



KARNATAK UNIVERSITY, DHARWAD  
ACADEMIC (S&T) SECTION

ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಧಾರವಾಡ  
ವಿದ್ಯಾಮಂಡಳ (ಎಸ್&ಟಿ) ವಿಭಾಗ



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'A' Grade 2014

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No. KU/Aca(S&T)/JS/MGJ(Gen)/2023-24/59

Date: 04/09/2023

ಅಧಿಸೂಚನೆ

ವಿಷಯ: 2023-24ನೇ ಶೈಕ್ಷಣಿಕ ಸಾಲಿನಿಂದ ಎಲ್ಲ ಸ್ನಾತಕ ಪದವಿಗಳಿಗೆ 5 ಮತ್ತು 6ನೇ ಸೆಮಿಸ್ಟರ್  
NEP-2020 ಪಠ್ಯಕ್ರಮವನ್ನು ಅಳವಡಿಸಿರುವ ಕುರಿತು.

- ಉಲ್ಲೇಖ: 1. ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿಗಳು(ವಿಶ್ವವಿದ್ಯಾಲಯ 1) ಉನ್ನತ ಶಿಕ್ಷಣ ಇಲಾಖೆ ಇವರ  
ಆದೇಶ ಸಂಖ್ಯೆ: ಇಡಿ 104 ಯುಎನ್‌ಇ 2023, ದಿ: 20.07.2023.  
2. ವಿದ್ಯಾವಿಷಯಕ ಪರಿಷತ್ ಸಭೆಯ ನಿರ್ಣಯ ಸಂಖ್ಯೆ: 2 ರಿಂದ 7, ದಿ: 31.08.2023.  
3. ಮಾನ್ಯ ಕುಲಪತಿಗಳ ಆದೇಶ ದಿನಾಂಕ: 04/09/2023

ಮೇಲ್ಕಾಣಿಸಿದ ವಿಷಯ ಹಾಗೂ ಉಲ್ಲೇಖಗಳನ್ವಯ ಮಾನ್ಯ ಕುಲಪತಿಗಳ ಆದೇಶದ ಮೇರೆಗೆ, 2023-24ನೇ  
ಶೈಕ್ಷಣಿಕ ಸಾಲಿನಿಂದ ಅನ್ವಯವಾಗುವಂತೆ, ಎಲ್ಲ B.A./ BPA (Music) /BVA / BTTM / BSW/ B.Sc./B.Sc. Pulp &  
Paper Science/ B.Sc. (H.M)/ BCA/ B.A.S.L.P./ B.Com/ B.Com (CS) / BBA & BA ILRD ಸ್ನಾತಕ ಪದವಿಗಳ 5  
ಮತ್ತು 6ನೇ ಸೆಮಿಸ್ಟರ್‌ಗಳಿಗೆ NEP-2020ರ ಮುಂದುವರಿದ ಭಾಗವಾಗಿ ವಿದ್ಯಾವಿಷಯಕ ಪರಿಷತ್ ಸಭೆಯ ಅನುಮೋದಿತ  
ಕೋರ್ಸಿನ ಪಠ್ಯಕ್ರಮಗಳನ್ನು ಕ.ವಿ.ವಿ. ಅಂತರ್ಜಾಲ [www.kud.ac.in](http://www.kud.ac.in) ದಲ್ಲಿ ಭಿತ್ತರಿಸಲಾಗಿದೆ. ಸದರ ಪಠ್ಯಕ್ರಮಗಳನ್ನು ಕ.ವಿ.ವಿ.  
ಅಂತರ್ಜಾಲದಿಂದ ಡೌನ್‌ಲೋಡ್ ಮಾಡಿಕೊಳ್ಳಲು ಸೂಚಿಸುತ್ತ ವಿದ್ಯಾರ್ಥಿಗಳ ಹಾಗೂ ಸಂಬಂಧಿಸಿದ ಎಲ್ಲ ಬೋಧಕರ ಗಮನಕ್ಕೆ  
ತಂದು ಅದರಂತೆ ಕಾರ್ಯಪ್ರವೃತ್ತರಾಗಲು ಕವಿವಿ ಅಧೀನದ/ಸಂಲಗ್ನ ಮಹಾವಿದ್ಯಾಲಯಗಳ ಪ್ರಾಚಾರ್ಯರುಗಳಿಗೆ  
ಸೂಚಿಸಲಾಗಿದೆ.

ಅಡಕ: ಮೇಲಿನಂತೆ

  
ಕುಲಸಚಿವರು.

ಗೆ,

ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯದ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಬರುವ ಎಲ್ಲ ಅಧೀನ ಹಾಗೂ ಸಂಲಗ್ನ ಮಹಾವಿದ್ಯಾಲಯಗಳ  
ಪ್ರಾಚಾರ್ಯರುಗಳಿಗೆ. (ಕ.ವಿ.ವಿ. ಅಂತರ್ಜಾಲ ಹಾಗೂ ಮಿಂಚಂಚೆ ಮೂಲಕ ಬಿತ್ತರಿಸಲಾಗುವುದು)

ಪ್ರತಿ:

1. ಕುಲಪತಿಗಳ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ಕ.ವಿ.ವಿ. ಧಾರವಾಡ.
2. ಕುಲಸಚಿವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ಕ.ವಿ.ವಿ. ಧಾರವಾಡ.
3. ಕುಲಸಚಿವರು (ಮೌಲ್ಯಮಾಪನ) ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ಕ.ವಿ.ವಿ. ಧಾರವಾಡ.
4. ಅಧೀಕ್ಷಕರು, ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ / ಗೌಪ್ಯ / ಜಿ.ಎ.ಡಿ. / ವಿದ್ಯಾಂಡಳ (ಪಿ.ಜಿ.ಪಿ.ಎಚ್.ಡಿ) ವಿಭಾಗ, ಸಂಬಂಧಿಸಿದ  
ಕೋರ್ಸುಗಳ ವಿಭಾಗಗಳು ಪರೀಕ್ಷಾ ವಿಭಾಗ, ಕ.ವಿ.ವಿ. ಧಾರವಾಡ.
5. ನಿರ್ದೇಶಕರು, ಕಾಲೇಜು ಅಭಿವೃದ್ಧಿ / ವಿದ್ಯಾರ್ಥಿ ಕಲ್ಯಾಣ ವಿಭಾಗ, ಕ.ವಿ.ವಿ. ಧಾರವಾಡ.



**KARNATAK UNIVERSITY, DHARWAD**

**BASLP**

**SYLLABUS**

**With Effect from 2023-24**

**DISCIPLINE SPECIFIC CORE COURSE (DSCC) FOR SEM V & VI,**

**DISCIPLINE ELECTIVE COURSE (DSE) FOR SEM V & VI**

**VOCATIONAL COURSE (Voc) FOR SEM V & VI and**

**SKILL ENHANCEMENT COURSE (SEC) FOR V SEM**

**AS PER NEP-2020**

# Karnatak University, Dharwad

## BASLP

Effective from 2023-24

Sem.	Type of Course	Theory/ Practical	Course Code	Course Title	Instruction hour/week	Total hours /semester	Duration of Exam	Marks			Credits	
								Formative	Summative	Total		
V	DSCT-5.1	Theory	135BLP011	Motor Speech Disorders in children	03hrs.	42	02hrs.	40	60	100	03	
	DSCT-5.2	Theory	135BLP012	Structural Anomalies and Speech Disorders	03hrs.	42	02hrs.	40	60	100	03	
	DSCT-5.3	Theory	135BLP013	Amplification Devices	03 hrs.	42	02hrs.	40	60	100	03	
	Any one	DSE-1A	Theory	135BLP021	Pediatric Audiology	03hrs.	42	02 hrs.	40	60	100	03
		DSE-1B		135BLP022	Community Based Rehabilitation							
		Voc-1	Theory	135BLP101	Otolaryngology	03 hrs.	42	02 hrs.	40	60	100	03
		DSCT-5.4	Theory	135BLP014	Research Methods & Statistics	03 hrs.	42	02 hrs.	40	60	100	03
		DSCP-5.1	Practical	135BLP014	Clinicals (Speech-Language Pathology)	06 hrs.	84	04hrs.	50	50	100	03
	SEC-3	Practical	135BLP061	Clinicals (Audiology)	06 hrs.	84	04hrs.	50	50	100	03	
<b>Total</b>								<b>340</b>	<b>460</b>	<b>800</b>	<b>24</b>	
VI	DSCT-6.1	Theory	136BLP011	Motor Speech Disorders in Adults	03 hrs.	42	02hrs.	40	60	100	03	
	DSCT-6.2	Theory	136BLP012	Language Disorders in Adults	03 hrs.	42	02 hrs.	40	60	100	03	
	DSCT-6.3	Theory	136BLP013	Child Language Disorders	03 hrs.	42	02 hrs.	40	60	100	03	
	DSCT-6.4	Theory	136BLP014	Implantable Hearing Devices and Hearing Aid Fitting	03 hrs.	42	02hrs.	40	60	100	03	
	Any one	DSE-2A	Theory	136BLP021	Environmental Audiology	03 hrs.	42	02 hrs.	40	60	100	03
		DSE-2B		136BLP022	Clinical Counselling							
		Voc-2	Theory	136BLP101	Speech-Language Pathology and Audiology in Practice	03 hrs.	42	02 hrs.	40	60	100	03
		DSCP-6.1	Practical	136BLP015	Clinicals (Speech-Language Pathology)	06 hrs.	84	04hrs.	50	50	100	03
	DSCP-6.2	Practical	136BLP016	Clinicals (Audiology)	06 hrs.	84	04hrs.	50	50	100	03	
<b>Total</b>								<b>340</b>	<b>460</b>	<b>800</b>	<b>24</b>	

**BASLP Semester –V**  
**DSCT-5.1 - Motor Speech Disorders in Children: 135BLP011**

Type of Course	Theory /Practical	Credits	Instruction hours per week	Total No. of Lectures/ Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
<b>DSCT-5.1</b>	<b>Theory</b>	<b>03</b>	<b>03</b>	<b>42</b>	<b>2hrs.</b>	<b>40</b>	<b>60</b>	<b>100</b>

**Course Outcomes (COs): At the end of the course students will be able to:**

**CO1:**Describe the characteristics of motor speech disorders in children such as cerebral palsy, childhood apraxia of speech and other childhood dysarthria.

**CO 2:**Assess the speech and non-speech aspects associated with the above conditions.

**CO3:**Plan and execute therapy strategies for children with motor speech disorders.

Unit	Title:	42hrs. /semester
<b>UnitI</b>	<p><b>Introduction to Neuromotor Organization and Sensorimotor Control of Speech and Motor Speech Disorders</b></p> <p>1.1 Central and peripheral nervous system in speech motor control (motor control by cortical, subcortical structures, centrifugal pathways, brainstem, cerebellum and spinalcord).</p> <p>1.2 Neuromuscular organization and control and sensorimotor integration.</p> <p>1.3 Introduction to motor speech disorders in children</p> <ul style="list-style-type: none"> <li>• Motor speech disorders leading to developmental dysarthria. <ul style="list-style-type: none"> <li>- Cerebral palsy - definition, causes, associated problems, and classification.</li> <li>- Syndromes leading to dysarthria (Juvenile progressive bulbar palsy, Congenital supranuclear palsy, Guillain-Barre syndrome, Worster-drought syndrome, Duchenne Muscular dystrophy)</li> </ul> </li> <li>• Motor speech disorders leading to developmental apraxia of speech- definition, causes, associated problems, and classification.</li> </ul> <p>1.4 High risk registers for neurological conditions.</p>	
<b>UnitII</b>	<p><b>Nature of Motor speech Disorders in Children</b></p> <p>2.1 Neuromuscular development in normal children and children with cerebral palsy</p> <p>2.2 Reflex profile</p> <p>2.3 Different types of cerebral palsy</p> <ul style="list-style-type: none"> <li>• Disorders of muscle tone – spasticity, rigidity, flaccidity, atonia</li> <li>• Disorders of movement – Hyperkinesias and dyskinesias – Ballismus, tremor, tic disorder, myoclonus, athetosis, chorea, dystonia, hypokinesias.</li> <li>• Disorders of coordination -Ataxia</li> </ul> <p>2.4 Speech and language problems in cerebral palsy</p> <p>2.5 Different types of apraxia- verbal and nonverbal apraxia</p> <p>2.6 Speech and language characteristics in developmental apraxia</p>	
<b>UnitIII</b>	<p><b>Assessment of Motor Speech Disorders in Children</b></p> <p>3.1 Assessment of speech (acoustic, respiratory, resonatory, prosodic aspects) in cerebral palsy – objective and subjective methods</p> <p>3.2 Assessment of oro-motor aspects and feeding</p> <p>3.3 Assessment of speech in developmental apraxia</p>	

	3.4 Differential diagnosis of motor speech disorders with other developmental speech disorder.	
<b>Unit IV</b>	<b>Management of Motor Speech Disorders in Children</b> 4.1 Team approach to rehabilitation and General principles of motor learning 4.2 Speech and oro-motor rehabilitation in cerebral palsy Approaches to intervention-Behavioural (vegetative exercises, oral sensorimotor facilitation techniques, compensatory and facilitatory techniques for the correction of respiratory, phonatory, resonatory & articulatory errors) and prosthetic 4.3 Feeding intervention in cerebral Palsy. 4.4 Motor approaches: Different approaches in neuromuscular education (such as Bobath, Temple Fay, Phelps) 4.5 Medical management of cerebral palsy (pharmacological and neurosurgical) 4.6 Management of developmental apraxia of speech: specific speech therapy techniques, other approaches 4.7 Augmentative and alternative communication (AAC)- Application of AAC methods in children with motor speech disorders in the Indian context, available AAC options (systems and devices), symbol selection (access methods), assessment for AAC candidacy, AAC intervention (team approach in the advocacy of AAC, instructional strategies) 4.8 Preventive measures to reduce the neurological conditions.	

### Practicum

1. With the help of models, charts, and software, identify the motor control centers in the brain.
2. Perform oro-motor examination in five children and adults and compare.
3. Identify oro-motor reflexes (rooting, suckling, & phase bite) in 5 infants.
4. Demonstrate normal posture and breathing patterns required for varied speech tasks.
5. Alter the postures and breathing patterns and notice changes in speech patterns.
6. Assess DDK rate in five typically developing children.
7. Rate intelligibility of speech in five typically developing children. Discuss factors that influenced speech intelligibility and their ratings.
8. Observe and record (a) physical status, (b) oral sensory motor abilities and vegetative skills, (c) respiration, (d) phonation, (e) resonance, (f) articulation and (g) language abilities in five typically developing children. Compare these with observations made from children with motor speech disorders.
9. Perform oro-motor exercises – isotonic and isometric. Discuss strategies to modify exercises for children.
10. Identify from video the AAC system such as low technology vs high technology systems and different symbol system, that is, Bliss symbols, IICP symbols and different signing systems – Makaton.
11. Observe feeding and swallowing skills in different age groups of children: 2 newborns; 2 infants, 2 toddlers, and 2 older children. Identify the differences in feeding methods, food consistencies, texture, quantity, feeding habits, feeding appliances used by these children.

### References

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- Children. New York: Thieme.
3. Love, R.J. (2000) (2nd Ed). *Childhood Motor Speech Disorders*. Allyn & Bacon.
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## DSCT-5.2 - Structural Anomalies and Speech Disorders: 135BLP012

Type of Course	Theory/Practical	Credits	Instruction hour per week	Total No. of Lectures/Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-5.2	Theory	03	03	42	2 hrs.	40	60	100

**Course Outcomes (COs):** At the end of the course students will be able to:

**CO1:** Evaluate and diagnose the speech characteristics seen in these disorders.

**CO2:** Learn about the techniques for the management of speech disorders in these conditions.

Unit	Title:	42hrs./semester
<b>Unit I</b>	<b>Introduction to Cleft Lip and Palate and Associated Problems</b> 1.1 Embryology – development of the palate 1.2 Causes – genetic, environmental, and other causes 1.3 Types of cleft lip and palate and classification of cleft lip and palate 1.4 Communication disorders: language and hearing <ul style="list-style-type: none"> <li>• Feeding, psychological, and dental problems</li> <li>• Syndromes associated with cleft lip and palate</li> </ul>	
<b>Unit II</b>	<b>Velopharyngeal Dysfunction and Assessment</b> 2.1 Velopharyngeal closure mechanism: Normal Physiology and types of different velopharyngeal closure 2.2 Velopharyngeal Dysfunction (VPD) <ul style="list-style-type: none"> <li>• Definition causes and classification.</li> <li>• Effect of VPD on speech</li> <li>• Assessment of VPD: Subjective and objective methods (Direct measures – Videofluoroscopy, MRI, CT, Cephalometric images, Cineradiography, Nasopharyngoscopy; Indirect measures – TONAR, Nasometry, NVS, Nasal View, ZIPPO, PERCI, Pressure flow technique, Rhinomanometry).</li> </ul>	
<b>Unit III</b>	<b>Assessment and Management of CLP</b> 3.1. Assessment of cleft lip/palate: Cleft palate Perceptual protocols 3.2. Management of cleft lip and palate – surgery, speech therapy, prosthesis 3.3. Speech and language therapy for CLP: early intervention, therapy techniques to improve language, speech therapy techniques to reduce compensatory articulation, speech therapy methods to improve resonance and speech intelligibility.	
<b>Unit IV</b>	<b>Types of Oral and Laryngeal Cancer and Management</b> 4.1 Definition, Causes and symptoms of laryngeal cancers. 4.2 Total laryngectomy – definition, characteristics, associated problems 4.3 Types of glossectomy and mandibulectomy 4.4 Assessment of patients with laryngectomy, glossectomy, mandibulectomy 4.5 pre-and post-operative counselling 4.6 Esophageal speech – anatomy, candidacy, different types of air intake procedure, speech characteristics in esophageal speech 4.7 Tracheo-Esophageal Speech – anatomy, candidacy, different types of TEP, fitting of prosthesis, speech characteristics, complications in TEP.	



4.8 Artificial larynx – different types, selection of artificial larynx, ultra- speech, speech characteristics.	
4.9 Gastric pull up – issues and management.	
4.10 Glossectomy, mandibulectomy–management	

## Practicum

1. Identify the different types of cleft lip and palate by looking at illustrations and images.
2. Listen to 10 speech samples of children with cleft lip and palate and rate their nasality/ speech (articulation and cleft type errors) based on universal reporting parameters.
3. Identify the type of closure of velopharyngeal port for 5 normal individuals and 5 individuals with cleft lip and palate using videos of nasoendoscopy/videofluoroscopy.
4. Perform oral peripheral mechanism examination on 10 individuals and document the structure and functions of the articulators.
5. Analyse the different types of occlusions in 10 individuals.
6. Identify the type of glossectomy by looking at pictures/illustrations.
7. Identify the different types of prosthesis in the management of head and neck cancer.
8. Analyse the speech profile of 5 individuals with laryngectomy.
9. Identify parts of an artificial larynx and explore its use.
10. Prepare a checklist / pamphlet illustrating care of the stoma and T- tubes in vernacular.

## References

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## DSCT-5.3–Amplification Devices: 135BLP013

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures/Hours /Semester	Duration of Exam	Formative AssessmentMarks	SummativeAssessmentMarks	Total Marks
DSCT-5.3	Theory	03	03	42	2hrs.	40	60	100

**Course Outcomes (COs):**At the end of the course students will be able to:

- CO1: Identify different types of hearing aids and explain their components.  
 CO2: Carry out Electro-acoustic measurement and categorize the hearing aids accordingly.  
 CO3: Describe different signal processing strategies and their relevance in different listening conditions.  
 CO4: Cross check whether the hearing aids meet the standards.

Unit	Title:	42hrs. /semester
<b>Unit I</b>	<b>Basics and Classifications of Hearing Aids</b> 1.1 Historical development of hearing aids-mechanical, analogue, digital hearingaid 1.2 Basic components of hearing aids –microphones, amplifier,receiver/vibrator, cords, volume control, telecoil, and batteries. 1.3 Body level, ear level hearing aids (BTE, ITE, ITC, CIC, IIC, RIC,RITE) 1.4 Analogue, Programmable and Digital Hearingaid 1.5 Binaural, pseudo-binaural,mono-aural 1.6 Master hearingaids 1.7 Modular hearingaids 1.8 Group Amplification – hard wire, induction loop, FM, infrared	
<b>Unit II</b>	<b>Signal Processing in Hearing Aids</b> 2.1 Artificial Intelligence in Hearingaids 2.2 Signal processing in hearing aids - BILL, TILLPILL 2.3 Signal enhancing technology- Digital Noise reduction, Directionality of Microphones, Speech cueenhancement	
<b>UnitIII</b>	<b>Compression in Hearing Aids and other Signal Processing</b> 3.1 Output limiting: peak clipping, compression (Input/output compression, compression ratio, compression knee point, WDRC, Compression limiting, high level compression, low level compression), Expansion HearingAid. 3.2 Extended low frequency amplification, frequency lowering techniques. 3.3 Routing of signals, head shadow/baffle/ diffraction effects	
<b>Unit IV</b>	<b>Electro-acoustic Measurement of Hearing aids</b> 4.1 Electro-acoustic measurements for hearing aids Purpose, parameters, instrumentation, procedure (analogue and digital), variables affectingEAM. 4.2 Standards on Electro-acoustic measurements of Hearing aids (BIS, IEC and ANSI standards). 4.3 Environmental tests for Hearingaids	

### Practicum

1. Listen to the output of different types and classes of hearing aids (monaural, binaural, analog, digital hearing aids), in different settings.
2. Troubleshoot hearing aids: Check the continuity of the receiver cord using multimeter, measure the voltage of different sized batteries using multi meter, Check voltage of batteries different types and sizes.

3. Carry out electroacoustic measurements for the body level and ear level hearing aids.
4. Program the hearing aid for different configuration and degrees of hearing loss (at least 5 different audiograms) using different prescriptive formulae.
5. Program the hearing aid for different listening situations (at least 3 different situations)
6. Vary the compression settings in a digital hearing aid and note down the differences in the output.
7. Perform real ear insertion measurements using different hearing aids (body level and ear level, hearing aids of different gains)
8. Compare speech perception through conventional BTE and RIC hearing aids using a rating scale.
9. Observe assistive listening devices such as telephone amplifier, vibro-tactile alarms, note down the candidacy and their utility.

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## DSE-1A –Pediatric Audiology: 135BLP021

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
<b>DSE-1A</b>	<b>Theory</b>	<b>03</b>	<b>03</b>	<b>42</b>	<b>2hrs.</b>	<b>40</b>	<b>60</b>	<b>100</b>

**Course Outcomes (COs): At the end of the course students will be able to:**

**CO1:** Describe auditory development.

**CO2:** List etiologies and relate them to different types of auditory disorders that may arise.

**CO3:** Explain different hearing screening/identification procedures and their application.

**CO4:** Elaborate on different aspects of pediatric behavioral and physiological/electrophysiological evaluation.

Unit	Title:	42 hrs. /semester
<b>Unit I</b>	<p><b>Development of Human Auditory System</b></p> <p>1.1. Introduction to pediatric audiology and basic terminologies.</p> <p>1.2. Embryological development of the human auditory and vestibular systems, and the relevance of this information with special reference to syndromes.</p> <p>1.3. Maturation of the auditory nervous system and its relevance in pediatric hearing.</p> <p>1.4. Development of auditory behavior – prenatal hearing, newborn hearing, auditory development (minimum response level, localization, perception of speech, need for multiple cues).</p>	
<b>Unit II</b>	<p><b>Early Identification of Hearing Loss and Hearing Screening</b></p> <p>2.1 Need for early identification with special reference to conductive and sensorineural hearing loss, mild hearing losses, sloping hearing losses, fluctuating hearing losses and unilateral hearing loss.</p> <p>2.2 Recommendations of the Joint committee on infant screening- various position statements showing its evolution.</p> <p>2.3 High risk registers and its utility in early identification.</p> <ul style="list-style-type: none"> <li>• Commonly used high risk registers</li> <li>• Sensitivity and specificity</li> <li>• Relevance in Indian scenario</li> </ul> <p>2.4 Universal newborn hearing screening- concept, history, present scenario and hurdles.</p> <p>2.5 Behavioral screening tests (awakening test, bottle feeding test, behavioral observation audiometry) stimuli, procedures, recording of response, interpretation of results.</p> <p>2.6 Objective screening tests (e.g., Crib-O Gram, auditory cradle, accelerometer recording system, reflex inhibition audiometry, immittance, reflectometry, wide-band reflectance, OAE, evoked potentials).</p> <ul style="list-style-type: none"> <li>• School screening</li> <li>• Screening for hearing sensitivity- behavioral and objective tests.</li> <li>• Screening for (C)APD- Need, tests used (checklists &amp; behavioral screening tests).</li> </ul>	

<b>Unit III</b>	<b>Diagnostic Evaluations- Behavioral Tests Behavior observationaudiometry</b> 3.1 Conditioning techniques: <ul style="list-style-type: none"> <li>• Visual reinforcement audiometry and its modifications including CORA.</li> <li>• PIWI and peep show audiometry</li> <li>• TROCA</li> <li>• Play audiometry.</li> </ul> 3.2 Modifications required for multiple disabilities. 3.3 Speech audiometry <ul style="list-style-type: none"> <li>▪ Modification required while carrying out speech audiometry in children.</li> <li>▪ Speech detection threshold</li> <li>▪ Speech recognition threshold</li> <li>▪ Speech recognition scores – PBK, WIPI, NU Chip, Early speech perception test, Ling’s six sound tests, auditory number test, tests available in Indian languages</li> <li>▪ BC speech audiometry.</li> </ul> 3.4 Functional hearing loss- signs & symptoms and tests used. 3.5 Balance assessment: need, causes, behavioral tests.	
<b>Unit IV</b>	<b>Diagnostic Evaluations- Objective tests</b> 4.1 Immittance evaluation- including high frequency probe-tone, tympanometry, reflexometry, wide-band reflectance. 4.2 OAEs (TEAOAE & DPOAE) 4.3 Evoked potentials (ABR, ASSR & ALLR) 4.4 Objective tests for vestibular assessment (cVEMP, oVEMP, vHIT, Caloric & tests for central vestibular assessment).	

### Practicum

1. Observe a child with normal hearing (0-2 years) in natural settings. Write a report on his/her responses to sound.
2. Observe a child with hearing impairment (0-2 years) in natural settings. Write a report on his/her responses to sound with and without his amplification device.
3. Administer HRR on at least 3 newborns and interpret responses.
4. Based on the case history, reflect on the possible etiology, type and degree of hearing loss the child may have.
5. Compare ABR wave forms in children of varying ages from birth to 24 months.
6. Observe live or video of BOA/VRA of a child with normal hearing and hearing loss and write a report on the instrumentation, instructions, stimuli used, procedure and interpretation.
7. Observe OAE in a child with normal hearing and a child with hearing loss. Write a report on the instrumentation, protocol used and interpretation.
8. Observe ABR in a child with normal hearing and a child with hearing loss. Write down a report on the instrumentation, protocol used and interpretation.
9. Observe immittance evaluation in a child with normal hearing and a child with hearing loss. Write a report on the instrumentation, protocol used and interpretation.
10. Using role play demonstrate how the results of audiological assessment are explained to caregivers in children with the following conditions.
  - Child referred in screening and has high risk factors in his history.
  - Child with chronic middle ear disease
  - Child with CAPD
  - Child with severe bilateral hearing impairment

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## DSE-1B –Community Based Rehabilitation (CBR): 135BLP022

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
<b>DSE-1B</b>	<b>Theory</b>	<b>03</b>	<b>03</b>	<b>42</b>	<b>2hrs.</b>	<b>40</b>	<b>60</b>	<b>100</b>

### Course Outcomes (COs): At the end of the course students will be able to:

**CO1:** Explain the concept, principles and scope of community-based rehabilitation.

**CO2:** Learn the strategies for promoting public participation in CBR. Apply suitable methods for preparing persons with disability for rehabilitation within the community.

**CO3:** Provide need-based training to persons with disabilities.

**CO4:** Develop an understanding of the role of government and global agencies in CBR.

**CO 5:** Learn about the role of media in enhancing community participation.

Unit	Title:	42 hrs. /semester
<b>Unit I</b>	<b>Introduction to CBR</b> 1.1. Concept and Definition of CBR. 1.2. Principles of CBR. 1.3. Difference between CBR and institutional living. 1.4. Socio-cultural and economic contexts of CBR. 1.5. Scope and inclusion of CBR in government policies and programs.	
<b>Unit II</b>	<b>Preparing Community and Persons with Disability for CBR</b> 2.1 Awareness program: Types and methods. 2.2 Advocacy: Citizen and self. 2.3 Focus group discussion. 2.4 Community based employment and higher education.	
<b>Unit III</b>	<b>Preparing Persons with Disability for CBR</b> 3.1 Family counselling and family support groups. 3.2 CBR and corporate social responsibility. 3.3 School education: Person centered planning, and peer group support. 3.4 Transition: Individual transition plan, development of self-determination and self- management skills. 3.5 Community related vocational training. 3.6 Skill Training for living within community.	
<b>Unit IV</b>	<b>Role of Media in Enhancing Community Participation</b> 4.1 Mass media and its role in mobilization of CBR. 4.2 Strategies for community awareness and participation. 4.3 Different modes (print, electronic, audio-visuals, word-of-mouth). 4.4 Effectiveness of each media for different target groups. 4.5 Educators' use of mass media for community-based rehabilitation and education.	

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## Voc-1 –Otolaryngology: 135BLP101

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
VOC-1	Theory	03	03	42	2hrs.	40	60	100

### Course Outcomes (COs): At the end of the course, students will be able to:

**CO1:** Causes, signs, symptoms, pathophysiology, and management of diseases of external, middle and inner ear leading to hearing loss.

**CO2:** Causes, signs, symptoms, pathophysiology, and management of diseases of laryngeal and articulatory systems.

Unit	Title:	42hrs. /semester
<b>Unit I</b>	<b>External and Middle Ear and their Disorders</b> 1.1. Clinical anatomy of the ear 1.2. Congenital anomalies 1.3. Diseases of the external ear 1.4. Perforation and ruptures of tympanic membrane 1.5. Eustachian tube dysfunction 1.6. Otitis media with effusion 1.7. Cholesteatoma and chronic suppurative otitis media 1.8. Otosclerosis 1.9. Trauma to temporal bone 1.10. Facial nerve and its disorder	
<b>Unit II</b>	<b>Inner Ear and its Disorders</b> 2.1. Congenital anomalies 2.2. Meniere's Disorder 2.3. Ototoxicity 2.4. Presbycusis 2.5. Disorders of vestibular system 2.6. Vestibular Schwannoma 2.7. Tinnitus and medical line of treatment 2.8. pre-surgical medical and radiological evaluations for implantable hearing devices 2.9. Overview of surgical technique for restoration and preservation of hearing 2.10. post-surgical care and complication of surgery for cochlear implants 2.11. Overview of surgical technique, post-surgical care, and complication of surgeries for implantable hearing devices 2.12. Implantable bone conducted hearing aids and middle ear implant.	
<b>Unit III</b>	<b>Oral cavity, Pharynx, Esophagus, and their Disorders</b> 3.1 Anatomy of the oral cavity 3.2 Common disorders of the oral cavity	

	3.3 Cleft lip and palate – medical aspects 3.4 Clinical anatomy and physiology of pharynx 3.5 Inflammatory conditions of the pharynx, tonsils and adenoids 3.6 Clinical anatomy and physiology of esophagus 3.7 Clinical examination of esophagus 3.8 Congenital and acquired diseases of esophagus. 3.9 Airway management procedures	
<b>UnitIV</b>	<b>Larynx and its Disorders</b> 4.1 Clinical anatomy of larynx 4.2 Difference between adult and infant larynx 4.3 Clinical examination of larynx 4.4 Stroboscopy - technique, procedure, interpretation, and precautions 4.5 Congenital laryngeal pathologies 4.6 Inflammatory conditions of the larynx 4.7 Vocal nodule and other disorders of the vocal folds 4.8 Benign and malignant tumors of the larynx 4.9 Laryngectomy – overview of surgical procedure 4.10 Phono surgery and other voice restoration surgeries	

## References

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## DSCT-5.4–Research Methods and Statistics: 135BLP061

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-5.4	Theory	03	03	42	3hrs.	40	60	100

**Course Outcomes (COs): At the end of the course, students will be able to:**

**CO1:** Basic concept of research in the field of audiology and speech-language pathology

**CO 2:** Design and execution of research

**CO3:** Ethical guidelines for conducting research.

Unit	Title:	42hrs. / semester
<b>Unit I</b>	<b>Introduction to Research Methods</b> 1.1 Meaning and purpose of research: meaning. 1.2 Need for research in audiology and speech-language pathology 1.3 Funds/grants for research 1.4 Steps in research: identification, selection 1.5 Formulation of research questions: aims, objectives, statement of problem, hypothesis 1.6 Types of variables; types of sampling procedures (random and non-random); 1.7 Types/ methods of data collection and their advantages and disadvantages 1.8 Reliability and validity (internal and external validity)	
<b>Unit II</b>	<b>Research Design in Audiology and Speech-Language Pathology</b> 2.1 Types of research: survey, ex-post facto research, normative research, standard-group comparison 2.2 Experimental and quasi experimental research: group design & single subject design; Between groups vs. repeated measures design 2.3 Epidemiologic data sources and measurements 2.4 Epidemiologic methods – questionnaire survey, screening, personal survey, testing 2.5 Media - their advantages and disadvantages 2.6 Incidence and prevalence of hearing, speech, language disorders as per different census (NSSO, WHO) 2.7 Internal and external validity of research 2.8 Documentation of research: scientific report writing, different formats or styles (APA, AMA, and MLA), 2.9 Ethics of research	
<b>Unit III</b>	<b>Introduction to Statistics and Data Collection</b> 3.1 Application of statistics in the field of Audiology and speech-language pathology. 3.2 Scales of measurement: nominal, ordinal, interval, ratio 3.3 Classification of data: class intervals, continuous and discrete measurement	

	<p>3.4 Normal distribution: general properties of normal distribution, theory of probability, area under normal probability curve</p> <p>3.5 Variants from the normal distribution: skewness and kurtosis</p> <p>3.6 Measure of central tendency: mean, median, mode</p>	
<b>Unit IV</b>	<p><b>Statistics and Research Designs</b></p> <p>4.1 Choosing statistics for different research designs.</p> <p>4.2 Correlational techniques: Pearson's Product Moment Correlation Coefficient.</p> <p>4.3 Spearman's Rank order correlation coefficient</p> <p>4.4 Statistical inference: concept of standard error and its use; the significance of statistical measures; testing the significance of difference between two means z-test, t-test; analysis of variance, post hoc tests.</p> <p>4.5 Non-parametric tests: Chi-square test, Wilcoxon test, Mann-Whitney U test</p> <p>4.6 Reliability and validity of test scores: reliability and validity, Item analysis</p> <p>4.7 Analysis of qualitative data</p> <p>4.8 Software for statistical analysis</p>	

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## **DSCP-5.1–Clinical (Speech-Language Pathology): 135BLP014**

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
<b>DSCP-5.1</b>	<b>Practical</b>	<b>03</b>	<b>06</b>	<b>84</b>	<b>4hrs.</b>	<b>50</b>	<b>50</b>	<b>100</b>

### **Course Outcomes (COs): At the end of the course students will be able to:**

**CO1:** know (concepts), know how (ability to apply), show (demonstrate in a clinical diary/logbook based on clinical reports/recordings, etc.), and do (perform on patients/ client contacts) the following.

#### **Know:**

1. Differential diagnosis of motor speech disorders in children.
2. Procedures to assess individuals with cleft lip and palate, and other oro-facial structural abnormalities.
3. Procedures to assess laryngectomy and provide management options.

#### **Know-how:**

1. To administer at least two more (in addition to earlier semesters) standard tests for childhood language disorders.
2. To assess posture and breathing for speech in children with motor speech disorders.
3. To consult with inter-disciplinary medical/rehabilitation team and counsel the individual/family regarding management options and prognosis.

#### **Show:**

1. Rating of cleft, speech intelligibility and nasality – minimum of 2 individuals with cleft lip and palate.
2. Language assessment - minimum of 2 individuals with cleft lip and palate.
3. Assessment of rate of speech on various speech tasks – at least on 2 children & adults.

#### **Do:**

1. Oral peripheral examination on minimum of 2 individuals with cleft lip and palate.
2. Apply speech language stimulation/therapy techniques on 5 children with language disorders/speech sound disorders/motor speech disorders – minimum 5 sessions of therapy for each child.

### **SEC-3–Clinical (Audiology): 135BLP061**

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
<b>SEC-3</b>	<b>Practical</b>	<b>03</b>	<b>06</b>	<b>84</b>	<b>4 hrs.</b>	<b>50</b>	<b>50</b>	<b>100</b>

**Course Outcomes (COs): At the end of the course students will be able to:**

General considerations:

- Exposure is primarily aimed to be linked to the theory courses covered in the semester, however, not just limited to these areas.
- After completion of clinical postings in auditory diagnostics and auditory rehabilitation, the student will Know (concept), know how (ability to apply), show (demonstrate in a clinical diary/logbook), and do (perform on patients/ client contacts) the following:

#### **Know:**

1. Different protocols in tympanometry and reflexometry.
2. Different protocols used in auditory brainstem responses.
3. Protocols for screening and diagnostic otoacoustic emissions
4. Tests to assess vestibular system.
5. Different indications for selecting implantable hearing devices.
6. Various speech stimulation and auditory training techniques

#### **Know-how:**

1. To administer auditory brainstem responses for the purpose of threshold estimation and site of lesion testing
2. To administer high frequency tympanometry and calculate resonance frequency.
3. To administer high risk register
4. To modify the given environment to suit the needs of hearing impairment.

#### **Show:**

1. Analysis of ABR waveforms – threshold estimation 5 and site of lesion 5
2. Analysis of immittance audiometry and relating to other tests – 5 individuals with conductive and 5



individuals with sensory-neural hearingloss

3. How to formulate select appropriate auditory training technique based on audiological evaluation.

**Do:**

1. Threshold estimation on 5 infants (< 2years)
2. TEOAE and DPOAE on 5 infants (<2years)
3. BOA on 5 infants (<2years)
4. VRA on 2 infants (6 month – 3year)
5. Conditioned play audiometry – 3 children (3-6years)
6. Hearing aid fitment on 1 infant (< 3 years) 2 children (3-6years)
7. Listening age of 3 children with hearingimpairment
8. Appropriate auditory training on 5 children with hearingloss

**Scheme of Practical Examination (distribution of marks): 25 marks for Semester end examination**

**1. Practicum – 10 Marks**

**2. Viva- 15 Marks**

**Total 25 marks**

**Note: Same Scheme may be used for IA (Formative Assessment) examination**

**Details of Formative assessment (IA)for DSCC theory/OEC: 40% weight age for total marks**

Type of Assessment	Weight age	Duration	Commencement
Written test 1	15%	1 hr.	8 <sup>th</sup> Week
Written test 2	15%	1 hr.	12 <sup>th</sup> Week
Case study / Assignment / Field work / Project work/ Activity	10%	-----	--
Total	40% of the maximum marks allotted for the paper		

**GENERAL PATTERN OF THEORYQUESTION PAPER FOR DSCC/ OEC  
(60 marks for semester end Examination with 2 hrs. duration)**

**Part-A**

1. Question number 1-06 carries 2 marks each. Answer any 05 questions :10marks.

**Part-B**

2. Question number 07- 11 carries 05Marks each. Answer any 04questions : 20 marks.

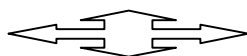
**Part-C**

3. Question number 12-15 carries 10 Marks each. Answer any 03 questions : 30 marks.

(Minimum 1 question from each unit and 10 marks question may have sub questions for 7+3 or 6+4 or 5+5 if necessary)

**Total: 60 Marks**

**Note: Proportionate weightage shall be given to each unit based on the number of hours prescribed.**



**B.ASLP Semester–VI**  
**DSCT-6.1–Motor Speech Disorders in Adults: 136BLP011**

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-6.1	Theory	03	03	42	2hrs.	40	60	100

**Course Outcomes (COs):At the end of the course students will be able to:**

**CO1:**Understand the characteristics of acquired motor speech disorders in adults.

**CO2:**Evaluate and diagnose speech characteristics in acquired motor speech disorders.

**CO3:**Learn about the techniques for the management of speech and related errors in acquired motor speech disorders.

Unit	Title:	42hrs. / semester
<b>Unit I</b>	<p><b>Introduction to Motor Speech Disorders in Adults</b></p> <p>1.1 Dysarthria in adults:</p> <ul style="list-style-type: none"> <li>• Definition and different classification systems of dysarthria in adults</li> <li>• Types of dysarthria in adults and their neurological bases</li> <li>• Nonspeech and speech characteristics in different types of dysarthria</li> <li>• Acoustic and physiological findings in different types of dysarthria.</li> </ul> <p>1.2 Apraxia of speech in adults (AOS):</p> <ul style="list-style-type: none"> <li>• Definition of verbal and nonverbal apraxia of speech.</li> <li>• Different types of apraxia in adults and their neurological bases.</li> <li>• Nonspeech and speech characteristics of AOS.</li> <li>• Acoustic and physiologic findings in AOS.</li> </ul> <p>1.3 Physiology of normal swallow and its characteristics in different neurological conditions such as ALS, Parkinson's disease, Huntington's disease, multiple sclerosis, apraxia.</p>	
<b>Unit II</b>	<p><b>Etiologies of Dysarthria and Apraxia of Speech</b></p> <p>2.1. Common causes leading to any of the dysarthria and apraxia: Traumatic brain injury (TBI), Cerebrovascular accident (CVA), Infections such as meningitis, encephalitis, and HIV, Neoplasms, Toxic agents, Ischemic brain damage, Hypoxic ischemic encephalopathy, Cerebral infarction,</p>	

	<p>Intracranialhemorrhage, subarachnoidhemorrhage.</p> <p>2.2. Common neurogenic conditions leading todysarthria.</p> <ul style="list-style-type: none"> <li>• Flaccid dysarthria: Muscular dystrophy, polymyositis, myasthenia gravis, poliomyelitis, polyneuritis (Guillian-Barresyndrome)</li> <li>• Ataxic dysarthria: Ataxic telangiectasia, Von-Hippel Lindadisease,Freidrich’s ataxia</li> <li>• Hypokinetic dysarthria: Parkinson’s disease</li> <li>• Hyperkinetic dysarthria: Tardive dyskinesia, Huntington’s and Syndenham’s chorea, Meige syndrome, Tourette’s syndrome.</li> <li>• Mixed dysarthria: Motor neurone disease [Amyotrophic multiple sclerosis (ALS), Primary lateral sclerosis (PLS), Progressive bulbarand pseudobulbar palsy], Corticobasal Degeneration (CBD), Wilson’s disease,Neurosyphilis.</li> </ul>	
<b>UnitIII</b>	<p><b>Assessment of Dysarthria and Apraxia of Speech</b></p> <p>3.1 Assessment of dysarthria</p> <ul style="list-style-type: none"> <li>• Perceptual analysis – examination of the speech systems during speech and nonspeech (oro-motor and oro-sensory) activities, standard tests and methods, speech intelligibility assessmentscales.</li> <li>• Instrumentalanalysis-Aerodynamic, Electromyographic, Kinematic, Acoustic</li> </ul> <p>3.2 Advantages and disadvantages of instrumental and perceptual analysis of speech.</p> <p>3.3 Assessment of apraxia of speech-standard tests and scales, subjective methods andprotocols.</p> <p>3.4 Differential diagnosis of dysarthria from functional articulation disorders, apraxia of speech, aphasia and allieddisorders.</p> <p>3.5 Evaluation of swallowing disorders (Dysphagia)- An overview to subjective and objectivemethods.</p>	
<b>UnitIV</b>	<p><b>Management of Dysarthria and Apraxia of Speech</b></p> <p>4.1 Management of dysarthria–</p> <ul style="list-style-type: none"> <li>• General interventionprinciples</li> <li>• Behavioural approaches (vegetative exercises, oral sensorimotor facilitation techniques, compensatory and facilitatory techniques for the correction of respiratory, phonatory, resonatory, articulatory &amp; prosodic errors)</li> <li>• Prosthetic and medical (surgical and pharmacologicalapproaches.</li> </ul> <p>4.2 Management of apraxia of speech- principles of motor learning, different behavioral management approaches including articulatory kinematic approaches, rate and /or rhythmapproaches.</p> <p>4.3 Application of Augmentative and Alternative Communication (AAC) systems for adult dysarthric and apraxic individuals –assessment for AAC candidacy, choosing an appropriate system and technique, training communication partners, generalization of learning and effective use of AAC in adult dysarthrics and apraxics.</p> <p>4.4 Management of swallowing disorders (Dysphagia) – An overview to rehabilitative and compensatoryapproaches.</p>	

## Practicum

1. Identify the cranial nerves and mention its origin and insertion from a picture/model.
2. Demonstrate methods to assess the cranialnerves.
3. Assess the respiratory system using speech and non-speech tasks in 10 healthyadults.
4. Assess the phonatory system using subjective and acoustic analysis in 10 healthyadults.

5. Looking at a video identify the clinical signs and symptoms of different neurological conditions resulting in Dysarthria.
6. Record the speech sample of 5 normal adults and compare with the audio sample of individuals with Dysarthria.
7. Administer Duffy's intelligibility rating scale on 5 healthy adults.
8. Administer Frenchay's Dysarthria Assessment on 5 healthy adults.
9. Demonstrate activities to improve the functions of speech subsystem.
10. Identify the signs of UMN and LMN based on a video.
11. Prepare a low tech AAC for functional communication for an individual with apraxia.

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## DSCT-6.2–Language Disorders in Adults: 136BLP012

Type of Course	Theory / Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-6.2	Theory	03	03	42	2hrs.	40	60	100

**Course Outcomes (COs): At the end of the course students will be able to:**

**CO1:** Understand the characteristics of adult language disorders.

**CO2:** Evaluate and diagnose speech characteristics in adults with language disorders.

**CO3:** Learn about the techniques for the management of speech and related errors in language disorders seen in adults.

Unit	Title:	42hrs. / semester
<b>Unit I</b>	<p><b>Neurosciences of Adult Language Disorders &amp; Aphasiology</b></p> <p>1.1 Neuroanatomical, neurophysiological, and neurochemical correlates for language function</p> <p>1.2 Neurolinguistic models and language processes – connectionists, hierarchical, global, process and computational models</p> <p>1.3 Historical aspects of aphasia</p> <p>1.4 Definitions, causes, classifications (cortical and subcortical aphasias), approaches to classification systems, types of aphasia- speech, language, behavioral and cognitive characteristics of varieties of aphasia</p>	
<b>Unit II</b>	<p><b>Non-Aphasic Language Disorders/ Cognitive Communication Disorders in Adults</b></p> <p>A brief overview of Speech, language characteristics in</p> <ul style="list-style-type: none"> <li>• TBI (Traumatic Brain Injury) - Trauma to the CNS – subdural haematoma, epidural haematoma, parenchymal brain damages</li> <li>• RHD (Right Hemisphere Damage)</li> <li>• Dementia</li> <li>• PPA (Primary Progressive Aphasia)</li> <li>• Schizophrenia</li> <li>• Metabolic disorders</li> <li>• Alcohol induced disorders.</li> </ul>	
<b>Unit III</b>	<p><b>Assessment of Aphasia and Other Cognitive Communication Disorders</b></p> <p>3.1 Assessment of cognitive-linguistic behavior of adults with aphasia – Screening, Diagnostic and performance assessment tools (Scoring, interpretation, and rationale) – BST, WAB, RTT, BAT, LPT, CLAP, CLQT.</p> <p>3.2 Assessment of speech, language, linguistic and cognitive behavior of adults with non-aphasic language disorders/ Cognitive communication disorders – MMSE, ABCD, CLAP, CLQT.</p> <p>3.3 Reflections on approaches to assessment in bi/multilingual situation.</p>	



	3.4 Theories of spontaneous recovery and prognostic indicators of aphasia and other cognitive-communication disorders.	
<b>Unit IV</b>	<b>Intervention Strategies for Aphasia and Cognitive-Communication Disorders</b> 4.1 Principles of language intervention 4.2 Speech-Language Management Approaches- Deblocking, VCIU, LOT, MAAT, PACE, Stimulation Facilitation Approach, RET, VAT, Semantic Feature Analysis, TAP, TUF. 4.3 Team approach in rehabilitation of adult language disorders 4.4 Counseling and home management for aphasia and other cognitive-communication disorders. 4.5 Rights of persons with aphasia.	

## Practicum

1. Identify different lobes of in the brain by looking at a model/ image and label the language areas.
2. Administer a standardized test battery on 3 normal individuals to assess language and cognition.
3. Administer bilingual aphasia test on 3 healthy normal adults.
4. List the language characteristics in different types of aphasia from a video.
5. Analyse the speech, linguistic and non-linguistic features seen in Right hemisphere damaged individual from a video.
6. In a given brain model mark the subcortical structures involved in language processing/production.
7. Demonstrate various facilitatory and compensatory therapy techniques in the management of aphasia.
8. Formulate activities to assess linguistic abilities in dementia and aphasia.
9. Counsel by a role play for a given profile of an individual with adult language disorder.
10. Prepare a counselling checklist / guideline that can be used with the family members of an individual with aphasia and traumatic brain injury.

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### **DSCT-6.3–Child Language Disorders: 136BLP013**

Type of Course	Theory / Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-6.3	Theory	03	03	42	2hrs.	40	60	100

**Course Outcomes (COs): At the end of the course students will be able to:**

**CO1:** Explain the process of acquisition of language and factors that influence its development in children.

**CO2:** Identify and assess language delay and deviance in children.

**CO3:** Select appropriate strategies for intervention.

**CO4:** Counsel and provide guidance to parents/caregivers of children with language disorders.

Unit	Title:	42hrs. /semester
Unit I	<p><b>Overview of Theories of Language Acquisition and Neurobiological Correlates of Language Development in Children</b></p> <p>1.1. Overview of theories of language acquisition in children-Traditional and modern approaches in each: Biological maturation approaches, Cognitive approaches, Linguistic approaches, Information processing theories, Behavior theory, Pragmatic approaches</p> <p>1.2. Language acquisition including bilinguals/multilinguals- types (based on age, manner of acquisition, factors affecting language acquisition).</p> <p>1.3. Role of Psychosocial and environmental factors in language development.</p> <p>1.4. Neurobiological correlates – neuroanatomical, neurophysiological, and neurochemical aspects of language development, Neurobiological underpinnings in child language disorders.</p>	
Unit II	<p><b>Language Characteristics (Oral and Written) of Developmental and Acquired Language Disorders in Children</b></p> <p>Delayed speech and language development associated with:</p> <ul style="list-style-type: none"> <li>• Hearing impairment</li> <li>• Intellectual disability</li> <li>• Syndromes associated with child language disorders-Down Syndrome, Fragile X Syndrome, William’s Syndrome, Klinefelter’s Syndrome.</li> <li>• Autism Spectrum Disorders.</li> <li>• Developmental dysphasia/specific language impairment</li> <li>• Acquired dysphasia/Acquired Childhood Aphasia</li> <li>• ADD and ADHD</li> <li>• Language Learning disability/Dyslexia</li> <li>• Other conditions</li> <li>• Co-morbidity in children</li> </ul>	

UnitIII	<p><b>Assessment of Children with Language Disorders</b></p> <p>3.1. Preliminary components of assessment: Case history, screening, evaluation of environmental, linguistic &amp; cultural variables.</p> <p>3.2. Methods to assess children with language disorder: Formal versus informal assessment; types of assessment materials: assessment scales, observational checklists, developmental scales; standardization, reliability, validity, sensitivity, and specificity of test materials.</p> <p>3.3. Informal assessment - pre-linguistic behavior, play, mother-child interaction.</p> <p>3.4. Language sampling: planning and collecting representative sample; strategies to collecting language sample, audio-video recording, transcription.</p> <p>3.5. Analysis of language sample: Specific to various components of language such as phonology, morphology, syntax, semantics, and pragmatics.</p> <p>3.6. Test materials for assessing language skills: Assessment of Language Development (ALD), 3D-Language Assessment Test, Linguistic Profile Test, Com-DEALL checklist, other Indian and global tests.</p> <p>3.7. Test materials used for children with developmental delay, intellectual disability: Madras Developmental Program Scale, Bayley's Scale for infant and toddler development.</p> <p>3.8. Test materials used for children with autism spectrum disorder: Modified-Checklist for Assessment of Autism in Toddlers, Childhood Autism Rating Scale, Indian Scale for Assessment of Autism.</p> <p>3.9. Other test materials used for children with ADHD, ACA, LD (NIMH battery for assessment of Learning Disability).</p> <p>3.10. Documenting assessment results: diagnostic report, summary report and referral report specific to disorder.</p> <p>3.11. Differential diagnosis of language disorders in children</p>	
UnitIV	<p><b>Management of Children with Language Disorders</b></p> <p>4.1 Approaches and techniques for management of language disorders in children – cognitive linguistic, behavioral, play therapy and Augmentative &amp; alternative communication approaches.</p> <p>4.2 Importance of team approach-Other approaches such as medical/surgical/Physiotherapy/ Occupational therapy</p> <p>4.3 Benefits, concessions and rights for children with language disorders</p>	

## Practicum

1. Record mother-child interaction of one typically developing child in the age range of 0-1, 1-2, 2-4, 4-6 and 6-8 years of age. Compare linguistically the out puts from the mother and the child across the age groups. Make inferences on socio cultural influences in these interactions.
2. Make a list of loan words in two familiar languages based on interaction with 10 typically developing children in the age range of 2-4, 4-6, 6-8 and 8- 10years.
3. Discuss the influence of bi- or multilingualism on vocabulary.
4. Record a conversation and narration sample from 3 children who are in preschool kindergarten, and primary school. Perform a language transcription and analyze for form, content, and use.
5. Administer 3D LAT, ALD, LPT, ComDEALL checklist on 2 typically developing children.
6. Draft a diagnostic report and referral letter for a child with language disorder.
7. Demonstrate general language stimulation techniques and discuss the clinical application.
8. Demonstrate specific language stimulation techniques with appropriate materials and discuss

its clinical applications.

9. Draft Subjective Objective Assessment Plan (SOAP) for a pre-recorded sample of a 45-minute session of intervention for a child with language disorder.
10. Draft a lesson plan for a child with language disorder.
11. Draft a discharge summary report for a child with language disorder.

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## **DSCT-6.4–Implantable Hearing Devices and Hearing Aid Fitting: 136BLP014**

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
<b>DSCT-6.4</b>	<b>Theory</b>	<b>03</b>	<b>03</b>	<b>42</b>	<b>2hrs.</b>	<b>40</b>	<b>60</b>	<b>100</b>

**Course Outcomes (COs):Attheend ofthecoursestudentswillbeableto:**

**CO1:**Select hearing aids based on preselection factors and appropriate tests.

**CO2:**Select different assistive listening devices.

**CO3:**Take ear impression and prepare the earmould.

**CO4:**Decide candidacy and select appropriate implantable device.

**CO5:**Troubleshooting hearing aids and counsel.

Unit	Title	42hrs. / semester
<b>Unit I</b>	<b>Hearing Aid Selection and Fitting</b> 1.1 Pre-selection factors 1.2 Selection and programming of linear and non-linear digital hearing aids using prescriptive and comparative procedures. 1.3 Verification using functional gain and insertion gain methods. 1.4 Use of impedance, OAEs and AEPs	
<b>Unit II</b>	<b>Hearing Aid Fitting in Different Population, Assistive Listening Devices and Outcome Measures</b> 2.1 Hearing aids for conductive hearing loss 2.2 Hearing aids for children 2.3 Hearing aids for elderly 2.4 Outcome measures of Hearing aid benefits 2.5 Assistive listening devices – types and selection	
<b>Unit III</b>	<b>Implantable Hearing Devices</b> 3.1 Middle ear implants Implantable hearing aids- Types components, Types, components, surgical approaches, risks, complications, candidacy, and contraindications 3.2 Implantable bone conduction devices-Types, components, surgical approaches, risks, complications, candidacy, and contraindications 3.3 Cochlear implants-Components, terminology, speech coding strategies, candidacy, contra- indications, advantages and complications, Mapping and issues related to CI. 3.4 Overview of Brainstem and Midbrain implants	
<b>Unit IV</b>	<b>Mechano-Acoustic Couplers, Counseling and Troubleshooting Types of earmoulds</b> 4.1 Various procedures of making different types of earmoulds. 4.2 Various modifications of ear moulds and its effect on acoustic characteristics 4.3 Counseling on care and Maintenance of earmoulds. 4.4 Counseling on care, maintenance and troubleshooting of hearing aids and implantable devices. 4.5 Troubleshooting of hearing devices.	

### **Practicum**

1. Administer a questionnaire to assess hearing aid benefit on 2 persons using hearing aids.



2. Carry out a role play activity of counseling a hearing aid user
3. EarMolds
  - Take impression for the ear mold using different techniques, different methods and using different materials.
  - Make hard mold for any 2 ears.
  - Make soft mold for any 2 ears.
  - Make vent in hard molds you made.
4. Watch videos of BAHA, middle ear implant, cochlear implant
5. Create hypothetical cases (at least 5 different cases) who are candidates for cochlear implantation. Make protocol for recording an EABR.
6. List down the technological differences across different models of cochlear implants from different companies, their cost
7. Observation of mapping
8. Watching of videos on AVT
9. Watch video on cochlear implant surgery

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## DSE-2A –Environmental Audiology: 136BLP021

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSE-2A	Theory	03	03	42	2hrs.	40	60	100

**Course Outcomes (COs): At the end of the course students will be able to:**

**CO1:** Explain the effects of noise on various systems in the body, with special reference to auditory system.

**CO2:** Select appropriate test/s and assess the effects of occupational noise.

**CO 3:** Independently assess various kinds of noise in the environment and its possible effects.

**CO 4:** Identify people at-risk of developing occupational hearing loss and plan effective hearing conservation program.

**CO 5:** Assess eligibility for compensation in individuals with NIHL.

Unit	Title	42 hrs./ semester
<b>Unit I</b>	<p><b>Overview, Types and Effects of Environmental Noise-14 Hrs</b></p> <p>1.1 Definition of noise, sources –community, industrial, music, traffic and others, types – steady and non-steady</p> <p>1.2 Effects of noise:</p> <ul style="list-style-type: none"> <li>• Auditory effects of noise exposure: Historical aspects, TTS, factors affecting TTS, recovery patterns, PTS, Histopathological changes, Effect on communication, SIL, AI, Noy, PNdB, PNL, EPNL, NC curves, NRR, SNR. Effects on central auditory processing.</li> <li>• Non-auditory effects of noise exposure: Physiological/somatic including vestibular effects, psychological responses, stress and health, sleep, audio- analgesia effects on CNS and other senses, effects on work efficiency and performance.</li> </ul>	
<b>Unit II</b>	<p><b>Audiological Evaluation of Individuals Exposed to Occupational Noise</b></p> <p>2.1 Case history</p> <p>2.2 Audiometry in NIHL Pure tone audiometry</p> <ul style="list-style-type: none"> <li>• Hearing screening</li> <li>• Baseline and periodic monitoring tests, brief tone audiometry, correction for presbycusis</li> <li>• Testing environment</li> <li>• Extended high frequency audiometry</li> <li>• Speech audiometry</li> <li>• Speech perception tests in quiet and in presence of noise</li> </ul> <p>2.3. Other audiological evaluations: immittance evaluation, AEP, OAE, Tests for susceptibility.</p>	
<b>Unit III</b>	<p><b>Noise and Vibration Measurements</b></p> <p>3.1 Instrumentation</p> <p>3.2 Procedure for indoor and outdoor measurement of ambient noise, noise survey, traffic noise, aircraft noise, community noise and industrial noise</p> <p>3.3 Factors affecting noise and vibration measurement.</p> <p>3.4 Reporting noise measurement including noise mapping.</p>	

	<ul style="list-style-type: none"> <li>• DRC – definition, historical aspects, use of TTS and PTS, information in establishing DRC.</li> <li>• CHABA, AFR 160-3, AAOO, damage risk contours, Walsh-Healey Act, OSHA, EPA, Indian noise standards for firecrackers</li> </ul> <p>3.5 Claims for hearing loss: Fletcher point-eight formula, AMA method, AAOO formula, California variation in laws, factors in claim evaluation, variations in laws and regulations, date of injury, evaluation of hearing loss, number of tests</p> <p>3.6 Indian acts/regulations.</p>	
<b>Unit IV</b>	<p><b>Hearing Conservation</b></p> <p>4.1 Need for hearing conservation program.</p> <p>4.2 Steps in hearing conservation program</p> <p>4.3 Noise control: Engineering and administrative controls</p> <p>4.4 Hearing protective device (HPDs)</p> <ul style="list-style-type: none"> <li>• Types: ear plugs, earmuffs, helmets, special hearing protectors, merits and demerits of each type</li> <li>• Properties of HPDs: attenuation, comfort, durability, stability, temperature, tolerance</li> <li>• Outcome measures and evaluation of attenuation characteristics of HPDs</li> </ul> <p>4.5 Noise conditioning/ Toughening</p>	

## References

1. Behar, A., Chasin M. & Cheesman, N. (2000). *Noise control: A primer*. California: Singular Publishing Group.
2. Chasin, M. (1996). *Musicians and prevention of hearing loss*. San Diego: Singular Publishing Group Inc.
3. Le prell, C.G., Henderson, D., Fay, R.R., & Popper, A.N. (2012). *Noise induced hearing loss*. London: Springer.
4. Crocker, J.M. (2007). *Handbook of Noise and Vibration Control*. New York: John Wiley and Sons.
5. Bies, D.A. & Hansen, C.H. (2009). *Engineering noise control theory and practice*. Ohio: CRC Press.

## **DSE-2B –Clinical Counselling: 136BLP022**

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
<b>DSE-2B</b>	<b>Theory</b>	<b>03</b>	<b>03</b>	<b>42</b>	<b>2hrs.</b>	<b>40</b>	<b>60</b>	<b>100</b>

**Course Outcomes (COs): At the end of the course students will be able to:**

**CO1:** Understand counsellor-client relationships in the context of training and rehabilitation of individuals with disorders in human communication.

**CO2:** Gain practical skills and competencies required for mastering basics of clinical counselling in their practice for identification and management of persons with communication disorders.

**CO 3:** Understand ethical aspects of clinical counselling when dealing with individuals or their families with communication disorders.

**CO 4:** Develop integrating counselling-based aspects in the field of research in communication disorders.

Unit	Title	42 hrs./ semester
<b>Unit I</b>	<b>Basics of Clinical Counselling</b> 1.1. Guidance and counselling. 1.2. Meaning 1.3. Nature & Scope of counselling. 1.4. Principles and goals of counselling. 1.5. Types and Techniques: Individual and Group counselling 1.6. Special focus on clinical counselling: <ul style="list-style-type: none"> <li>• Need and Applications of clinical counselling</li> <li>• Counselling across lifespan</li> <li>• Counselling across relationships</li> </ul>	
<b>Unit II</b>	<b>Professional Counselling</b> 2. Portrait of effective counselors <ul style="list-style-type: none"> <li>• Qualifications and qualities</li> <li>• Micro and macro skills and competencies</li> <li>• Expectations and limitations in professional counselling: Tips for improvement and Ethical issues</li> </ul>	
<b>Unit III</b>	<b>Clinical Counselling</b> 3.1. Stages in Clinical Counselling. 3.2. Principles in clinical practice: Directive and non-directive. 3.3. Approaches and tools for clinical counselling. 3.4. Do's and don'ts of clinical counselling. 3.5. Human rights, enablement and empowerment through counselling. 3.6. Alternate/holistic forms of counselling. 3.7. Scientific basis, cultural constraints and ethical issues in counselling.	
<b>Unit IV</b>	<b>Application of Counselling</b> 4.1. Outline of conditions requiring clinical counselling. 4.2. Organic brain syndromes. 4.3. Functional disorders. 4.4. Psychotic and neurotic disorders. 4.5. Disabilities & impairments: Personality & conduct disorders. 4.6. Special populations: HIV/AIDS, school dropouts, chronic or terminally ill	

## References

1. Anthony DiLollo, Robert A. Neimeyer (2022) Counseling in Speech-Language Pathology and Audiology: Reconstructing Personal Narratives. Plural publishing.
2. Katz, J (1978, 1985, 1994). Handbook of clinical audiology. 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup>Ed. Baltimore: Williams & Wilkins.

## Voc-2–Speech-Language Pathology and Audiology in Practice: 136BLP101

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
VOC-2	Theory	03	03	42hrs.	2hrs.	40	60	100

**Course Outcomes (COs): At the end of the course students will be able to:**

**CO1:**List and describe the highlights of legislations relating to speech and hearing disabilities.Incorporate ethical practices in professionalactivities.

**CO2:**Provide information on the facilities available for the speech and hearing disabled includingwelfare measures and policies ofgovernment.

**CO3:**Describe different strategies to create awareness of speech and hearing impairment andfacilities available to take care ofthem.

**CO4:**Familiarizing different clinical setups for the rehabilitation of speech and hearing disorders, withreference to their requirement, protocols and role and responsibility of theprofessionals.

**CO5:**Familiarizing terminology, technology and methods used in public education, clinical practice including tele practice andcamps.

**CO6:**And their application in speech and hearing servicedelivery.

Unit	Title	42 hrs. / semester
<b>Unit I</b>	<p><b>Introduction to the Speech –Language Pathology and Audiology in Practice</b></p> <p>1.1 Epidemiology of speech and hearing disorders</p> <p>1.2 Need for rehabilitation and steps involved inrehabilitation.</p> <p>1.3 ICD andICF</p> <p>1.4 Levels of prevention: Primary, secondary andtertiary</p> <p>1.5 National programs and efforts by the professionals including India intheprocess of rehabilitation.</p> <p>1.6 Organizing camps, screening (need, purpose, planning, organizing, and conducting including providing remedial measures to theneedy)</p> <p>1.7 Public education and information (media, radio broadcasts, streetplays)</p> <p>1.8 Functions of speech &amp; hearing centers in differentset-ups</p> <p>1.9 Private practice, evidence-basedpractice, Government organizations,NGOs</p> <p>1.10 Role of itinerant speech therapist, anganwadis, resource teachersetc.</p> <p>1.11 Community based rehabilitation and other methods of integration ofthe disabled in thesociety.</p>	
<b>Unit II</b>	<p><b>Public Laws Related to Disability</b></p> <p>2.1 Scope of practice in speech and hearing (National &amp; Internationalbodies)</p> <p>2.2 Professionaethics</p> <p>2.3 Rehabilitation Council of India and Disability related acts inIndia</p> <p>2.4 Consumer protection Act and other publiclaws.</p> <p>2.5 Disability related Acts pertaining to Education and welfare of persons withdisability in internationalperspective-UNCRPD.</p> <p>2.6 Welfare measures available for persons with speech language and hearing disability</p> <p>2.7 Certification of persons with speech language and hearingdisability</p> <p>2.8 Concept of barrier free access and universal design relating to individuals with speech and hearingimpairment</p>	

<b>Unit III</b>	<b>Organization and Administration of Speech-Language and Hearing Centers and Public Education</b> 3.1 Setting up a speech-language and hearing center. 3.2 Organization of space, time, personnel, and audiometric rooms. 3.3 Budgeting and, financial management 3.4 Purchase formalities 3.5 Recruiting personnel – rules and salary 3.6 Leave rules and other benefits for professionals and personnel 3.7 Documents and record keeping – different types. 3.8 Public education methods 3.9 Organizing workshops, seminars, and conferences.	
<b>Unit IV</b>	<b>Scope and Practice of Tele-Assessment &amp; -Rehabilitation</b> 4.1 Introduction to tele-health: definition, history of tele-health 4.2 Terminologies-tele-health, tele medicine, telepractice 4.3 Connectivity: internet, satellite, mobile data 4.4 Methods of tele-practice-store and forward and real time 4.5 Ethics and Regulations for telepractice 4.6 Requirements/Technology for tele- practice: Web based platforms, Video conferencing, infrastructure. 4.7 Manpower at remote end and speech-language pathologist/audiologist end, training assistants for tele-practice 4.8 Audiological screening using tele-technology: newborn hearing screening, school screening, community screening, counselling. 4.9 Diagnostic services using tele-technology: video otoscopy, pure tone audiometry, speech audiometry, otoacoustic emission, tympanometry, auditory brainstem response.	

### Practicum

1. Attend camps, seminars, workshops, conferences, school screening, community-based screening.
2. Undertake the activities such as ‘Dangerous decibel’ program ([www.dangerousdecibels.org](http://www.dangerousdecibels.org))
3. Visit a speech pathologist/audiologist in different practice settings and provide a report.
4. Administer ICF protocols for patients with different disorders.
5. Explore websites of various institutions, hearing aid companies, NGOs working with disabled and describe the accessibility features and information provided.
6. Develop one pamphlet/poster/ in local language that would address some aspect of speech and hearing practice.
7. Perform accessibility ability of your institute/center and prepare a report.

### References

1. Audiology Telepractice; Editor in Chief, Catherine V. Palmer, Ph.D.; Guest Editor, Greg D. Givens, Ph.D. Seminars in Hearing, volume 26, number 1, 2005.
2. Bergland, B., Lindwall, T., Schwela, D.H., eds (1999). Guidelines on Community Noise <http://www.who.int/docstore/peh/noise/guidelines2.html> WHO 1999
3. BIS specifications relating to Noise Measurements.- IS:7194-1973 Specification for assessment of noise exposure during work for hearing conservation purposes.
4. Census of India information on disability
5. Dobie, R. A (2001). Medical legal evaluation of hearing loss, 2nd Ed. Hearing health and strategies for prevention of hearing impairment WHO (2001).



6. International classification of Functioning, Disability and Health. Geneva: WHO
7. <http://www.asha.org/Practice-Portal/Professional-Issues/Audiology-Assistants/Teleaudiology-Clinical-Assistants/>
8. <http://www.asha.org/uploadedFiles/ModRegTelepractice.pdf>
9. IS:10399-1982 Methods for measurement of noise emitted by Stationary vehicles
10. IS:6229-1980 Method for measurement of real-ear
11. IS:9167-1979 Specification for ear protectors.
12. IS:9876-1981 Guide to the measurement of airborne acoustical noise and evaluation of its effects on man- IS:7970-1981 Specification for sound level meters.
13. IS:9989-1981 Assessment of noise with respect to community response.
14. John Ribera. Tele-Audiology in the United States. In Clinical Technologies: Concepts, Methodologies, Tools and Applications (pp. 693-702), 2011. Hershey, PA: Medical Information Science Reference. doi:10.4018/978-1-60960-561-2.ch305

## DSCP-6.1 –Clinical (Speech-Language Pathology): 136BLP015

Type of Course	Theory / Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
<b>DSCP-6.1</b>	<b>Practical</b>	<b>03</b>	<b>06</b>	<b>84</b>	<b>4hrs.</b>	<b>50</b>	<b>50</b>	<b>100</b>

### **Course Outcomes (COs): At the end of the course students will be able to:**

**CO1:** know (concepts), know how (ability to apply), show (demonstrate in a clinical diary/logbook based on clinical reports/recordings, etc.), and do (perform on patients/ client contacts) the following.

#### **Know:**

1. Procedures to assess motor speech disorders in adults.
2. Differential diagnosis of motor speech disorders in adults.
3. Procedures to assess individuals with adult language disorders, and other related abnormalities.

#### **Know-how:**

1. To administer at least two standard tests for adult language disorders.
2. To administer at least two standard tests/protocols for motor speech disorders in adults.
3. To record a sample for analysis of language and speech skills in adults with neurocommunication disorders.
4. To assess posture, breathing, speech and swallowing in adults with motor speech disorders.
5. To consult with inter-disciplinary medical/rehabilitation team and counsel the individual/family regarding management options and prognosis.
6. To administer at least two more (in addition to earlier semester) standard tests for childhood language disorders.
7. Counselling for children with speech-language disorders.

#### **Show:**

1. Language assessment - minimum of 2 individuals after stroke.
2. Associated problems in individuals after stroke and its evaluation.
3. Dysphagia assessment – minimum of 2 children & adults.
4. Goals and activities for therapy (including AAC) based on assessment/test results for adults with neuro-communication disorders.
5. Pre-therapy assessment and lesson plan for children with speech and language - minimum of 2 children each.

#### **Do:**

1. Bed side evaluation of individuals with neuro-communication disorders – Minimum of 2 individuals.
2. Apply speech language stimulation/therapy techniques on 5 children with language disorders/speech sound disorders/motor speech disorders – minimum 5 sessions of therapy for each child.
3. Case history - minimum of 2 children with speech and language disorders.

### **DSCP-6.2–Clinical (Audiology): 136BLP016**

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
<b>DSCP-6.2</b>	<b>Practical</b>	<b>03</b>	<b>06</b>	<b>84</b>	<b>4 hrs.</b>	<b>50</b>	<b>50</b>	<b>100</b>

#### **General considerations:**

- Exposure is primarily aimed to be linked to the theory courses covered in the semester, however, not just limited to these areas.
- After completion of clinical postings in auditory diagnostics and auditory rehabilitation, the student will Know (concept), know how (ability to apply), show (demonstrate in a clinical diary/log book), and do (perform on patients/ client contacts) the following:

#### **Know:**

1. National and international standards related to noise exposure.
2. Recommend appropriate treatment options such as speech reading, AVT, combined approaches etc.

#### **Know-how:**

1. To carry out noise survey in Industry and community.
2. To carry out mapping of cochlear implant in infants and children using both objective and subjective procedures.
3. To trouble shoot cochlear implant.

#### **Show:**

1. Analysis of objective responses like compound action potential, stapedial reflexes on at least 3 samples.
2. Comprehensive hearing conservation program for at least 1 situation.

#### **Do:**

1. AVT on at least 1 child with hearing impairment
2. Trouble shooting and fine tuning of hearing aids on at least 5 geriatric clients.
3. At least one activity for different stages involved in auditory training.

**Scheme of Practical Examination (distribution of marks): 25 marks for Semester end examination**

**3. Practicum – 10 Marks**

**4. Viva- 15 Marks**

**Total 25 marks**

**Note: Same Scheme may be used for IA (Formative Assessment) examination**

**Details of Formative assessment (IA) for DSCC theory/OEC: 40% weight age for total marks**

Type of Assessment	Weight age	Duration	Commencement
Written test 1	15%	1 hr.	8 <sup>th</sup> Week
Written test 2	15%	1 hr.	12 <sup>th</sup> Week
Case study / Assignment / Field work / Project work/ Activity	10%	-----	--
Total	40% of the maximum marks allotted for the paper		

**GENERAL PATTERN OF THEORY QUESTION PAPER FOR DSCC/ OEC  
(60 marks for semester end Examination with 2 hrs. duration)**

**Part-A**

4. Question number 1-06 carries 2 marks each. Answer any 05 questions :10marks.

**Part-B**

5. Question number 07- 11 carries 05 Marks each. Answer any 04 questions : 20 marks.

**Part-C**

6. Question number 12-15 carries 10 Marks each. Answer any 03 questions : 30 marks.

(Minimum 1 question from each unit and 10 marks question may have sub questions for 7+3 or 6+4 or 5+5 if necessary)

**Total: 60 Marks**

**Note: Proportionate weightage shall be given to each unit based on the number of hours prescribed.**

