

9.sternger test used in diagnosis of
a.non organic hearing loss b. conductive hearing loss
c.SNHL d.Mixed hearing loss

10.hearing loss at 65 db . what will be the grade of deafness
a. mild b. moderate
c. moderately severe d. severe

PRE TEST

5

6. In pure tone audiogram the symbol X is used to mark:

a. Air conduction in RE
b. Air conduction in LE
c. Bone conduction in RE
d. no response in air conduction in right ear

7. high frequency audiometry is used in

a. otosclerosis
b. ototoxicity
c. non organic hearing loss
d. menier's disease

8. SISI is specifically for

a. acoutic trauma
b. otosclerosis
c. meniers disease
d. facial nerve palsy

9. sternger test used in diagnosis of

a. non organic hearing loss
b. conductive hearing loss
c. SNHL
d. Mixed hearing loss

10. hearing loss at 65 db. what will be the grade of deafness

a. mild
b. moderate
c. moderately severe
d. severe

ANNEXURE 3

SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

PUDUCHERRY

TOPIC: Hands on training on Audiological Evaluation Using Pure Tone Audiometry **(ENT 05)**

STUDENT NAME: Hemasri .C

UNIVERSITY NO: U14MB253

7

1. Threshold for moderate hearing loss

a.26-40db b.56-70 db

c.41-55 db d.>90db

2. Subjective test of hearing is:

a.pure tone audiometry b.OAE

c.BERA D.impedance audiometry

3.Weber Test in Conductive Deafness

a.Sound louder in normal ear b.sound louder in diseased ear

c.heard with equal intensity in both ears d.inconclusive test

4.Tough shaped curve audiogram seen in

a. congenital SNHL b. Otitis media with effusion

c. ototoxicity d. menieres disease

5.positive rinne test is seen in

a.otosclerosis b.csom

c.impacted wax d.presbycusis

6. In pure tone audiogram the symbol X is used to mark:

a.Air conduction in RE b.Air conduction in LE

X c.Bone conduction in RE d.no response in air conduction in right ear

7. high frequency audiometry is used in

a. otosclerosis b. ototoxicity

X c. non organic hearing loss d. menier's disease

8. SISI is specifically for

a. acoutic trauma b. otosclerosis

X c. meniers disease d. facial nerve palsy

9.sternger test used in diagnosis of

a.non organic hearing loss b. conductive hearing loss

X c.SNHL d.Mixed hearing loss

10.hearing loss at 65 db. what will be the grade of deafness

a. mild b. moderate

X c. moderately severe d. severe

ANNEXURE 3

SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

PUDUCHERRY

TOPIC: Hands on training on Audiological Evaluation Using Pure Tone Audiometry **(ENT 05)**

STUDENT NAME: Gokul S

UNIVERSITY NO: U14MB247

(3)

1. Threshold for moderate hearing loss

a.26-40db b.56-70 db

c.41-55 db d.>90db

2. Subjective test of hearing is:

a.pure tone audiometry b.OAE

c.BERA D.Impedance audiometry

3.Weber Test in Conductive Deafness

a.Sound louder in normal ear b.sound louder in diseased ear

c.heard wih equal intensity in both ears d.Inconclusive test

X

4.Tough shaped curve audiogram seen in

a. congenital SNHL b. Otitis media with effusion

c. ototoxicity d. menieres disease

X

5.positive rinne test is seen in

a.otosclerosis b.csom

c.impacted wax d.presbycusis

POST TEST

5

6. In pure tone audiogram the symbol X is used to mark:

a.Air conduction in RE b.Air conduction in LE

c.Bone conduction in RE d.no response in air conduction in right ear

7. high frequency audiometry is used in

a. otosclerosis b. ototoxicity

c. non organic hearing loss d. menier's disease

8. SISI is specifically for

a. acoutic trauma b. otosclerosis

c. meniers disease d. facial nerve palsy

9.sterngar test used in diagnosis of

a. non organic hearing loss b. conductive hearing loss

c.SNHL d.Mixed hearing loss

10.hearing loss at 65 db. what will be the grade of deafness

a. mild b. moderate

c. moderately severe d. severe

(10)

ANNEXURE 3

SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

PUDUCHERRY

TOPIC: Hands on training on Audiological Evaluation Using Pure Tone Audiometry (ENT 05)

STUDENT NAME: Gokul . S

UNIVERSITY NO: U14MB247

1. Threshold for moderate hearing loss

a.26-40db b.56-70 db

c.41-55 db d.>90db

2. Subjective test of hearing is:

a.pure tone audiometry b.OAE

c.BERA D.impedance audiometry

3.Weber Test in Conductive Deafness

a.Sound louder in normal ear b.sound louder in diseased ear

c.heard with equal intensity in both ears d.inconclusive test

4.Tough shaped curve audiogram seen in

a.congenital SNHL b. Otitis media with effusion

c. ototoxicity d. menieres disease

5.positive rinne test is seen in

a.otosclerosis b.csom

c.impacted wax d.presbycusis

6. In pure tone audiogram the symbol X is used to mark:

a.Air conduction in RE
b.Air conduction in LE
c.Bone conduction in RE
d.no response in air conduction in right ear

7. high frequency audiometry is used in

a. otasclerosis
b. ototoxicity
c. non organic hearing loss
d. menier's disease

8. SISI is specifically for

a. acoutic trauma
b. otosclerosis
c. meniers disease
d. facial nerve palsy

9.sterngar test used in diagnosis of

a.non organic hearing loss
b. conductive hearing loss
c.SNHL
d.Mixed hearing loss

10.hearing loss at 65 db. what will be the grade of deafness

a. mild
b. moderate
c. moderately severe
d. severe

(9)

ANNEXURE 3

SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

PUDUCHERRY

TOPIC: Hands on training on Audiological Evaluation Using Pure Tone Audiometry **(ENT 05)**

STUDENT NAME: Hemasai. C

UNIVERSITY NO: U14MB253

1. Threshold for moderate hearing loss

a.26-40db ~~b.56-70 db~~

c.41-55 db d.>90db

2. Subjective test of hearing is:

~~a.~~pure tone audiometry b.OAE

c.BERA D.Impedance audiometry

3.Weber Test in Conductive Deafness

a.Sound louder in normal ear ~~b.~~Sound louder in diseased ear

c.heard wih equal intensity in both ears d.inconclusive test

4.Tough shaped curve audiogram seen in

~~a. con~~genital SNHL b. Otitis media with effusion

c. ototoxicity d. menieres disease

5.positive rinne test is seen in

~~d.~~otosclerosis b.csom

c.impacted wax d.presbycusis

ANNEXURE 4

Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research

(Deemed to be University under section 3 of the UGC Act 1956)

CERTIFICATE OF MERIT

This is to certify that _____ has actively participated in the Value Added Course Hands on training Audiological Evaluation using Pure tone Audiometry held during July 2017 – Dec 2017 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

Dr. K.R. Jothikumar
RESOURCE PERSON

Dr. Kalaiarasi. R
COORDINATOR

Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research

(Deemed to be University under section 3 of the UGC Act 1956)

CERTIFICATE OF MERIT

This is to certify that Dr.Gokul.S(U14MB247) has actively participated in the Value Added Course Hands on training Audiological Evaluation using Pure tone Audiometry held during July 2017 – Dec 2017 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

Dr. K.R. Jothikumar
RESOURCE PERSON

Dr. Kalaiarasi. R
COORDINATOR

Annexure 5

Course/Training Feedback Form

Student Feedback Form

Course Name: Hands on training on Audiological Evaluation Using Pure Tone Audiometry

Subject Code: **ENT05**

Name of Student: _____ Roll No.: _____

We are constantly looking to improve our classes and deliver the best training to you. Your evaluations, comments and suggestions will help us to improve our performance

Sl. NO	Particulars	1	2	3	4	5
1	Objective of the course is clear					
2	Course contents met with your expectations					
3	Lecturer sequence was well planned					
4	Lectures were clear and easy to understand					
5	Teaching aids were effective					
6	Instructors encourage interaction and were helpful					
7	The level of the course					
8	Overall rating of the course	1	2	3	4	5

**** Rating: 5 – Outstanding; 4 - Excellent; 3 – Good; 2– Satisfactory; 1 - Not-Satisfactory***

Suggestions if any:

Annexure 5

Course/Training Feedback Form

Student Feedback Form

Course Name: Hands on training on Audiological Evaluation Using Pure Tone Audiometry

Subject Code: **ENT05**

Name of Student: Gokul S Roll No.: 114MB247

We are constantly looking to improve our classes and deliver the best training to you. Your evaluations, comments and suggestions will help us to improve our performance

Sl. NO	Particulars	1	2	3	4	5
1	Objective of the course is clear					✓
2	Course contents met with your expectations					✓
3	Lecturer sequence was well planned					✓
4	Lectures were clear and easy to understand					✓
5	Teaching aids were effective					✓
6	Instructors encourage interaction and were helpful				✓	
7	The level of the course				✓	
8	Overall rating of the course	1	2	3	4	5

** Rating: 5 – Outstanding; 4 - Excellent; 3 – Good; 2- Satisfactory; 1 - Not-Satisfactory*

Suggestions if any:

NIL

Annexure 5

Course/Training Feedback Form

Student Feedback Form

Course Name: Hands on training on Audiological Evaluation Using Pure Tone Audiometry

Subject Code: **ENT05**

Name of Student: HEMALATHA K Roll No.: U14MB260

We are constantly looking to improve our classes and deliver the best training to you. Your evaluations, comments and suggestions will help us to improve our performance

SL NO	Particulars	1	2	3	4	5
1	Objective of the course is clear			✓		
2	Course contents met with your expectations				✓	
3	Lecturer sequence was well planned				✓	
4	Lectures were clear and easy to understand					✓
5	Teaching aids were effective				✓	
6	Instructors encourage interaction and were helpful			✓		
7	The level of the course					✓
8	Overall rating of the course	1	2	3	4	5

** Rating: 5 – Outstanding; 4 - Excellent; 3 – Good; 2– Satisfactory; 1 - Not-Satisfactory*

Suggestions if any:

LECTURES WAS GOOD AND CLEAR

ANNEXURE 6

Date : 15/12/2017

From
Dr.K.R. Jothikumar,
Dept of Otorhinolaryngology,
SLIMS
Bharath Institute of Higher Education and Research,
Puducherry.

Through Proper Channel

To
The Dean,
SLIMS,
Bharath Institute of Higher Education and Research,
Puducherry.

Sub: Completion of value-added course: Hands on training on Audiological Evaluation Using Pure Tone Audiometry reg.

Dear Sir,

With reference to the subject mentioned above, the department has conducted thevalue-added course titled:Hands on training on **Hands on training on Audiological Evaluation Using Pure Tone Audiometry** on July 2017 to Dec 2017. We solicit your kind action to send certificates for the participants, that is attached with this letter. Also, I am attaching the photographs captured during the conduct of the course.

Kind Regards
Dr.K.R.Jothikumar
<HOD Sign and Seal>

Sri Lakshmi Narayana Institute of Medical Sciences

Date:08.05.2017

From

Dr.Kamatchi
Professor and Head,
Department of Microbiology,
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai

To

The Dean,
Sri Lakshmi Narayana Institute of Medical College
Bharath Institute of Higher Education and Research,
Chennai.

Sub: Permission to conduct value-added course: Hospital information system& Environmental health and hygiene

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled: Hospital information system for July to September 2017& Environmentalhealth and hygiene October to November 2017. We solicit your kind permission for the same.

Kind Regards

Dr. Kamatchi

FOR THE USE OF DEANS OFFICE

Names of Committee members for evaluating the course:

The Dean: **Dr. Jayalakshmi.G**

The HOD: **Dr. Kamatchi**

The Expert: **Dr. Jayapradha.S**

The committee has discussed about the course and is approved.

Dean	Subject Expert	HOD
(Sign & Seal)	(Sign & Seal)	(Sign & Seal)