



SHRI
DHARMASTHALA
MANJUNATHESHWARA
UNIVERSITY

• **ORDINANCE GOVERNING**
• **BACHELOR IN AUDIOLOGY**
• **AND SPEECH-LANGUAGE**
• **PATHOLOGY (B. ASLP)**
• **CURRICULUM 2025-26**
• **Revised Scheme (RS-1)**

|| Om Shree Manjunathaya Namaha ||



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Shri Dharmasthala Manjunatheshwara University

(A State Private University established under the Shri Dharmasthala Manjunatheshwara University

Act No 19 of 2018 of Government of Karnataka and Notification No. ED 261 URC 2018 dated 19th December 2018)

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**SHRI
DHARMASTHALA
MANJUNATHESHWARA
UNIVERSITY**

THE LOGO

Poojya Dr D. Veerendra Heggade, Hon'ble Chancellor of the University, while searching for an appropriate Logo for the University, saw a photograph picked from Temple Architecture showing Wings of a Bird, sculpted in Indian style and wanted it to be incorporated in the logo for the University, as the Wings symbolize 'Spreading of Knowledge beyond Boundaries'. Further it was felt that the Central theme of the logo should be 'Rudra' (The Linga) with wings on each side. In this way, the logo of the University was conceptualized.

Hence:

1. The central part represents Rudra who Demolishes Darkness.
2. The Three horizontal lines on The Linga stand for Samyak Darshan (Right Belief), Samyak Gyan (Right Knowledge) and Samyak Charitra (Right Conduct).
3. The Wings symbolize spreading of Knowledge across the boundaries.
4. Base line "Truth Liberates" highlights the Purpose of Education: to liberate oneself unconditionally. It shows that it is not discipline, nor knowledge nor the efforts to freedom that liberate but Truth is what liberates you from all your conditioning and ignorance.

The overall significance of Shri Dharmasthala Manjunatheshwara University's Logo is:

Darkness of ignorance is destroyed by the flow of knowledge to bring Liberty to everyone, by realizing the truth. And, it should spread globally without the boundaries as hindrance.



**SHRI
DHARMASTHALA
MANJUNATHESHWARA
UNIVERSITY**

VISION

Shri Dharmasthala Manjunatheshwara University will set the highest standards of teaching and learning, awakening the intelligence of the students and nurturing the creativity hidden in them by creating an environment where the ancient wisdom blends with modern science, to transform them into whole human beings to face the challenges.

MISSION

- To ensure that the journey of education is inspiring, pleasant and enjoyable.
- Attract the best of teachers and students.
- Achieve high principles of trust, love and spirituality in the students.
- Create a collaborative, diverse and exclusive community.
- Transform the student of today to be a leader of tomorrow and a better human being.
- Produce passionate teachers.
- Evolve innovative teaching techniques.
- Create a peaceful environment.
- Prepare the student to face the social challenges.
- Create a University of which the Nation is proud of.
- Be an effective partner in Nation Building.
- Create an Eco-friendly University.
- Create a University based on the principles of beauty, love and justice.

|| Om Shanti! Om Shanti! Om Shanti ||



SDMU/ACD/ALLIED/Notif-449/681/2025

Date: 23.08.2025

NOTIFICATION

Ordinance Governing the Revised Scheme 1 (RS1) of the Curriculum for Bachelor in Audiology and Speech Language Pathology (B. ASLP)

- Ref:
1. Minutes of the 11th Meeting of Academic Council held on 20th June 2025
 2. Norms, Regulations & Curriculum Framework of Bachelor in Audiology and Speech Language Pathology (B.ASLP), Rehabilitation Council of India 2024-25

In exercise of the powers conferred under Statutes 1.4 (Powers and functions - Para x & xvi), of Shri Dharmasthala Manjunatheshwara University, the approval of the Academic Council is hereby accorded for the **Ordinance Governing the Revised Scheme 1 (RS1) of the curriculum for Bachelor in Audiology and Speech Language Pathology (B. ASLP) program**, with effect from the academic year 2025-26.



REGISTRAR
REGISTRAR

Shri Dharmasthala Manjunatheshwara
University, Dharwad

To: The Principal, SDM College of Medical Sciences & Hospital

Copy for kind information to:

1. Hon'ble Chancellor, Shri Dharmasthala Manjunatheshwara University, Dharwad
2. Vice Chancellor - Shri Dharmasthala Manjunatheshwara University.
3. Pro Vice-Chancellor - Shri Dharmasthala Manjunatheshwara University.
4. Controller of Examinations, Shri Dharmasthala Manjunatheshwara University.
5. Chairperson, Board of Studies - Allied Health Sciences
6. University Records



**BACHELOR IN AUDIOLOGY AND
SPEECH-LANGUAGE PATHOLOGY (B.ASLP)**

Effective from Academic year 2025-26

Choice-Based CREDIT SYSTEM (CBCS)

**DEPARTMENT OF SPEECH AND HEARING
SDM COLLEGE OF MEDICAL SCIENCES AND HOSPITAL, DHARWAD**

*Adapted from the Rehabilitation Council of India
(A statutory body under the Ministry of Social Justice and Empowerment,
Government of India, New Delhi)

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BACHELOR IN AUDIOLOGY AND SPEECH-LANGUAGE PATHOLOGY (B.ASLP)

Choice-Based CREDIT SYSTEM (CBCS)

PART I:

NOMENCLATURE

According to the 2014 UGC notification, the official title of the program is “Bachelor in Audiology and Speech-Language Pathology”, abbreviated as B.ASLP.

PREAMBLE

The Rehabilitation Council of India (RCI), the apex body entrusted with the responsibility of maintaining standards in the training of rehabilitation personnel and professionals in India, periodically undertakes revision of the curriculum of its training programs. There was a sense of urgency in this year’s proposal for revision because the components of the New Education Policy 2020 – the flagship program of the Government of India – had to be incorporated. The present revision has included many salient features of the NEP 2020, namely, major–minor subjects dimension, choice of subjects across multidisciplinary fields of study, ratio of theory to clinical/practical subjects, and the credits system, to name a few. The present revision has also considered and included aspects of the National Credit Framework 2023, of the UGC. The prospective students have to log in a minimum of 160 credits, spread over major, minor, and clinical subjects, for a Bachelor’s degree.

Other highlights of the present revision:

- a) The guidelines recommended by the National Medical Commission under Graduate Medical Education Regulations 2023 to define the profile of the trained graduates in the field have been adopted. The program objectives have been tuned to reflect this.
- b) The recommendations under the Rights of Persons with Disabilities Act, 2016, to decide on the eligibility of Divyangjan to the training programs in speech and hearing, have been adopted. The curriculum makes a provision for the constitution of an expert committee to ensure that the Divyangjan are considered for admission without any prejudice.

PART II:

INTRODUCTION

Audiologists play a significant role in managing individuals with hearing and balance disorders, including diagnosis, hearing aid fitting, cochlear implantation and auditory rehabilitation. Speech-Language Pathologist contributes to the assessment and treatment of speech, language, and swallowing disorders across age groups, supporting communication development and rehabilitation in clinical and community settings.

AIM

To prepare students to attain high standards of academic, personal, and professional excellence, enabling them to become competent Audiologists and Speech-Language Pathologists (ASLPs) who can effectively serve diverse patient needs and adapt to dynamic healthcare and social service systems.

OBJECTIVE

To develop competent professionals with foundational knowledge and clinical skills to assess, manage, and rehabilitate speech, language, swallowing, and hearing disorders, to promote early intervention, collaborate across disciplines, raise public awareness, and advocate for individuals with communication challenges across diverse settings.

PROGRAM OUTCOMES (PO):

At the end of the B. ASLP program, the graduate will:

- P01** Demonstrate comprehensive knowledge and skill to support patient care
- P02** Demonstrate competent technical skills to support patient care
- P03** Demonstrate critical thinking and problem-solving skills
- P04** Practice good hospital infection control, safety, biomedical waste disposal and other health care system protocols
- P05** Collaboratively work in a healthcare team, exhibiting good leadership and management qualities
- P06** Exhibit effective communication skills and social responsibilities towards preventive and rehabilitative healthcare services
- P07** Exhibit professional and ethical attributes
- P08** Develop the attitude of being a researcher and lifelong learner

Description of the Program Outcomes:

- P01 Demonstrate comprehensive knowledge and skill to support patient care:** Graduates will possess comprehensive knowledge and skills of basic and clinical sciences to organise, apply, and implement the prescribed investigative and management plans to support effective patient care.
- P02 Demonstrate competent technical skills to support patient care:** Graduates will possess appropriate technical skills to perform basic procedures, handle and maintain various equipment appropriately in patient care.
- P03 Demonstrate critical thinking and problem-solving skills:** Graduates will utilize basic science knowledge, acquire critical thinking and problem-solving skills to assess patient conditions, recognize various emergencies/complications, follow management protocols, and effectively document and maintain the medical records.
- P04 Practice good hospital infection control, safety, biomedical waste disposal and other health care system protocols:** Graduates will adhere to policies and regulations of healthcare system and follow infection control, safety and biomedical waste disposal practices to improve patient outcomes.

- P05 Collaboratively work in a healthcare team, exhibiting good leadership and management qualities:** Graduate will collaboratively work with other healthcare professionals to provide holistic patient care. Graduate shall possess the ability to identify priorities and effectively manage resources/ medical supplies to ensure the maintenance and enhancement of the quality of care adhering to the policies of healthcare system.
- P06 Exhibit effective communication skills and social responsibilities towards preventive and rehabilitative healthcare services:** Graduate will effectively communicate with patients, caregivers, healthcare professionals and other members of the community to support ideal psycho-social health of patients at individual and community levels considering cultural, economic and environmental factors.
- P07 Exhibit professional and ethical attributes:** Graduate will exhibit professional qualities demonstrating high standards of morality, integrity, commitment and adhere to professional and medical ethics in holistic patient care.
- P08 Develop the attitude of being a researcher and lifelong learner:** Graduate will be committed to continuous improvement in knowledge and skills by appraising scientific literature while harnessing modern tools and technology.

PROGRAM-SPECIFIC OUTCOMES OF THE B. ASLP PROGRAM (PSO)

Graduate attributes (PSOs) of the B. ASLP program:

PS01: Function as audiologists and speech-language pathologists in different work settings.

PS02: Understand concepts relating to speech, language, communication, hearing and disability.

PS03: Screen, evaluate, diagnose and assess the severity of different disorders related to speech, language, swallowing, hearing and hearing-related vestibular disorders.

PS04: Manage speech, language, swallowing, hearing and hearing-related vestibular disorders across the life span.

PS05: Counsel persons with disorders of communication, and their family members

PS06: Rehabilitate persons with speech, language, swallowing, hearing and hearing-related vestibular disorders.

PS07: Implement programs for public on awareness and prevention of speech, language, swallowing, hearing and hearing-related vestibular disorders.

PS08: Liaise with professionals in allied fields, administrators, policymakers and other stakeholders on issues related to communication disorders, and

PS09: Undertake advocacy measures on behalf of, and for persons with speech, language and hearing disorders.

DEFINITION OF KEY WORDS

- i. **Letter Grade:** It is an index of the performance of students in a given course. Grades are denoted by letters A, B, C, P and F.
- ii. **Grade Point:** It is a numerical weightage allotted to each letter grade on a 10-point scale.
- iii. **Credit:** A unit by which the coursework is measured. It determines the number of hours of instruction required per week over the duration of a semester (minimum 15 weeks). Examples - One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week (i.e., 6 working days per week).
- iv. **Credit Point:** It is the product of grade point and number of credits for a course.
- v. **Semester Grade Point Average (SGPA):** It is a measure of the academic performance of student/s in a semester. It is the ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.
- vi. **Cumulative Grade Point Average (CGPA):** It is a measure of the overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points earned by a student in various courses in all semesters and the sum of the total credits of all courses in all semesters. It is expressed up to two decimal places.
- vii. In the CGPA system, program means a degree and a course means audiology and speech-language pathology.
- viii. **DSC: Discipline-specific core course**, which should compulsorily be studied by a candidate.
- ix. **AECC: Ability enhancement compulsory course** based upon the content that leads to knowledge enhancement.
- x. **AEC:** Ability Enhancement Course will also include the minor optional subjects offered as an open elective to be chosen from the options suggested by the Rehabilitation Council of India (Annexure 1).
- xi. **SEC: Skill enhancement courses** are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.
- xii. **VAC: Value Added Course** – additional educational offerings designed to enhance the skills, knowledge, and overall profile of students beyond their regular curriculum.

PART III - GENERAL GUIDELINES

1. NAME OF THE COURSE: BACHELOR IN AUDIOLOGY AND SPEECH-LANGUAGE PATHOLOGY (B. ASLP)

2. SCHEME: CHOICE-BASED CREDIT SYSTEM(CBCS)

3. MODE OF STUDY: Full-time Semester program

4. DURATION OF THE COURSE: 4 (Four) years (08-Eight Semesters)

3 (Three) years of coursework (6 semesters) + 01 (One) year of Internship

5. MEDIUM OF INSTRUCTION: English

6. INTAKE: As per the Rehabilitation Council of India (RCI) approval.

7. ELIGIBILITY FOR ADMISSION:

- i. The Candidates applying for the B. ASLP program should have passed 10+2 or an equivalent examination from a recognized Board with a minimum of 50% aggregate marks. Relaxation in the qualifying marks shall be as per the rules and regulations of the Shri Dharmasthala Manjunatheshwara University/ State or Central government.
- ii. The applicant/candidate should have studied Physics, Chemistry, and one of the following subjects: Biology / Mathematics / Computer Science / Statistics / Electronics / Psychology.
- iii. The upper age limit for admission will be as per the Shri Dharmasthala Manjunatheshwara University guidelines.
- iv. The eligibility of persons with disability shall be assessed by a committee constituted by the Principal, an expert in speech-language pathology, audiology, clinical psychology, pediatrics, and otolaryngology, among others.
- v. In general, admission of students under "Disability Category" for the B. ASLP program shall be governed by the same guidelines (No. U. 14021-8-2023-UGMEB / Dated the 12th June 2023) issued by the National Medical Commission for admission of students under "Disability Category" to the MBBS program.
- vi. Foreign applicants shall obtain an equivalency certificate from the Association of Indian Universities.
- vii. Selection of the candidates and admission process will be as per the Government of Karnataka and Shri Dharmasthala Manjunatheshwara University rules and regulations.

viii. There will be no provision for any lateral entry to the B. ASLP program.

8. PROGRAM STRUCTURE AND CREDIT DISTRIBUTION

Time structure of each semester:

- Months / Semester = 06 Months
- Study holidays + Examination = 08 weeks in each semester
- Study duration in each semester = 15 weeks (minimum)
- Days per Week / Semester = 06 Days / 90 Days
- Hours per Day / Semester = 07 Hours / 630 Hours

Each semester shall have a minimum of 20 weeks duration, during which a minimum of 15 weeks shall be available for the conduct of academics, excluding sessional exams, study leave, University exams, semester break, declared holidays & non-academic events.

Credits are distributed as below:

Lectures (L)	: 1 Hr /week = 1 credit
Tutorial (T)	: 1 Hr /week = 1 credit
Practical (P)	: 2 Hrs/week = 1 credit
Clinical postings (CL)	: 3 Hrs/week = 1 credit

9. DISTRIBUTION OF TEACHING HOURS AND CREDITS

SEMESTER I: Total credits – 28 / Total Hours - 630

Course code	Course Type	Course Title	Lecture		Practical		Tutorial		Clinicals	
			Credits	Hours	Credits	Hours	Credits	Hours	Credits	Hours
B 1.1 M	DSC 1 (Theory)	Introduction to Speech-Language Pathology	3	45	-	-	1	15	-	-
B 1.2 M	DSC 2 (Theory)	Introduction to Audiology	3	45	-	-	1	15	-	-
B 1.3 MC	AECC 1 (Theory)	Anatomy & Physiology of Speech & Swallowing	2	30	-	-	1	15	-	-
B 1.4 MC	AECC 2 (Theory)	Anatomy & Physiology of Hearing	2	30	-	-	1	15	-	-
B 1.5 M	SEC 1 (Practical)	Practicals in Speech-Language Pathology /Viva Voce	-	-	1	30	-	-	3	135
B 1.6 M	SEC 2 (Practical)	Practicals in Audiology /Viva Voce	-	-	1	30	-	-	3	135
B 1.7 MO 1	AEC 1 (Theory)	Choose from AEC list (Annexure 1)	1	15	-	-	1	15	-	-
B 1.8	AEC 2 (Theory)	English & Communication	2	30	-	-	-	-	-	-
B 1.9	VAC1 (Theory)	Environmental Science (EVS) and Indian Constitution	2	30	-	-	-	-	-	-
		Total	15	225	2	60	5	75	6	270

SEMESTER II: Total credits – 29 / Total Hours - 675

Course Code	Course Type	Course Title	Theory		Practical		Tutorial		Clinicals	
			Credits	Hours	Credits	Hours	Credits	Hours	Credits	Hours
B 2.1 M	DSC 3 (Theory)	Fluency and Its Disorders	3	45	-	-	1	15	-	-
B 2.2 M	DSC 4 (Theory)	Diagnostic Audiology-Basic	3	45	-	-	1	15	-	-
B 2.3 MC	AECC 3 (Theory)	Linguistics and Phonetics	2	30	-	-	1	15	-	-
B 2.4 MC	AECC 4 (Theory)	Otolaryngology	2	30	-	-	1	15	-	-
B 2.5 MO2	AEC 3 (Theory)	Choose from AEC list (Annexure 1)	1	15	-	-	1	15	-	-
B 2.6 M	SEC 3 (Practical)	Clinicals in Speech-Language Pathology /Viva Voce	-	-	2	60			3	135
B 2.7 M	SEC 4 (Practical)	Clinicals in Audiology /Viva Voce	-	-	2	60			3	135
B 2.8	VAC 2 (Theory)	Sociology	3	45	-	-	-	-	-	-
		Total	14	210	4	120	5	75	6	270

Course Types:

- a) DSC: Discipline Specific Core Course
- b) AEC: Ability Enhancement Courses
- c) AECC: Ability Enhancement Compulsory Course
- d) SEC: Skill Enhancement Course
- e) VAC: Value Added Course

10. ATTENDANCE

- Minimum attendance shall be as stipulated by the Shri Dharmasthala Manjunatheshwara University. Attendance shall not be less than 80% in theory and 90% in Clinicals/Practicals in each semester to be eligible to appear for the examination at the end of each semester. The 20% and 10% leverage is inclusive of medical, personal, and miscellaneous leaves.
- Students who fail to have a minimum of 90% attendance in clinicals/practicals in each semester will have to carry out compensation until the criteria are met.
- Candidates have to fulfill the required attendance criteria to be eligible for University exams.
- Condonation of shortage of attendance in genuine cases shall be subject to approval from the Vice-Chancellor of Shri Dharmasthala Manjunatheshwara University.

11. SCHEME OF EXAMINATIONS:

i. Internal assessment components (IAC):

IAC for all discipline-specific core (DSC) subjects shall be computed on the basis of a continuous evaluation of the student in mid-semester exam, class participation, assignments, and seminars. The department's core faculty will carry out all internal assessments (Viva). Clinical viva and case-based assessment will be carried out at the end of each semester and will be the basis for awarding the marks.

Theory IA components			Clinicals/Practical IA components		
1	Mid semester exam (01)	50 marks	1	Mid semester exam (01)	50 marks
2	Class test	25 marks	2	Skill acquisition (day to day assessment by direct observation)	30 marks
3	Assignment/Seminars	25 marks	3	Logbooks/Practical record book	20 marks
	Total	100 marks		Total	100 marks
	It shall be reduced to 30 marks			It shall be reduced to 10 marks in the odd semesters (1, 3, 5) and 50 marks for even semester (2, 4, 6)	

Internal assessment for Ability enhancement courses (AEC) and Value-added courses (VAC) shall be considered in the form of assignments or regular assessments for 10 marks. Students must score at least 50% in the internal assessment to be allowed to appear for the end-semester exam for that course/subject. Semesters 7 and 8 will not have any internal assessment component.

ii. End Semester University Examinations (ESE):

- The University shall conduct examination for the core subjects at the end of each semester. The candidates, who satisfy the requirement of attendance and internal assessment, shall be eligible to appear for the University examination. The head of the institution shall verify the same before forwarding the applications to the University within stipulated time along with the prescribed fee.
- All the odd semester University regular exams will be conducted in January. All the even semester regular exams will be conducted in July. However, the exact month of exam will depend on the date of admission of the student and completion of 20 weeks of academic training from the date of admission.

ESE - Theory

Question paper pattern: 70 marks / 3 Hours

- | | | |
|------|---|----------------------------|
| I. | Long Essay Questions (Answer 2 out of 3) | : 02 x 10 marks = 20 marks |
| II. | Short Essay Questions (Answer 6 out of 8) | : 06 x 05 marks = 30 marks |
| III. | Short Answer Questions (Answer all 10) | : 10 x 02 marks = 20 marks |

Total = 70 marks

ESE - Practical/Clinical

The end-semester practical/clinical exam will be held during the even semesters (2, 4, 6) for a total of 100 marks, which includes 50 marks for practical/clinical work and 50 marks for the external viva-voce.

The external practical/clinical exam and viva-voce will be conducted by one internal and one external examiner. The marks will be equally distributed between the internal and external examiners.

During semester 8, the practical/clinical exam and viva-voce will be conducted for 100 marks (50 by internal examiner + 50 by external examiner).

Study holidays - 6 days holiday shall be given for exam preparations before end semester examination.

iii. Non-University examinations (NUE):

Examination for Value Added Courses, Languages, Allied subjects, Skill enhancement and Elective subjects shall be conducted by the college/department and the marks obtained shall be submitted to the University along with the IA marks of the core subjects at least 15 days before the commencement of the University examination. The marks of non- core subjects shall be incorporated in the marks card issued by the University.

• NUE - Theory:

Question paper pattern: 40 marks / 2 Hours

- | | | |
|-----|--|--------------------------|
| I. | Long Essay Questions (Answer 1 out of 2): | 01 x 10 marks = 10 marks |
| II. | Short Essay Questions (Answer 6 out of 8): | 06 x 05 marks = 30 marks |

Total = 40 marks

- **NUE – Clinicals/Practical:**

It shall be conducted in the form of assignments, bedside discussion, viva, or case presentation based on the clinical postings.

In odd semesters (1, 3, 5) the practical/clinical exam will be an NUE conducted by core faculty for 50 marks, including 10 marks from internal assessment.

However, during semester 7, the practical/clinical exam will be conducted for 100 marks by the core faculty of the department.

iv. Resit Examination (RE):

A resit examination shall be conducted every six months along with the End semester examination (ESE) of the next semester to clear the subjects in which the student has secured 'F' grade. The students who are absent in the main examination **he/she will be appearing under the term as the "SUPPLEMENTARY" examination.**

12. MARKS DISTRIBUTION

Semester I

Course code	Course Type	Course Title	IAC	ESE	NUE	Total	Credit
B 1.1 M	DSC (T)	Introduction to Speech-Language Pathology	30	70	-	100	4
B 1.2 M	DSC (T)	Introduction to Audiology	30	70	-	100	4
B 1.3 MC	AECC (T)	Anatomy & Physiology of Speech & Swallowing	30	70	-	100	3
B 1.4 MC	AECC (T)	Anatomy & Physiology of Hearing	30	70	-	100	3
B 1.5 M	SEC (P)	Practicals in Speech-Language Pathology /Viva Voce	10	-	40	50	4
B 1.6 M	SEC (P)	Practicals in Audiology /Viva Voce	10		40	50	4
B 1.7 MO 1	AEC (T)	Open Elective – Choose from Annexure 1	10	-	40	50	2
B 1.8	AEC (T)	English & Communication	10		40	50	2
B 1.9	VAC (T)	Environmental Science (EVS) and Indian Constitution	10		40	50	2
			170	280	200	650	28

Semester II

Course code	Course Type	Course Title	IAC	ESE	NUE	Total	Credit
B 2.1 M	DSC (T)	Fluency and Its Disorders	30	70	-	100	4
B 2.2 M	DSC (T)	Diagnostic Audiology-Basic	30	70	-	100	4
B 2.3 MC	AECC (T)	Linguistics and Phonetics	30	70	-	100	3
B 2.4 MC	AECC (T)	Otolaryngology	30	70	-	100	3
B 2.5 MO2	AEC (T)	Open Elective – Choose from Annexure 1	10		40	50	2
B 2.6 M	SEC (P)	Clinicals in Speech-Language Pathology /Viva Voce	50	50	-	100	5
B 2.7 M	SEC (P)	Clinicals in Audiology /Viva Voce	50	50	-	100	5
B 2.8	VAC (T)	Sociology	10		40	50	3
			240	380	80	700	29

13. EXAMINERS

- i. **Appointment of Examiners:** Examiners shall be appointed by the University to conduct the end semester University practical examinations, from the panel of examiners approved by the Board of Studies/Board of appointment of examiners. For Practical examinations, there shall be one external examiner and one internal examiner. Theory paper shall be valued by both the examiners.

- ii. **Qualification and Experience of Examiners:** (Internal and External examiner)

Post graduation MSc in the respective field with two years of teaching experience. Relaxation can be done in case of non-availability of examiners and with the approval of Board of Appointment of Examiners.

Post MD/MS/PhD – can be appointed as examiners after completion of their MD/MS/PhD

14. INTERNAL ASSESSMENT CRITERIA

- i. Candidates should score a minimum of 'C' grade (50%) separately in Theory and Practical IAC for all the discipline specific core subjects to be eligible to appear for End semester university examination
- ii. If a candidate is absent for any of the IA examinations due to genuine reasons, such a candidate may be given a re-examination, within a fortnight. This will be with the approval of Principal for each individual candidate.
- iii. IAC will be included in the Theory and Practical components of End semester university exams for declaration of results. Student should get a minimum of 50% marks including ESE and IAC (Grade C) in Theory and Practical separately to be declared as PASS in that subject.
- iv. Remedial/Improvement examination (Theory and practical separately)
 - a. Remedial exam will be conducted for mid semester exam component of IAC only for those candidates who have failed to secure minimum of "C" grade (50%) in IAC for a course (either in Theory or practical IAC). It will be conducted before the ESE and also before the Resit examination.
 - b. An improvement exam will be conducted for candidates who have failed in the resit examination. They can attend the mid-semester exam of the subsequent batch if they wish to improve their mid-semester exam marks.
 - c. Candidate has to pay the exam fee for the improvement exam as prescribed by the Institute/University.
 - d. The marks obtained in other components of IAC may be carried forward without reassessment.

15. EVALUATION AND GRADING

- i. The final evaluation and grading for each course shall be based on Internal Assessment Components (IAC) and the End-semester examinations (ESE).
- ii. Letter grade and Grade point allocation:

Letter grades are given for each subject in ESE. Based on the performances, each student shall be awarded a final letter grade at the end of the semester for each course. The letter grades and their corresponding grade points are given in Table below:

Letter grades and grade points are equivalent to the percentage of marks obtained:

Percentage of Marks obtained	Letter Grade	Grade Point	Performance
90.00 and above	O	10	Outstanding
80.00 - 89.99	A+	09	Excellent
75.00 - 79.99	A	08	Very Good
65.00 - 74.99	B+	07	Good
60.00 – 64.99	B	06	Above Average
50.00 - 59.99	C	05	Average
50.00 and above	P	-	Pass
Less than 50.00	F	-	Fail
0.00	AB	-	Fail

P - Pass; F - Fail; AB – Absent; DT - Detained/Attendance shortage

- iii. The candidate will have to get a minimum of a C grade (grade point 05, which is a minimum of 50%) separately in all the courses to be declared as 'PASS ', and a Grade of F is considered as FAIL.
- iv. To be eligible for a grade C or above for a course, the pass criteria mentioned in point no. 16 is applicable.
- v. A candidate who remains absent for any end semester examination shall be assigned a letter grade of 'AB' and a corresponding grade point of 'zero'. He/she should reappear for the said evaluation/examination in due course. This shall be considered as an attempt.
- vi. The overall performance of a student in each semester is indicated by the Semester Grade Point Average (SGPA). The overall performance of the student for the entire programme is indicated by the Cumulative Grade Point Average (CGPA).
- vii. Semester Grade Point Average (SGPA):
The performance of a student in a semester is indicated by a number called 'Semester Grade Point Average' (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses by the student during the semester. For example, if a student takes five courses (Theory/Practical) in a semester with credits C1, C2, C3, C4 and C5 and the student's grade points in these courses are G1, G2, G3, G4 and G5, respectively, and then students' SGPA is equal to:

$$\text{SGPA} = \frac{C1G1+C2G2+C3G3+C4G4+C5G5}{C1+C2+C3+C4+C5}$$

The SGPA is calculated to two decimal points. It should be noted that, the SGPA for any semester shall take into consideration the F and AB grade awarded in that semester. For example, if a learner has a F or AB grade in course 4, the SGPA shall then be computed as:

$$\text{SGPA} = \frac{C1G1+C2G2+C3G3+\mathbf{C4 \times ZERO} +C5G5}{C1+C2+C3+C4+C5}$$

viii. Cumulative Grade Point Average (CGPA):

The CGPA is calculated with the SGPA of all the semesters to two decimal points and is indicated in final grade report card/final transcript showing the grades of all 8 semesters and their courses. The CGPA shall reflect the failed status in case of F grade(s), till the course(s) is/are passed. When the course(s) is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA shall only reflect the new grade and not the fail grades earned earlier. The CGPA is calculated as:

$$\text{CGPA} = \frac{C1S1+C2S2+C3S3+C4S4+C5S5+C6S6}{C1+C2+C3+C4+C5+C6}$$

where C1, C2, C3.... is the total number of credits for semester I,II,III,.... and S1, S2, S3.... is the SGPA of semester I,II,III,.... etc.

16. CRITERIA FOR PASS

- i. **Discipline Specific Core Subjects:** Passing in Theory and Practical will be considered separately.
 - **Theory** - Candidates are declared to have passed in a subject, if they secure minimum 50% marks in End semester examination (ESE) and 50% marks in Internal assessment components (IAC) separately and a minimum 50% when both ESE+ IAC are added together.
 - **Clinicals/Practical** - Candidates are declared to have passed in a subject, if they secure minimum 50% marks in End semester examination (ESE) and 50% marks in Internal assessment components (IAC) separately and a minimum 50% when both ESE+ IAC are added together.
- ii. **Ability enhancement courses and Value added courses:** For Language papers, allied papers, skill enhancement and elective papers, the minimum prescribed marks for a pass shall be 40% of the maximum marks prescribed for a subject including Non University exam and Internal assessment marks (NUE+IA) added together.

- iii. **Provision of Grace marks:** If the student has failed in only one subject and has passed in all the other subjects of a particular semester and Grace marks of up to 5 marks to theory marks can be added for one course/subject only, provided that by such an addition the student passes the semester examination.

17. CARRY OVER CRITERIA:

- Each paper should be completed within 3 attempts including the first one.
- There is no limit to the number of theory papers that can be carried over to the next semester.
- The candidate should have cleared all papers before starting internship.
- It is mandatory to clear clinical viva at the end of each semester to be able to start the next semester. If students fail in clinical viva, they cannot proceed to the next semester/year.
- Students are eligible to appear for 8.1 and 8.2 examinations only after successfully completing all theory, practical, and clinical examinations of all semesters, including the sixth semester, and internship posting.
- Students can start internships after the declaration of results of the 6th semester examinations. Students must pass the sixth semester clinical viva to start the internship.
- Students who fail in theory exams can repeat that specific paper(s) during the following semester. E.g.: If a student fails in a course/subject(s) during the 1st semester, he/she will be allowed to repeat the paper in 2nd semester along with the other papers of that semester. If the student fails a paper even on the second attempt, one last attempt is provided in the following semester. A maximum of 3 attempts will be provided for every paper. However, if a student fails the theory exam of the 5th and/or 6th semester, he/she has to reappear for the specific papers in the following semester exam cycle and must clear all the papers to become eligible for an internship.
- Clinical Viva: Supplementary exam for Clinical Viva shall be conducted at the end of even semesters ONLY. Students failing in clinical viva must repeat one whole year of clinical postings and appear for supplementary exam along with junior batch at the end of next even semester. Maximum number of attempts will be 3 for clinical viva.
- Students who are reappearing for the exams should pay the university exam fees. The marks obtained in the previous internal assessments will be considered without reassessment. There will be no provision for a makeup exam during the entire course.

18. INTERNSHIP

- i. Twelve months (one year) internship shall be mandatory after successful completion of sixth semester examination. The 'Internship Completion Certificate' shall be issued by the college and copy of same is submitted to the University.
- ii. The candidate must pass in all the subjects in all six semesters before starting the internship.

19. REVALUATION AND RETOTALLING OF ANSWER PAPERS

There is NO PROVISION for revaluation or retotaling of the answer papers in any examination.

20. MAXIMUM DURATION FOR COMPLETION OF COURSE

A candidate shall complete the course within six years from the date of admission (excluding internship), failing which the candidate shall re-register for the course.

21. AWARD OF DEGREE

A candidate who has passed in all the subjects (core/language/allied/skill enhancement/elective papers) of all the semesters and has successfully completed the internship shall be eligible for the award of degree.

22. AWARD OF RANKS/MEDALS

Ranks and Medals shall be awarded on the basis of the final CGPA. However, candidates who fail in one or more subjects during the course shall not be eligible for the award of ranks.

23. CERTIFICATION AS A REGISTERED PROFESSIONAL

The successful students will be eligible to register as an Audiologist and Speech-Language Pathologist in the Central Rehabilitation Register of the Rehabilitation Council of India.

PART IV

Course Content: 4-year B. ASLP Program

Semester 1

B1.1 M: Introduction to Speech-Language Pathology

Hours: 60

Marks: 100 / Credits: 4

Course Outcomes Program Name: B. ASLP Course code: B1.1 M			
S. No	By the end of the programme, the B. ASLP students shall possess	Mapped Program Outcomes	Mapped Program Specific Outcomes
CO - 01	The basic concepts of speech, language and communication, and the relationship between them.	P01, P02, P03	PS02, PS05
CO - 02	Knowledge of the physical, biological, social, psychological and linguistic bases of speech.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS05, PS07, PS08, PS09
CO - 03	Ability to trace out the stages of normal development of speech and language.	P01, P02, P03, P06, P08	PS01, PS02, PS03, PS04, PS05, PS06
CO - 04	The basic skills of assessment and evaluation of speech, language and swallowing disorders	P01, P02, P03, P04, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08
CO - 05	Knowledge of the nature and scope of the field of speech-language pathology.	P01, P02, P03, P05, P06, P07	PS01, PS02, PS06, PS07, PS08, PS09

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	Introduction to Speech-language Pathology	12 – 16
2	Normal Development of Speech-Language and Basics of Management	14 - 18
3	Assessment and Management of Speech-Language and Swallowing Disorders	14 - 25
4	Assessment and Management of Language Disorders	14 – 25
5	Speech-language Pathology as a Profession	12 - 18

Note: LEQs can be asked from any unit.

Unit 1: Introduction to Speech-language Pathology

- a) History and development of speech-language pathology in Indian and Global context.
- b) Definition and functions of speech, language, communication, and their components
- c) Basic models of speech communication: Speech and hearing as a servo system, Shannon-Weaver model, Lasswell model, and Berlo model
- d) Speech chain and Speech as an overlaid function
- e) Bases of speech and language – anatomical, physiological, neurological, physical, aerodynamic, linguistic, psychological, socio-cultural and genetic
- f) Introduction to Speech-Language Disorders
- g) Incidence and prevalence of speech and language disorders
- h) Definition and descriptions of delay, deviancy, and disorders; impairment, disability and handicap

Unit 2: Normal Development of Speech-language and Basics of Management

- a) Development of speech-language
- b) Pre-requisites and factors affecting speech-language development
- c) Basic concepts and terminologies in speech therapeutics
- d) General principles of speech and language therapy
- e) Individual and group therapy
- f) Approaches to speech-language therapy – formal, informal, and eclectic approaches
- g) Planning for speech and language therapy – goals, steps, procedures, and activities
- h) Importance of reinforcement principles and strategies in speech and language therapy, types and schedules of rewards and punishment

Unit 3: Assessment and Management of Speech-Language and Swallowing Disorders

- a) Causes of speech-language disorder
- b) Speech disorders - Fluency disorders, Voice disorders, Phonological and Articulation disorders
- a) Feeding and swallowing disorders
- b) Overview of assessment procedures for voice disorders; articulation and phonological disorders; and fluency disorders
- c) Overview of management procedures for voice disorders; articulation and phonological disorders; and fluency disorders
- d) Basic concepts in assessment and management of swallowing disorders

Unit 4: Assessment and Management of Language Disorders

- a) Types, characteristics and classification of language disorders
- b) Causes of language disorders
- c) Overview of assessment procedures for child language disorders; adult language disorders; and neurogenic language disorders
- d) Overview of management procedures for child language disorders; adult language disorders; and neurogenic language disorders
- e) Issues related to bi/multilingualism
- f) Early identification and prevention of speech and language disorders

Unit 5: Speech-language Pathology as a Profession

- a) Professional code of conduct – social, cultural and other ethical issues
- b) Interdisciplinary nature and scope of practice in speech-language pathology
- c) Documentation of diagnostic, therapeutic and referral reports
- d) Evaluation of therapy outcome and follow up
- e) Evidence-based practice
- f) Community-based rehabilitation
- g) Role of itinerant speech therapist, Anganwadi, and resource teachers
- h) Facilities and concessions available for speech and hearing disabled

Recommended Reading

- a. Brookshire, R. H. (2003). Introduction to neurogenic communication disorders (6th ed.). St. Louis, Mo: Mosby.
- b. Hegde, M. N., & Davis, D. (2005). Clinical methods and practicum in speech-language pathology (4th ed.). Australia; Clifton Park, NY: Thomson Delmar Learning.
- c. Hult, L.M., Marle. R., Kathleen, R. H., & Fowey (2010). Born to Talk. Pearson Communication Science and Disorders Series 5th Ed.
- d. Owens. Jr, Kimberly, A. Metz, F.E. (2014). 5th Ed. Introduction to Communication Disorders: A life span based Perspective. Pearson Communication Science and Disorders Series.
- e. Roth, F. P., & Worthington, C. K. (2005). Treatment resource manual for speech language pathology (3rd ed.). Australia; Clifton Park, NY: Thomson Delmar Learning.
- f. S R Savithri, (2019) Introduction to Communication Sciences, Nova Science Publishers.
- g. Shipley, K. G., & McAfee, J. G. (2004). Assessment in speech-language pathology: A resource manual (3rd ed.). Australia; Clifton Park, NY: Delmar Learning.

- h. Shipley, K. G., & Roseberry-McKibbin, C. (2006). Interviewing and counselling in communicative disorders: Principles and procedures (3rd ed.). Austin, Tex: Pro-Ed.
- i. Ysseldyke, J. E., & Algozzine, R. (2006). Teaching students with communication disorders: A practical guide for every teacher. Thousand Oaks, Calif.: Corwin Press.

B1.2 M: Introduction to Audiology

Hours: 60

Marks: 100 / Credits: 4

Course Outcomes Programme Name: B. ASLP Course code: B1.2 M			
S. No	By the end of the programme, the B. ASLP students shall possess	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Ability to describe the basic concepts of hearing sensitivity and acoustics.	P01, P02, P03, P05, P06	PS01, PS02, PS03, PS04, PS05, PS06, PS08, PS09
CO - 02	Ability to describe the characteristics and causes for different types of hearing loss.	P01, P02, P03, P04, P05, P06, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08
CO - 03	Ability to take case history, administer and interpret tuning fork tests.	P01, P02, P03, P05, P06, P07	PS01, PS02, PS03, PS04, PS05, PS08
CO - 04	Ability to carry out pure tone and speech audiometry on clinical population.	P01, P02, P03, P04, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06
CO - 05	Ability to carry out subjective calibration and daily listening checks of the audiometer.	P01, P02, P03, P04, P05, P07	PS01, PS02, PS03
CO - 06	Demonstrate knowledge of theoretical basis of objective calibration of audiometers.	P01, P02, P03, P04, P05, P07	PS01, PS02, PS03, PS08

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	Historical Aspects of Audiology and Scope of Audiology	12 – 16
2	Normal Aspects of Hearing	14 - 20
3	Hearing Loss, Case History and Tuning Fork Tests	14 - 25
4	Pure Tone Audiometry	14 – 25
5	Speech Audiometry	12 - 20

Note: LEQs can be asked from any unit.

Unit 1: Historical Aspects of Audiology and Scope of Audiology

- History of Audiology, development of instrumentation in audiology
- Development of the field of audiology: Indian and global context
- Branches of audiology and scope of audiology
- Multidisciplinary inputs to audiology

Unit 2: Normal Aspects of Hearing

- a) Sound intensity and concept of decibel; Acoustic energy and Power, absolute and relative units – importance of reference: Sound intensity and intensity levels – absolute and relative measurements: Bel – decibels and its application: relationship between intensity and pressure
- b) Audibility and hearing: Hearing range – intensity and frequency: Minimum audible pressure and field: Estimation of minimum audible levels: Missing six dB: Reference equivalent threshold sound pressure levels and hearing levels: Sensation levels, threshold of pain, most comfortable levels
- c) Differential sensitivity: Concept of just noticeable difference and its applications: Intensity, frequency and duration discrimination: Magnitude estimation and production: Loudness – equal loudness level contours and its application: Scales of pitch and loudness scales

Unit 3: Hearing Loss

- a) Hearing loss and related terminologies
- b) Classification of hearing loss: conductive, sensori-neural, mixed and central
- c) Characteristics of different types of hearing loss
- d) Causes of different types of hearing loss: Adult and children: Congenital and acquired: Pre-natal, natal and Post-natal causes: Genetic and environmental causes

Unit 3: Case History and Tuning Fork Tests

- a) Importance of case history taking in audiology practice
- b) Essential factors to be included in case history for adults and children
- c) Interpretation of case history information
- d) Principles, procedure, interpretation, advantages and disadvantages of different tuning fork tests – Rinne, Schwabach, Weber and Bing tests
- e) Audiometric version of Weber and Bing test

Unit 4: Pure Tone Audiometry

- a) Classification of audiometers, Parts of an audiometer, characteristics and specifications of transducers used (earphones, bone vibrators, loud speakers)
- b) Audiogram- concept and symbols used
- c) Clinical method of threshold estimation
- d) Factors affecting air conduction threshold

- e) Bone conduction thresholds- measurements, factors effecting; SAL.
- f) Permissible noise levels in the audiometric room

Unit 5: Speech Audiometry

- a) Terminology, need for speech audiometry and types of stimuli used in speech audiometry, Test materials available in Indian languages
- b) Speech reception thresholds – procedures and application
- c) Word recognition scores –procedure and applications
- d) Other measures of speech audiometry: Speech detection threshold, most comfortable level, uncomfortable level,
- e) PIPB function – procedure and applications
- f) Factors affecting speech audiometry, Bone conduction speech audiometry

Recommended reading

- a) Speaks, C. E. (2017). Introduction to Sound: Acoustics for the Hearing and Speech Sciences (4th Edition). Plural Publishing Inc.
- b) Martin, F. N., & Clark, J. G. (2018). Introduction to Audiology. 13th Edition. Boston: Pearson.
- c) Gelfand, S. A. (2017). Hearing: An Introduction to Psychological and Physiological Acoustics (6th edition.). London: CRC Press.
- d) Durrant, J. D., & Feth, L. L. (2012). Hearing Sciences: A Foundational Approach (1 Edition.). Boston: Pearson.
- e) Katz, J. (2014). Handbook of Clinical Audiology (7th International edition.). Lippincott Williams and Wilkins.
- f) Silman, S., & Silverman, C. A. (1997). Auditory Diagnosis: Principles and Applications (Reissue Edition.). San Diego: Singular Publishing Group
- g) Stach, B. A. (2021). Clinical Audiology: An Introduction (3rd Edition). Plural Publishing Inc.
- h) Gelfand, S. A. (2017). Essentials of Audiology (4th Edition). Thieme Publishers.

B1.3 MC: Anatomy and Physiology of Speech & Swallowing

Hours: 45

Marks: 100 / Credits: 3

Course Outcomes Programme Name: B. ASLP Course code: B1.3 MC			
S. No	By the end of the programme, the B. ASLP students shall be able to	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Describe the embryonic development of structures subserving speech	P01, P02, P03, P05, P06, P07 P08	PS02, PS03, PS04, PS05, PS06, PS08
CO - 02	Describe the development of structures subserving swallowing	P01, P02, P03, P05, P06, P07 P08	PS02, PS03, PS04, PS05, PS06, PS08
CO - 03	Describe the anatomy of the structures involved in speech production	P01, P02, P03, P05, P06, P07, P08	PS02, PS03, PS04, PS05, PS06, PS08
CO - 04	Describe the process of speech production including voice, and the underlying mechanism including neural control.	P01, P02, P03, P05, P06, P07 P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08
CO - 05	Explain the anatomy and physiology of swallowing mechanism	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08

Weightage of marks/ blue print for each topic in theory examination:

Sl No	Topic	Weightage of marks
1	Unit 1: Anatomy: Introduction	10 - 20
2	Unit 2: Anatomy of Speech Production and Swallowing	14 - 25
3	Unit 3: Physiology of Speech Production and Swallowing	14 - 25
4	Unit 4: Disorders of Speech and Swallowing	10 - 20

Note: LEQ can be asked from any units.

PART A - Anatomy

Unit 1: Anatomy: Introduction

- a) Anatomical terms, Positions, and planes of reference
- b) Cells and tissues of the body
- c) Embryology: Basic terminology, Development of larynx , respiratory and oral cavity structures

Unit 2: Anatomy of Speech Production and Swallowing

- a) Anatomy of respiration, phonation, articulation and resonance
- b) Neural structures subserving speech production
- c) Anatomy of swallowing: oral cavity, pharynx and esophagus
- d) Five examples of embryonic anomalies affecting speech and language
- e) Speech disorders: fluency disorders, voice disorders, articulatory and resonatory disorders – Anatomical aspects
- f) Feeding and swallowing disorders – Anatomical aspects

PART B: Physiology

Unit 3: Physiology of Speech Production and Swallowing

- a) Breathing, speech-breathing, and posture
- b) Role of larynx in voice-speech production
- c) Mechanism of phonation
- d) Mechanism of production of speech sounds
- e) Resonatory mechanisms and their contribution to speech
- f) Stages and processes of swallowing : Oral and pharyngeal phase
- g) Stages and processes of swallowing : Esophageal phase

Unit 4: Disorders of Speech and Swallowing

- a) Speech disorders: fluency disorders, voice disorders, articulatory and resonatory disorders – Physiological aspects
- b) Feeding and swallowing disorders – Physiological aspects

Recommended Reading

- a) Bernard Rousseau., & Ryan C. Branski. (2018). Anatomy and Physiology of Speech and Hearing. Thieme Medical Publishers, Inc. New York.
- b) Chaurasia, B.D (2022). Human Anatomy, vol 3. Head Neck and vol 4. Brain (9th Edition) CBS Publishers and Distributors, New Delhi. ISBN 81-239-1157-2.
- c) Gelfand, S. A. (2017). Hearing: An Introduction to Psychological and Physiological Acoustics (6th edition.). London: CRC Press.
- d) Hixon, T J., Weismer G & Hoit J D (2020). Pre-clinical speech science – Anatomy, Physiology, Acoustics and Perception (3rd edition). Plural Publishing
- e) Hoit, J D., & Weismer G. (2017). Foundations of speech and hearing: anatomy and physiology. Plural Publishing, Inc,
- f) Kelley, M., Wu, D., & Fay, R. R. (Eds.). (2010). Development of the Inner Ear. New York: Springer.
- g) Seikel, J. A., King, D. W., & Drumright, D. G., & Hudock D. J. (2019). Anatomy & Physiology of Speech, Language, and Hearing (6th edition). Plural publishing, Inc. NY.
- h) Zemlin, W. R. (2010). Speech and Hearing Science: Anatomy and Physiology.. International Edition (4 edition.). Boston: Pearson.

Internal assessment components (IAC): 30 marks

PART A – Anatomy

Theory IA components		
1	Mid semester exam (01)	25 marks
2	Class test	15 marks
3	Assignment/Seminars	10 marks
	Total	50 marks
It shall be reduced to 15 marks		

PART B – Physiology

Theory IA components		
1	Mid semester exam (01)	25 marks
2	Class test	15 marks
3	Assignment/Seminars	10 marks
	Total	50 marks
It shall be reduced to 15 marks		

End-of-semester University examinations (ESE): 70 marks

PART A – Anatomy

Question paper pattern: 35 marks

- | | |
|---|----------------------------|
| I Long Essay Questions (Answer 1 out of 2) | : 01 x 10 marks = 10 marks |
| II. Short Essay Questions (Answer 3 out of 4) | : 03 x 05 marks = 15 marks |
| III. Short Answer Questions (Answer all 5) | : 05 x 02 marks = 10 marks |
| Total = 35 marks | |

PART B – Physiology

Question paper pattern: 35 marks

- | | |
|---|----------------------------|
| I Long Essay Questions (Answer 1 out of 2) | : 01 x 10 marks = 10 marks |
| II. Short Essay Questions (Answer 3 out of 4) | : 03 x 05 marks = 15 marks |
| III. Short Answer Questions (Answer all 5) | : 05 x 02 marks = 10 marks |
| Total = 35 marks | |

B1.4 MC: Anatomy and Physiology of Hearing

Hours : 45

Marks : 100/ Credits: 3

Course Outcomes Programme Name: B. ASLP Course code: B1.4 MC			
S. No	By the end of the programme, the B. ASLP students shall possess	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Understand the evolution and anatomy of the auditory system including neural supply	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08
CO - 02	Describe the anatomy and functioning of external ear	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08
CO - 03	Describe the anatomy and functioning of middle ear system	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08
CO - 04	Describe the anatomy and functioning of labyrinth	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08
CO - 05	Describe the functional anatomy of the central auditory pathway	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08

Weightage of marks/ blue print for each topic in theory examination:

Sl No	Topic	Weightage of marks
1	Unit 1: Introduction to general anatomy and embryology	10 - 20
2	Unit 2: Anatomy of ear	14 - 25
3	Unit 3: Physiology of external and middle ear	14 - 25
4	Unit 4: Physiology of inner ear and Central auditory pathway	10 - 20

Note: LEQ can be asked from any units.

PART A: Anatomy

Unit 1: Introduction to general anatomy and embryology

- a) General anatomical terms
- b) Development of external, middle and inner ear
- c) Five examples of embryonic anomalies affecting auditory system

Unit 2: Anatomy of ear

- a) Brief anatomy of the temporal bone
- b) Anatomy of pinna and external auditory canal
- c) Anatomy of middle ear including tympanic membrane
- d) Anatomy of Eustachian tube
- e) Anatomy of the bony and membranous labyrinth
- f) Micro and macro anatomy of cochlea
- g) Innervations and blood supply to cochlea
- h) Functional Anatomy of Auditory nerve and central auditory pathway

PART B: Physiology

Unit 3: Physiology of external ear and middle ear

- a) Auditory and non-auditory functions of external ear including localization
- b) Head shadow effect, inter-aural intensity and time difference
- c) Auditory and non-auditory functions of the middle ear
- d) Middle ear transformer action
- e) Physiology of Eustachian tube

Unit 4: Physiology of inner ear and Central auditory pathway

- a) Physiology of cochlea
- b) Electrical potentials of the cochlea
- c) Hearing through bone conduction
- d) Overview to physiology of balancing mechanisms
- e) Physiology of the Auditory nerve
- f) Physiology of the central auditory pathway

Recommended Reading

- a) Seikel, J. A., King, D. W., & Drumright, D. G., & Hudock D. J. (2019). Anatomy & Physiology of Speech, Language, and Hearing (6th edition). Plural publishing, Inc. NY.
- b) Zemlin, W. R. (2010). Speech and Hearing Science: Anatomy and Physiology: International Edition (4 edition.). Boston: Pearson.
- c) Gelfand, S. A. (2017). Hearing: An Introduction to Psychological and Physiological Acoustics (6th edition.). London: CRC Press.
- d) Chaurasia, B.D (2022). Human Anatomy, vol 3. Head Neck and vol 4. Brain (9th Edition) CBS Publishers and Distributors, New Delhi. ISBN 81-239-1157-2.
- e) Kelley, M., Wu, D., & Fay, R. R. (Eds.). (2010). Development of the Inner Ear. New York: Springer.
- f) Hoit, J D., & Weismer G. (2017). Foundations of speech and hearing: anatomy and physiology. Plural publishing, Inc.
- g) Bernard Rousseau., & Ryan C. Branski. (2018). Anatomy and Physiology of Speech and Hearing. Thieme Medical Publishers, Inc. New York.

Internal assessment components (IAC): 30 marks

PART A – Anatomy

Theory IA components		
1	Mid semester exam (01)	25 marks
2	Class test	15 marks
3	Assignment/Seminars	10 marks
	Total	50 marks
It shall be reduced to 15 marks		

PART B – Physiology

Theory IA components		
1	Mid semester exam (01)	25 marks
2	Class test	15 marks
3	Assignment/Seminars	10 marks
	Total	50 marks
It shall be reduced to 15 marks		

End-of-semester University examinations (ESE): 70 marks

PART A – Anatomy

Question paper pattern: 35 marks

- | | | |
|------|---|----------------------------|
| I | Long Essay Questions (Answer 1 out of 2) | : 01 x 10 marks = 10 marks |
| II. | Short Essay Questions (Answer 3 out of 4) | : 03 x 05 marks = 15 marks |
| III. | Short Answer Questions (Answer all 5) | : 05 x 02 marks = 10 marks |
| | | Total = 35 marks |

PART B – Physiology

Question paper pattern: 35 marks

- | | | |
|------|---|----------------------------|
| I | Long Essay Questions (Answer 1 out of 2) | : 01 x 10 marks = 10 marks |
| II. | Short Essay Questions (Answer 3 out of 4) | : 03 x 05 marks = 15 marks |
| III. | Short Answer Questions (Answer all 5) | : 05 x 02 marks = 10 marks |
| | | Total = 35 marks |

B1.5 M: Practicals in Speech-Language Pathology

Hours : 165 (30 Practical + 135 Clinicals)

Marks:50 / Credits:4

Course Outcomes Programme Name: B. ASLP Course code: B1.5 M			
S. No	By the end of the program, the B. ASLP students shall Possess	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO – 01	Identify normal speech and language development	P01, P02, P03, P06, P07, P08	PS01, PS02, PS03, PS05, PS07
CO – 02	List various parameters of speech and language skills	P01, P02, P03, P06, P08	PS01, PS02
CO – 03	Gather case history and conduct oral peripheral examination	P01, P02, P03, P04, P06, P07, P08	PS01, PS02, PS03, PS08
CO – 04	Differentiate normal versus disordered speech and language skills in children and adults	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS08
CO – 05	List strategies/ tools for assessment and techniques for therapy to facilitate speech and language skills in children and adult	P01, P02, P03, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08

Perform:

Major Activities:

- List various assessment materials available for the evaluation of speech-language disorders.
- Prepare a chart and show the developmental stages of speech and language behavior.
- Use IPA to transcribe spoken language sample. A standard passage may be used. Identify the number of phonemes and syllables in a list of words/passage.
- Record a speech sample and analyse the parameters (voice, articulation, fluency, stress, rhythm, resonance).
- Record a neurotypical child's language sample and analyse various parameters of language.
- Measure the following: Habitual frequency, Frequency range, Intensity, Intensity range, Phonation duration, Rate of speech, Alternate Motion Rates, Sequential Motion Rates, s/z ratio.

- g) List the available test material in the clinic for assessing various parameters of speech and language. Familiarize with three commonly used language test materials at the institute – Ex: Assessment of Language Development, ComDEALL Developmental Checklist (CDDC), Language Assessment Tool (LAT). Administer on one typically developing child and one child with language disorder.
- h) List and demonstrate components of case history for communication disorders.
- i) Perform oral mechanism examination on two neurotypical children and adults.
- j) Perceptual analysis of speech parameters in persons with communication disorders – fluency, articulation, voice (3 adults, 3 children).
- k) Prepare diagnostic & therapy kits and a checklist for parent counseling.
- l) Document ICF classification of various speech-language disorders.
- m) Document DSM V and ICD 11 classification of various speech-language disorders.

Minor Activities:

- n) List the available clinical facilities and clinical activities of the department/institute.
- o) List the sources of referral for speech and language disorders (to and from the department).
- p) List various public education materials/ videos that are available in the department.
- q) Compile the normative data available in Indian languages with reference to speech sound acquisition
- r) Prepare a report on the available clinical facilities and clinical activities of your institute.
- s) Prepare the following reports for various speech and language disorders: diagnostic report, baseline report, lesson plan, progress report, and discharge report.
- t) List the commonly used speech language stimulation techniques and perform a role play.
- u) List reinforcement strategies. Prepare some reinforcers that can be used in diagnostics or therapy
- v) Prepare a list of sources of referrals and a response letter to the referral source.
- w) Observe the assessment and counseling of different speech and language disorders in children and adults.
- x) Observe the speech and language therapy of different speech and language disorders in children and adults.
- y) Observe the use of various software and instruments used for the assessment and management of speech and language disorders.

B1.6 M: Practicals in Audiology

Hours: 165(30 Practical + 135 Clinicals)

Marks: 50 / Credits: 4

Course Outcomes Programme Name: B. ASLP Course code: B1.6 M			
S. No	By the end of the program, the B. ASLP students shall possess	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO – 01	Ability to carry out daily care of instruments including daily listening checks, biological calibration and correction factor chart.	P01, P02, P03, P04, P05, P08	PS01, PS02
CO – 02	Understanding the instrumentation used for routine hearing tests: audiometer, tuning fork	P01, P02, P03, P04, P05, P08	PS01, PS02, PS03
CO – 03	Ability to give instructions for PTA, speech audiometry and masking in English and various Indian language and identify appropriate test materials for speech audiometry.	P01, P02, P03, P06, P08	PS01, PS02, PS03
CO – 04	Ability to carry out pure tone audiometry (including masking) and speech audiometry on normal hearing population.	P01, P02, P03, P06, P08	PS01, PS02, PS03, PS05
CO – 05	Understanding of counselling before and after audiological testing.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS05, PS06
CO - 06	Understanding of objective calibration procedure for audiometers.	P01, P02, P03, P04, P05, P07	PS01, PS02, PS03, PS08

Perform:

Major Activities:

- a. Preparation of correction factor chart after biological calibration on individuals with normal hearing
- b. Getting familiar with different clinical audiometers, parts of audiometers and their functions
- c. Familiarization with different types of transducers – earphones/ear cushion combination, speakers, insert earphones, bone vibrators
- d. Appropriate placement of various transducers on clients during audiometry including masking
- e. Familiarization with different types of stimuli used in audiometry
- f. Establishment of PT thresholds (AC & BC) using ascending, descending and modified Hughson Westlake procedures in 5 individuals with normal hearing
- g. Estimation of bone conduction threshold with forehead and mastoid placements in 5 individuals with normal hearing
- h. Familiarization with different symbols used on audiogram for unmasked and masked AC, BC, SRT, and SIS for different transducers for right and left ear.
- i. Establishing UCL, MCL, DR, SRT, SDT & SIS on 5 individuals with normal hearing
- j. Administration of clinical masking on 5 individuals with normal hearing
- k. Familiarization of different tuning fork tests and administer on the normal hearing individuals.
- l. Administration of SAL and Rainville on 5 individuals with normal hearing

Minor Activities:

- a. Daily listening check and trouble shoot of different clinical audiometers
- b. Get familiar with instructions for carrying out pure tone audiometry, speech audiometry and masking in 5 different languages at least
- c. Familiarization with materials used for speech audiometry in different Indian languages and English for adults and children
- d. To observe the counselling before and after audiological testing
- e. Familiarization with different equipment used for objective calibration of audiometers
- f. Observation of objective calibration procedure for audiometers as per standards

B 1.7 Optional Minor 1 (MO 1): Refer Annexure 1

B 1.8: English & Communication

Hours: 30

Marks: 50 /Credits: 2

Course Outcomes Program Name: B. ASLP Course code: B1.8			
S. No	By the end of the programme, the B. ASLP students should be able to	Mapped Program Outcomes	Mapped Program Specific Outcomes
CO - 01	Speak and write proper English	P01, P03, P05, P06, P08	PS01, PS04, PS05, PS06, PS07, PS08, PS09
CO - 02	Read, understand and comprehend English	P01, P02, P03, P05, P06, P08	PS01, PS02, PS04, PS05, PS06, PS07, PS08, PS09
CO - 03	Good in letter writing, note making, essay writing, report writing, etc.	P01, P02, P03, P05, P06, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09
CO - 04	Communicate in the right way	P01, P05, P06, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09

Course contents:

ENGLISH

1. Functional English – Grammar – Parts of speech
2. Components of a sentence – Verb - Transformation of sentences – Voice - Reported speech - Positive/ negative -Statement/ Interrogative - Subject verb agreement - Common errors – Exercises
3. Paragraph writing – Structure and essential elements
4. Writing skills: Teaching the different methods of writing like Note making, Summarizing, Report writing, Letter writing, E-mails, Medical transcription - case study, collecting the patient data and report writing.
5. Reading: What is efficient and fast reading? - Awareness of existing reading habits - Tested techniques for improving speed - Improving concentration and comprehension through systematic study
6. Comprehension: Expansion of an idea - Exercises on reading passages and answering questions based on the passage, Review of selected materials and express oneself in one's words, Seminar for students on power point presentation and book review.

COMMUNICATION SKILLS

1. Basic concepts & principles of good communication
2. Special characteristics of health communication
3. Types & process of communication
4. Barriers of communication & how to overcome
5. Communication Skills With focus on speaking - Conversations, discussions, dialogues, short presentations, pronunciation
6. Speaking: Importance of speaking efficiently, Voice culture, Preparation of speech, secrets of good delivery, Presentation skills - Conference/Interview technique, body language, Audience psychology handling, Basics of nonverbal communication
7. Listening: Importance of listening - Self-awareness about listening -Action plan execution - Barriers in listening - Good and persuasive listening

B 1.9 Environmental Science (EVS) and Indian Constitution

Hours: 30

Marks: 50 /Credits: 2

Course Outcomes Program Name: B. ASLP Course code: B1.9			
S. No	By the end of the programme, the B. ASLP students should be able to	Mapped Program Outcomes	Mapped Program Specific Outcomes
CO - 01	Describe various environmental factors affecting health	P01, P03, P04, P05, P08	PS01, PS02, PS04, PS05, PS06, PS07, PS09
CO - 02	Understand the importance of proper waste disposal	P01, P04, P05	PS01, PS04, PS06
CO - 03	Develop awareness about housing standards to promote good health	P01, P03, P04, P05, P08	PS01, PS02, PS06, PS07, PS08
CO - 04	To learn the modes of disease transmission and various control measures	P01, P02, P03, P04, P05, P06, P08	PS01, PS02, PS03, PS04, PS06, PS07, PS08, PS09
CO - 05	Describe the fundamental rights and duties of Indian citizen	P01, P03, P05, P06	PS01, PS05, PS06, PS07, PS08, PS09
CO - 06	Understand the Directive Principles of States Policies	P01, P03, P05, P06	PS01, PS05, PS06, PS07, PS08, PS09
CO - 07	Develop awareness about special rights created in Indian Constitution	P01, P03, P05, P06	PS01, PS05, PS06, PS07, PS08, PS09
CO - 08	Understand the Doctrine of Separation of Powers legislative, Executive and Judicial and their functioning in India	P01, P05, P06	PS01, PS07, PS08, PS09

Environmental Science

Course Contents:

1. Introduction to Environment and Health - Health hazards and control of environmental pollution
2. Water - The concept of safe and wholesome water, requirements of sanitary sources of water, water Pollution – causes and effects on health
3. Understanding the methods of purification of water on small scale and large scale, household purification, Various biological standards, including WHO guidelines for third world countries, methods for assessing quality of water.
4. Air - Composition, Indices of Thermal Comfort, Air pollutants, Air Pollution – Health effects, Environmental Effects, Green-house effect, Social & Economic Effects, Monitoring, Prevention & Control.
5. Light, Noise, Radiation - Natural and Artificial light; Properties, sources, noise pollution and its control, types, sources, biological effects and protection, Radiation hazards
6. Waste Disposal - Disposal of Wastes - Solid Wastes, Health hazards, Methods of Disposal; Dumping, Controlled tipping/sanitary landfill, Incineration, Composting.
7. Excreta Disposal - Public health importance, Health hazards, sanitation barrier, Methods of excreta disposal, unsewered areas and sewerred areas, sewage, Modern Sewage Treatment.
8. Awareness of standards of housing and the effect of poor housing on health- Social goals of housing, Criteria for Healthful Housing by Expert Committee of the WHO, Housing standards- Environmental Hygiene Committee, Rural Housing Standards, Overcrowding, Indicators of Housing.
9. Role of arthropods in the causation of diseases, mode of transmission of arthropods borne diseases, methods of control

Recommended Books:

- a. Text Book of Environmental Studies for under graduate courses By Erach Bharucha
Reprinted in 2006, Orient Longman Private Limited /Universities Press India Pvt. Ltd.
- b. Park K. Park's Textbook of Preventive and Social Medicine.

Indian constitution

Course Contents:

1. Meaning of the term 'Constitution' - Making of the Indian Constitution 1946-1950
2. The democratic institutions created by the constitution Bicameral system of Legislature at the Centre and in the States.
3. Fundamental Rights and Duties, their content and significance
4. Directive Principles of States Policies the need to balance Fundamental Rights with Directive Principles.
5. Special Rights created in the Constitution for: Dalits, Backwards, Women and Children

and the Religious and Linguistic Minorities.

6. Doctrine of Separation of Powers legislative, Executive and Judicial and their functioning in India
7. The Election Commission and State Public Service commissions
8. Method of amending the Constitution
9. Enforcing rights through writs.
10. Right to information act, Consumer protection act
11. Constitution and sustainable development in India

Recommended books:

- a. J.C. Johari: The Constitution of India- A Politico-Legal Study-Sterling Publication, Pvt. Ltd. New Delhi.
- b. J.N. Pandey: Constitution Law of India, Allahbad, Central Law Agency, 1998.
- c. Granville Austin: The Indian Constitution – Corner Stone of a Nation-Oxford, New Delhi, 2000.

PART V
Course Content: 4-year B. ASLP Program
Semester 2
B2.1 M: Fluency and Its Disorders

Hours: 60

Marks:100 / Credits:4

Course Outcomes Programme Name: B. ASLP			
Course code: B2.1 M			
S. No	By the end of the programme, the B. ASLP students will be able to	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Identify the normal aspects of fluency, its variability, and factors influencing its development,	P01, P02, P03, P05, P06, P08	PS01, PS02, PS03, PS05, PS07
CO - 02	Describe the terminologies, classification and characteristics of stuttering and other fluency disorders,	P01, P02, P03, P06	PS01, PS02, PS03, PS05, PS08
CO - 03	Assess fluency and dysfluency, and differentiate different variations of fluency disorders (stuttering, neurogenic stuttering, cluttering),	P01, P02, P03, P05, P06, P07, P08	PS01, PS04, PS05, PS06, PS07, PS08
CO - 04	Plan and serve management strategies for persons with fluency disorders,	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS05, PS06, PS08
CO - 05	Plan strategies and aspects to prevent development and relapse of stuttering,	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS07, PS09

Weightage of marks/ blueprint for each topic in theory examination:

Unit No.	Topic	Weightage of marks
1	Fluency	10 - 16
2	Stuttering and Other Fluency Disorders	14 - 25
3	Assessment and Differential Diagnosis of Fluency Disorders	14 - 25
4	Management of stuttering	14 - 25
5	Management of Fluency-related Entities	12 - 20

Note: LEQs can be asked from any unit.

Unit 1: Fluency

- a) Definition of fluency and dimensions of fluency
- b) Factors influencing fluency of speech
- c) Definition and characteristics of suprasegmentals in speech

- d) Development of fluency and its components
- e) Variables affecting development of fluency
- f) Typical disfluency, characteristics

Unit 2: Stuttering and Other Fluency Disorders

- a) Developmental stuttering – Definition, core and secondary characteristics, attitudes and anxiety issues in adults and children who stutter
Development of stuttering: from onset to adulthood (Bloodstein's phases, VanRiper's tracks, Conture's classification, Guitar's classification)
- b) Nature of stuttering- prevalence and incidence, gender ratio, variability, recovery, fluency inducing conditions, adaptation effect, multilingual issues
- c) Cause(s) of stuttering – introduction to theories of stuttering
 - Learning and Psychological theories: Diagnosogenic theory, Classical and operant conditioning, Personal Construct Theory, Anticipatory Struggle Hypothesis, Breakdown Hypothesis, Repressed Need Hypothesis
 - Organic Theories: Cerebral dominance, Genetic basis of Stuttering
 - Speech Motor Control Theories: Zimmerman's Model, Cyber kinetic or servo system Model, Interhemispheric inference Model, The variability Model, DIVA and GODIVA Model
 - Psycholinguistic Theories: Covert Repair hypothesis, EXPLAN theory, Fault-line Hypothesis
 - Multifactorial Models: Demands–capacities model, Neurophysiological Model, CALMS Model, Communication–Emotional model, Dual-diathesis stressor Model
- d) Acquired stuttering (neurogenic stuttering, psychogenic stuttering), Cluttering

Unit 3: Assessment and Differential Diagnosis of Fluency Disorders

- a) Case History for Preschool, School-age, adolescents, and adults
 - Speech sample recording
 - Speech sample transcription
- b) Assessment of core and secondary behaviours
 - Tools for quantification of core and secondary behaviours
 - Assessment of Speech naturalness
 - Assessment of feelings and attitudes accompanying stuttering
 - Assessment of the impact of stuttering
- c) Closing interview
- d) Differential diagnosis of fluency disorders (stuttering, cluttering, neurogenic stuttering and typical dysfluency)
- e) Mobile applications related to assessment of stuttering

Unit 4: Management of stuttering

- a) Counselling, Prevention and early identification of stuttering

- b) Management of stuttering – approaches and rationale
- c) Management of Children with stuttering: preschool and school-age children (Direct vs. Indirect Approaches)
 - Indirect approaches (Parent-child interaction Therapy)
 - Direct Approaches (LIDCOMBE Program, Westmead Program, Response Cost, RESTART-DCM)
 - Evidence in Indian context
 - Analogies
- d) Management of Adults with stuttering: Treatment goals
 - Fluency shaping vs stuttering modification approaches
 - Fluency shaping
 - Prolonged Speech
 - Shadowing
 - Habit rehearsal Techniques
 - Light Articulatory Contact
 - Flow and Slow Method / Modified airflow Technique
 - Comprehensive Stuttering Program
 - Camperdown Program
 - Successful Stuttering Management Program
 - Cognitive Behavior Therapy
 - Group therapy
 - Measurement of therapy progress and naturalness rating
- e) Issues of speech naturalness in stuttering
- f) Relapse and recovery from stuttering
- g) Instrumental approaches for the management of stuttering: DAF, mobile applications related to management of stuttering

Unit 5: Management of Fluency-related Entities

- a) Management of stuttering - its rationale, techniques and strategies in
 - Children with stuttering
 - Adults with stuttering
 - Neurogenic stuttering
 - Cluttering
- b) Relapse and recovery in neurogenic stuttering and cluttering
- c) Counselling,
- d) Prevention and early identification of stuttering and cluttering

Recommended Reading

- a. Bloodstein, O., Ratner, N. B. & Brundage, S. B. (2021). A Handbook on Stuttering (7th Ed.). USA: Plural Publishing Inc.
- b. Guitar, B. (2019). Stuttering-An Integrated Approach to its Nature and Treatment. (5th Ed.). Baltimore, Lippincott Williams & Wilkins.

- c. Guitar, B. (2024). Stuttering-An Integrated Approach to its Nature and Treatment. (6th Ed.). Baltimore, Lippincott Williams & Wilkins. (available online)
- d. Hegde, M. N. (2007). Treatment Protocols for Stuttering. CA Plural Publishing.
- e. Howell, P. (2011). Recovery from Stuttering. New York, Psychology Press.
- f. Logan K.J. (2015). Fluency disorders. San Deigo: Plural publishing.
- g. Maruthy, S., & Kelkar, P. (Eds.). (2023). Understanding and Managing Fluency Disorders: From Theory to Practice. Taylor & Francis.
- h. Rentschler, G. J. (2012). Here`s How to Do: Stuttering Therapy. San Diego, PluralPublishing.
- i. Yairi, E., & Seery, C. H. (2015). Stuttering - Foundations and Clinical Applications. (2nd Ed). USA, Pearson Education, Inc.

Practicum

Major Activities

- a) Assess the dimensions of fluency and rate of speech in 5 normal adults.
- b) Record and analyse suprasegmental features in typically developing children between 2 and 5 years.
- c) Listen/see samples of normal non fluency and stuttering in children and document the differences.
- d) Identify the types of dysfluencies/secondary behaviours in the recorded samples of adults with stuttering.
- e) Administer SPI on 3 typically developing & 2 children with stuttering.
- f) Administer CALMS rating scale on 3 typically developing & 2 children with stuttering.
- g) Administer SSI on 5 typically developing children.
- h) Administer SSI on 5 adults with normal fluency.
- i) Administer OASES – S on 5 children.
- j) Administer OASES – A on 5 adults with normal fluency.
- k) Administer naturalness rating scale on 5 adults with normal fluency and 3 recorded samples of stuttering
- l) Instruct and demonstrate the following techniques: Airflow, prolongation, easy onset and shadowing techniques.

Minor Activities

- a) Record audio visual sample of 5 typically developing children for fluency analysis.
- b) Record audio visual sample of 5 typical adults for fluency analysis.
- c) Record 5 speech samples with various delays in auditory feedback and analyse the differences.

B2.2 M: Diagnostic Audiology- Basic

Hours: 60

Marks:100 / Credits:4

Course Outcomes Programme Name: B. ASLP Course code: B2.2 M			
S. No	By the end of the programme, the B. ASLP students shall possess	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Explain masking and carryout audiometry with masking	P01, P02, P03, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06
CO - 02	Carryout subjective calibration and daily listening checks of the audiometer	P01, P02, P03, P04, P05	PS01, PS02, PS03, PS08
CO - 03	Explain the theoretical basis of objective calibration of audiometers	P01, P02, P03, P04, P05, P06, P07, P08	PS01, PS02, PS08
CO - 04	Apply appropriate test battery of behavioural tests to differentially diagnose cochlear and retrocochlear pathology	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS05, PS08
CO - 05	Apply appropriate test battery of behavioural tests to identify functional hearing loss	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS05, PS08
CO - 06	Explain the origin of otoacoustic emissions and record the same in adults and children	P01, P02, P03, P04, P05, P06, P07, P08	PS02, PS03, PS05, PS07, PS08, PS09

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	Clinical Masking & Calibration	14 – 25
2	Introduction to Diagnostic Audiology	12 – 20
3	Behavioural Tests to Diagnose Cochlear Pathology and Retro-cochlear Pathology	14 – 25

4	Behavioural Tests to Diagnose Functional Hearing Loss	14 – 25
5	Otoacoustic Emissions	14 - 25

Note: LEQs can be asked from any unit.

Unit 1: Clinical Masking & Calibration

- Purpose and rationale of clinical masking: Interaural attenuation and factors affecting interaural attenuation,
- Different types of stimulus employed in clinical masking, minimum and maximum masking level for masking
- Different procedures for masking during pure tone audiometry, speech audiometry
- Definition and purpose of calibration, Daily listening checks and subjective calibration
- Objective calibration of intensity through different transducers (air conduction, bone conduction, sound field)
- Objective calibration of frequency and distortion

Unit 2: Introduction to Diagnostic Audiology

- Concept of clinical decision analysis (sensitivity, specificity, true positive, true negative, false positive, false negative and hit rate)
- Screening tests for hearing loss, difference between screening and diagnostic test
- Characteristics of a good diagnostic test: behavioural and physiological,
- Need for test battery approach in auditory diagnosis and integration of the audiological tests results, Cross-check principle
- Communicating results of screening and diagnostic tests to clients/caretakers and making appropriate referrals

Unit 3: Behavioural Tests to Diagnose Cochlear Pathology and Retro-cochlear Pathology

- Behavioral and Clinical indications for cochlear pathology, retro-cochlear pathology,
- Physiological bases of recruitment/softness imperception and adaptation,
- Behavioural tests of recruitment/softness imperception: ABLB, MLB, dynamic range
- Tests of adaptation, SISI
- PIPB function, Brief tone audiometry, Bekesy audiometry
- Test to identify dead regions of cochlea.

Unit 4: Behavioural Tests to Diagnose Functional Hearing Loss

- a) Behavioural and clinical indicators of functional hearing loss
- b) Pure tone tests including tone in noise test, Stenger test, Bekesy audiometry, Brief tone audiometry, pure tone DAF
- c) Speech tests including Lombard test, Stenger test, lip-reading test, Doerfler-Stewart test, Low level PB word test, Yes-No test, DAF test
- d) Identification of functional hearing loss in children: Swinging story test, Pulse tone methods
- e) Counselling clients with functional hearing loss

Unit 5: Otoacoustic Emissions

- a) Origin and classification of OAEs
- b) Principle of instrumentation used for recording OAEs
- c) Recording and interpretation of OAEs: SOAE, TEOAEs, and DPSOAEs
- d) Clinical applications of OAEs: SOAE, TEOAEs, and DPSOAEs
- e) Contralateral suppression of OAEs and its clinical implications.

Recommended Reading

- a) DeRuiter, M. & Ramachandran, V. (2016). Basic Audiometry Learning Manual (3rd edition). Plural Publishing, Inc.
- b) Dhar, S., & Hall, J.W. (2018). Otoacoustic Emissions: Principles, Procedures, and Protocols. (2nd edition). Thieme.
- c) Gelfand, S. A. (2022). Essentials of Audiology. (5th edition). Thieme.
- d) Katz, J., Chasin, M., English, K., Hood, L.J & Tillery, K.L. (2019). Handbook of Clinical Audiology. (7th edition). Wolters Kluwer.
- e) Kramer, S., & Brown, D. K. (2021). Audiology: science to practice. (4th edition). Plural Publishing.
- f) Martin, F. N., & Clark, J. G. (2018). Introduction to audiology (13th edition). Pearson
- g) Oeding, K.A.M., Listenberger, J., Smith, S. (2016). The Audiogram Workbook. Thieme.
- h) Stach, B.A., & Ramchandran, V. (2021). Clinical Audiology: An Introduction. (3rd edition). Plural Publishing, Inc.
- i) Valente, M., & Valente, L.M. (2020). Adult Audiology Casebook (2nd edition). Thieme.

Practicum

Major Activities

- a) Carry out clinical masking on 10 normal hearing individuals with simulated conductive hearing loss and carry out clinical masking on 5 individuals with conductive hearing loss and 5 individuals with sensorineural hearing loss.
- b) Carryout daily listening checks and subjective calibrations 20 times and observe objective calibration once
- c) Administer classical SISI on 3 individuals and note down the scores
- d) Administer tone decay tests (classical and its modifications) and note down the results (at least 3 individuals)
- e) Plot PIPB function using standardized lists in any 5 individuals
- f) Administer the tests of functional hearing loss (both tone based and speech based) by asking subject to malingering and having a yardstick of loudness.
- g) Record TEOAEs and note down the amplitude, SNR, noise floor and reproducibility at octave and mid-octave frequencies. Note down the stimulus stability and the overall SNR (10 ears).
- h) Record DPOAEs and note down the amplitude, SNR, noise floor and reproducibility at octave and mid-octave frequencies (10 ears)

Minor Activities

- a) Administer ABLB, MLB and prepare ladder gram (ABLB to be administered by blocking one ear with impression material)
- b) Administer Bekesy audiometry
- c) Administer Brief tone audiometry

B 2.3 MC: Linguistics and Phonetics

Hours: 45

Marks:100 / Credits:3

Course Outcomes Programme Name: B. ASLP Course code: B2.3 MC			
S. No	By the end of the programme, the B. ASLP students shall possess	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Ability to describe different branches and aspects of linguistics	P01, P02, P03, P05, P06, P08	PS02, PS03, PS04, PS05, PS06, PS08
CO - 02	Understanding of characteristics and functions of language	P01, P02, P03, P05, P06, P07, P08	PS02, PS03, PS04, PS05, PS06
CO - 03	Ability to explain different branches of phonetics, applied linguistics	P01, P02, P03	PS02, PS03, PS04, PS05, PS06, PS08
CO - 04	Describe phonology, morphology, syntax, semantics, pragmatics	P01, P02, P03	PS02, PS03, PS04, PS05, PS06, PS08
CO - 05	Ability to explain acquisition of language and factors affecting it	P01, P02, P03, P05, P06, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09
CO - 06	Understanding of bi/multilingualism and related issues	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	Introduction to Linguistics	12 - 20
2	Phonetics and Phonology	14 - 25
3	Morphology, syntax, semantics and applied linguistics	14 - 25
4	Language acquisition	12 - 20
5	Bi/multilingualism	12 - 20

Note: LEQs can be asked from any unit.

Unit 1: Introduction to Linguistics

- a) Different branches of linguistics: Applied linguistics, sociolinguistics, psycholinguistics, neurolinguistics and clinical linguistics
- b) Language characteristics and functions. Difference between animal communication systems and human language
- c) Morphology – concepts of morph, allomorph, morpheme, bound free and compound forms, roots etc. Processes of word formation: Content and function words
- d) Endocentric and exocentric constructions,
- e) Inflection and derivation, paradigmatic and syntagmatic relationship
- f) Concepts in linguistics: Competence vs. performance: Langue vs. parole etc.

Unit 2: Phonetics and Phonology

- a) Introduction to phonetics: Articulatory, acoustic, and auditory phonetic
- b) Articulatory classification of sounds – segmental and supra-segmental.
Classification description and recognition of vowels and consonants
- c) Transcription systems with special emphasis on IPA.
- d) Introduction to phonology, classification of speech sounds on the basis of distinctive features
- e) Phonotactics: Phonotactic patterns of English and Indian languages
- f) Phonemic analysis – principles and practices
- g) Phonological processes

Unit 3: Morphology, syntax, semantics and applied linguistics

- a) Morphology – concepts of morph, allomorph, morpheme, roots, compound forms - endocentric and exocentric constructions, free and bound morphemes, morphemic analysis - inflection and derivation,
- b) Syntax – concepts of phrases and clauses, sentence and its types,
- c) Different methods of syntactic analysis – Immediate constituent analysis, Phrase structure, grammar, transformational generative grammar– deep structure versus surface structure, acceptability versus grammaticality.
- d) Introduction to the major types of transformations
- e) Processes of word formation: Content and function words,
- f) Semantics, semantic relations, semantic feature theory
- g) Pragmatics and discourse

Unit 4: Language acquisition

- a) Issues in first language acquisition: Pre-linguistic stages, linguistic stages
- b) Acquisition of phonology, morphology, syntax, semantics, and pragmatics
- c) Language and cognition
- d) Applied linguistics with special reference to communication disorders
- e) Usefulness of morphemic and syntactic analysis in planning speech-language therapy

Unit 5: Bi/multilingualism

- a) Introduction to the language families of India
- b) Issues related to second language acquisition and factors influencing it
- c) Inter-language theory, language transfer and linguistic interference
- d) Differences between first and second language acquisition/learning
- e) Bilingualism/Multilingualism
- f) Indian writing systems

Recommended Reading

- a) Allwright, Dick; Hanks, Judith (2009). *The Developing Language Learning: An Introduction to Exploratory Practice*. Basingstoke: Palgrave MacMillan.
- b) Ball & Martin (1995). *Phonetics for Speech Pathology*. Delhi: AITBS Publishes
- c) Ball, Rahilly & Tench (1996). *The phonetic transcription of disordered speech*. San Diego: Singular Publishing Group Inc.
- d) Berk, Laura E. (2009). *Language Development*. Boston: Pearson Education/Allyn & Bacon.
- e) Bhatia, Tej K., and William C. Ritchie (eds.) (2006). *Bilingualism in South Asia*. In: Buch, A., Erschler, D. B. Jäger, G. Lupas, A (2013). *Towards automated language classification: A clustering approach*.
- f) Foster-Cohen, S. (2009). *Language acquisition*. London: Palgrave Macmillan.
- g) Sousa, David, A. (2011). *Handbook of Bilingualism*. Oxford: Blackwell Publishing.
- h) Kennison, S. (2013). *Introduction to language development*. Los Angeles, CA: Sage.
- i) Shriberg & Kent (1982). *Clinical phonetics*. New York: John Wiley & Sons

B 2.4 MC : Otolaryngology

Hours: 45

Marks 100: Credits:3

Course Outcomes Programme Name: B. ASLP Course code: B2.4 MC			
S. No	By the end of the programme, the B. ASLP students shall possess	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Understanding of anatomy and physiology of organs of speech, swallowing and hearing.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS05, PS08
CO - 02	Ability to identify the causes and signs/symptoms of different pathological conditions of the ear leading to hearing loss	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS07, PS08
CO - 03	Ability to identify the causes, signs/symptoms and management of different pathological conditions of the laryngeal system leading to voice disorders.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS07, PS08
CO - 04	Ability to identify the causes and signs/symptoms of different pathological conditions of the oral cavity and esophagus	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS07, PS08
CO - 05	Understanding of clinical techniques for assessment of speech, swallowing and hearing disorders.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS08
CO - 06	Understand the principles of management of diseases of pathological conditions of the ear leading to hearing loss	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS04, PS05, PS06, PS08

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	External and Middle Ear and Their Disorders	12 - 20
2	Inner Ear and its Disorders	12 - 20
3	Oral Cavity and its Disorders	12 - 20
4	Larynx and its Disorders	12 - 20
5	Esophagus and its Disorders	10 - 16

Note: LEQs can be asked from any unit.

Unit 1: External and Middle Ear and Their Disorders

- a) Clinical anatomy of external and middle ear
- b) Congenital anomalies of the ear
- c) Diseases of the external ear – tumors, perforation and ruptures of the tympanic membrane, and Eustachian tube dysfunction
- d) Otitis media with effusion
- e) Cholesteatoma and chronic suppurative otitis media
- f) Otosclerosis
- g) Trauma to the temporal bone
- h) Facial nerve and its disorder

Unit 2: Inner Ear and its Disorders

- a) Clinical anatomy of inner ear
- b) Congenital anomalies
- c) Meniere's Disorder
- d) Ototoxicity
- e) Presbycusis
- f) Disorders of the vestibular system including vestibular Schwannoma
- g) Tinnitus and medical line of treatment
- h) Overview of surgical techniques for restoration and preservation of hearing

Unit 3: Oral Cavity and its Disorders

- a) Anatomy and physiology of the oral cavity
- b) Malformation and inflammations of lip and oral cavity
- c) Benign, premalignant, and malignant tumors of the oral cavity
- d) Clinical anatomy and physiology of pharynx
- e) Inflammatory conditions of the pharynx, tonsils and adenoids
- f) Benign, premalignant, and malignant tumors of the pharynx

Unit 4: Larynx and its Disorders

- a) Clinical anatomy and physiology of larynx
- b) Clinical examination of larynx
- c) Stroboscopy - technique, procedure, interpretation and precautions
- d) Congenital laryngeal pathologies
- e) Inflammatory conditions of the larynx
- f) Benign and malignant tumors of the larynx
- g) Laryngectomy – overview of surgical procedure
- h) Phonosurgery and other voice restoration surgeries
- i) Airway management procedures

Unit 5: Esophagus and its Disorders

- a) Clinical anatomy and physiology of esophagus
- b) Clinical examination of esophagus
- c) Congenital anomalies of esophagus
- d) Inflammatory conditions of esophagus
- e) Benign and malignant tumors of esophagus
- f) Medical management of these pathological conditions

Recommended Reading

- a) Clarke, R. W. (2022). Diseases of the Ear, Nose & Throat in Children: An Introduction and Practical Guide. CRC Press.
- b) Dhingra, P. L. & Dhingra, S. (2017). Diseases of Ear, Nose and Throat (Seventh edition). Elsevier.
- c) Maqbool, M., & Maqbool, S. (2013). Textbook of Ear, Nose and Throat Diseases (1st edition). Jaypee Brothers Medical Publishers.
- d) Nawka, T., & Hosemann, W. (2005). Surgical procedures for voice restoration. GMS current topics in otorhinolaryngology, head and neck surgery, 4.
- e) Probst, R., Grevers, G., & Iro, H. (2006). Basic Otolaryngology: A Step-By-Step Learning Guide. Thieme.
- f) Rosen, C. A. (2005). Stroboscopy as a research instrument: development of a perceptual evaluation tool. The Laryngoscope, 115(3), 423-428.

B 2.5 Optional Minor 2 (MO 2): Refer Annexure 1

B 2.6 M: Clinicals in Speech-Language Pathology

Hours: 195 (60 Practical + 135 Clinicals)

Marks : 100 / Credits : 5

Course Outcomes Programme Name: B. ASLP Course code: B2.6 M			
S. No	By the end of the programme, the B. ASLP students shall	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Observe and understand normative data about various speech, language and swallowing development across different age groups.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS07
CO - 02	Demonstrate understanding of assessment, counselling and management of various speech, language and swallowing disorders across different age groups.	P01, P02, P03, P04, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08, PS09
CO - 03	Be able to compare performance on various speech-language tasks and identify deviation from normal speech-language abilities	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS05, PS08
CO - 04	Be able to administer various manual and instrumental techniques to collect clinical data and use it for assessment and management of various speech-language disorders across various age groups	P01, P02, P03, P04, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09
CO - 05	Develop diagnostic and therapy kits for assessment and management of various speech-language disorders	P01, P02, P03, P08	PS01, PS02, PS03, PS04, PS06

General Considerations

- 1) Clinical work should be primarily linked to the theory courses of the semester.
- 2) After completion of clinical postings in Audiology, the student will have the concept (Know), ability to apply (Knowhow), demonstrate in a clinical diary/log book (Show), and perform (Do) the following on clinical population. The students will be able to document observations made during clinical work.

Know

Major Activities

- a) Record case history of a minimum of four affected persons and compare it with that of normal persons
- b) Transcribe speech samples and identify instances of deviance with reference to speech samples of normal persons
- c) Observe and learn evaluation/assessment process and counseling of at least three children and adults with fluency disorders,
- d) Observe and document the results of assessment of speech fluency through standardized tests,
- e) Prepare a diagnostic and therapy kit for a person with stuttering or delayed speech- language development,

Minor Activities

- f) Study normative data (Indian / Western) relating to phonology, semantics, syntax, morphology, pragmatics, voice, articulation, fluency and prosody, and relate them to clinical population,
- g) List various speech & language stimulation techniques with descriptions and illustrations,
- h) Record speech samples from persons with stuttering and identify stuttering instances and measure rate of speech,
- i) Observe management / therapeutic procedures with children and adults with speech and language disorders.
- j) Familiarize with the basics of counseling procedures – client as well as parents.

Know how

Major Activities

- a) Count the number of phonemes and syllables and identify the class of words, phrases, syllable structure, and syntactic structure in a recorded standard passage (native language and English)
- b) Differentiate the speech characteristics between normal non-fluency and developmental stuttering by observing audio-video samples.
- c) Differentiate the speech characteristics between developmental, neurogenic, and psychogenic stuttering by observing audio-video samples.
- d) Differentiate the speech characteristics between developmental stuttering and cluttering by observing audio-video samples.

Minor Activities

- e) Determine the speech and language skills of individuals with and without speech and language disorders and perceptually analyse the variations in these skills across age and gender.
- f) Use software/ applications/ instruments used for assessment and management of individuals with fluency disorders.

Show

Major Activities

- a) Perform transcription of recorded speech samples in native language and English.
- b) Demonstrate how to perform a detailed interview for individuals with fluency disorders.
- c) Analyze and document the core and secondary features of stuttering, adaptation effect and individual and situational variations in individuals with stuttering.
- d) Analyze and document the speech characteristics of individuals with cluttering.
- e) Diagnose cluttering using available screening/ diagnostic tool(s).
- f) Administer, interpret, and diagnose stuttering using standardized test material in children and adults.
- g) Demonstrate therapy techniques used for management of fluency disorders in children and adults.

Minor Activities

- h) Demonstrate stress, intonation and variations in rate of speech and analyze perceptually variations in prosody in different recorded samples of typical individuals in different age and gender.
- i) Record audio-visual speech samples of children and adults with and without fluency disorders and analyze and compare dysfluencies, secondary behaviors (if any), rate of speech, articulatory rate.
- j) Administer 9 point speech naturalness rating scale on individuals with and without stuttering.
- k) Administer and interpret the results of quality-of-life questionnaire on individuals with fluency disorders.
- l) Record speech samples of individuals with and without fluency disorders and with delay in auditory feedback: analyze and compare the results.

Do

Major Activities

- a) Perform case history for children and adults with speech-language disorders.
- b) Prepare a diagnostic kit used for the assessment of speech-language disorders.
- c) Prepare a therapy kit used for speech-language therapy.

Practicals/Clinical Exam:

- ✓ Internal evaluation shall be based on attendance, clinical diary, log book and learning conference.
- ✓ External Evaluation shall be based on spot test, OSCE, Practicum Record, Case Work and Viva-Voce.

B 2.7 M: Clinicals in Audiology

Hours: 195 (60 Practical + 135 Clinicals)

Marks:100/ Credits:5

Course Outcomes Programme Name: B. ASLP Course code: B2.7 M			
S. No	By the end of the programme, the B. ASLP students shall possess	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	The student observe and understand the concepts related to calibration (subjective and objective)	P01, P02, P03, P04, P05, P08	PS01, PS02, PS03, PS08
CO - 02	The student should be able to identify the causes and signs/symptoms of different pathological conditions of the ear leading to hearing loss	P01, P02, P03, P05, P06, P08	PS01, PS02, PS03, PS05, PS08
CO - 03	The student learns to take detailed case history, perform tuning fork tests on different clinical population and interpret the same.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS05, PS07
CO - 04	The student should perform pure tone audiometry, speech audiometry and masking in normal and clinical population and interpret the results	P01, P02, P03, P04, P05, P06, P07, P08	PS01, PS02, PS03, PS05, PS09
CO - 05	The student should be able to calculate disability percentage for hearing loss.	P01, P02, P03, P05, P06, P07	PS01, PS02, PS03, PS04, PS05, PS06, PS08, PS09

General Considerations

Clinical work should be primarily linked to the theory courses of the semester.

After completion of clinical postings in Audiology, the student will have the concept (Know), ability to apply (Knowhow), demonstrate in a clinical diary/log book (Show), and perform (Do) the following on clinical population.

Knowhow

Major Activities

- a) Materials commonly employed in speech audiometry.
- b) Calculation pure tone average, % of hearing loss, minimum and maximum masking levels.
- c) Different types of hearing loss and its common causes

Minor Activities

- d) Methods to calibrate audiometer.

Know how

Major Activities

- a) To obtain detailed case history from clients or parents/guardians.
- b) To carryout commonly used tuning fork tests.
- c) To administer pure tone audiometry including appropriate masking techniques on adults
- d) To administer tests to find out speech reception threshold, speech identification scores, most comfortable and uncomfortable levels on adults.

Show

Major Activities

- a) Plotting of audiograms with different degree and type with appropriate symbols – 2 audiograms per degree and type of hearing loss
- b) Detailed case history taken and its analysis
- c) Calculation degree, type and percentage of hearing loss on 5 sample conditions

Do

Major Activities

- a) Case history on at least 5 adults and 3 children with hearing disorders
- b) Tuning fork test on at least 5 individuals with conductive and 5 individuals with sensori-neural hearing loss
- c) Pure tone audiometry with appropriate masking on 5 individuals with conductive, 5 individuals SN hearing loss and 3 individuals with unilateral/asymmetric hearing loss
- d) Speech audiometry on 5 individual with conductive, 5 individuals SN hearing loss and 3 individuals with unilateral/asymmetric hearing loss.

Practicals/Clinical Exam:

- ✓ Internal evaluation shall be based on attendance, clinical diary, log book and learning conference.
- ✓ External Evaluation shall be based on spot test, OSCE, Practicum Record, Case Work and Viva-Voce.

B 2.8 Sociology

Hours: 45

Marks: 50 /Credits: 3

Course Outcomes Programme Name: B. ASLP Course code: B2.8			
S. No	By the end of the programme, the B. ASLP students shall possess	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Understand basic sociology concepts, principles and social process.	P01, P03, P05, P06, P07, P08	PS01, PS02, PS05, PS06, PS07, PS08, PS09
CO - 02	Describe the role of social institutions in relation to the individual, family and community.	P01, P03, P05, P06, P08	PS01, PS02, PS05, PS06, PS07, PS08, PS09
CO - 03	Discuss various social factors affecting the family in rural and urban communities in India.	P01, P03, P06, P07	PS01, PS02, PS05, PS06, PS07, PS08, PS09

Course content:

1. Introduction:

- Meaning, Definition and scope of sociology. Its relation to Anthropology, Psychology, Social Psychology
- Importance of its study with special reference to health care professionals

2. Social Factors in Health and Disease:

- Meaning of social factors, Role of social factors in health and illness

3. Socialization:

- Meaning and nature of socialization
- Primary, Secondary and Anticipatory socialization

4. Social Groups:

- Concepts of social groups, influence of formal and informal groups on health and sickness. The role of peoples involved in the primary and secondary health care groups in the hospital and rehabilitation setup.

5. Family:

- The family, meaning and definitions, Functions of types of family, Changing family patterns
- Influence of family on the individual's health, family and nutrition, the effects of sickness in the family and psychosomatic disease and their importance to physiotherapy.

6. Community:

- Rural community: Meaning and features – Health hazards to rural communities, health hazards to tribal community.
- Urban community: Meaning and features – Health hazards of urbanities

7. Culture and Health:

- a. Concept of Health, Concept of culture
- b. Culture and Health, Culture and Health Disorders

8. Social Change:

- Meaning of social changes.
- Human adaptation and social change
- Social change and stress.
- Social change and health programme
- The role of social planning in the improvement of health and rehabilitation.

9. Social Problems of disabled: Consequences of the following social problems in relation to sickness and disability, remedies to prevent these problems.

- Population explosion
- Poverty and unemployment, Problems of women in employment
- Juvenile delinquency, Geriatric problems, Problems of underprivileged.
- Alcoholism

10. Social Work:

- Meaning of Social Work
- The role of a Medical Social Worker

Recommended Books:

- a. Sachdeva & Vidya bhushan, Introduction to the study of sociology
- b. Indrani T.K., Text book of sociology for graduates' nurses and Physiotherapy students, JP Brothers, New Delhi 10 46

Annexure 1

Optional Minor 1: MO 1: Genetics in Audiology and Speech-Language Sciences

Hours: 30

Marks:50/ Credits:2

Course Outcomes Programme Name: B. ASLP Course code: MO 1			
S. No	By the end of the programme, the B.ASLP students will be able to	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Understand fundamental concepts in genetics.	P01, P02, P03, P05, P06, P08	PS01, PS02, PS05, PS06, PS08
CO - 02	Describe types of mutations and relate them to genetic disorders	P01, P02, P03, P05, P06, P08	PS01, PS02, PS08
CO - 03	Apply inheritance principles to analyse familial risk of disorders	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09
CO - 04	Identify genetic causes of hearing and speech-language disorders	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS06, PS08, PS09
CO - 05	Interpret pedigrees and understand basic genetic testing procedures	P01, P02, P03	PS01, PS02, PS08
CO - 06	Appreciate ethical considerations in genetic counselling	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS05, PS08, PS09

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	Fundamentals of Genetics	10 - 20
2	Mutations and Genetic Variability	10 - 20
3	Inheritance Patterns	10 - 20
4	Genetics in Communication Disorders & Genetic Techniques	10 - 20
5	Applied Human Genetics in Healthcare	10 - 20

Note: LEQs can be asked from any unit.

Unit 1: Fundamentals of Genetics

- **Basic Concepts & Terminology**
 - Gene, allele, genotype, phenotype, locus, mutation, polymorphism
- **Cell Biology & Chromosomal Organization**
 - Structure of cell and nucleus
 - Chromosome morphology and classification
- **Cell Division & Genetic Continuity**
 - Mitosis and meiosis in relation to ploidy maintenance and gametogenesis
- **Molecular Genetics**
 - DNA, RNA, genetic code, transcription, translation (Central Dogma)
 - Human genome structure and gene architecture
- **Genomic Projects & Applications**
 - Human Genome Project and its implications in health sciences

Unit 2: Mutations and Genetic Variability

- **Mutations: Definition & Classification**
 - Gene-level (point mutations, frameshifts)
 - Chromosomal-level (deletions, duplications, translocations, aneuploidy)
- **Mutagenic Factors**
 - Chemical, physical, and biological mutagens
- **Functional & Clinical Consequences**
 - Effects on protein function and phenotype
 - Examples in human disorders including syndromic and non-syndromic forms
- **Concept of Genetic Variability**
 - Polymorphism, single nucleotide variants, and copy number variations

Unit 3: Inheritance Patterns

- **Classical Genetics**
 - Mendelian inheritance: dominant, recessive, autosomal, X-linked, mitochondrial
 - Homozygous vs. heterozygous states
- **Beyond Mendel**
 - Non-Mendelian inheritance: incomplete dominance, codominance, multiple alleles, polygenic inheritance
 - Epigenetics and gene-environment interaction
- **Analysis of Traits**
 - Phenotypic variation and penetrance/expressivity
 - Risk calculation and recurrence risks in families
 - Pedigree analysis and case illustrations

Unit 4: Genetics in Communication Disorders & Genetic Techniques

- **Genetic Basis in Audiology**
 - Classification of hearing loss (syndromic, non-syndromic, mitochondrial)
 - Genes associated with congenital and progressive hearing loss
- **Genetics in Speech-Language Pathology**
 - Genetic underpinnings of speech-language disorders (e.g., FOXP2, stuttering, SLI, autism spectrum)
- **Diagnostic and Laboratory Techniques**
 - Karyotyping, FISH, PCR, next-generation sequencing (NGS)
 - Gene mapping and linkage studies
- **Therapeutic Approaches & Bioethics**
 - Gene therapy, stem cell approaches, cloning
 - Ethical concerns, privacy, genetic discrimination
- **Clinical Relevance**
 - Genetic counseling principles, case-based applications in communication disorders

Unit 5: Applied Human Genetics in Healthcare

- **Population Genetics & Public Health**
 - Hardy-Weinberg equilibrium, carrier frequency, founder effects
 - Screening programs and their importance in audiology and speech-language practice
- **Genetics in Multidisciplinary Care**
 - Role of geneticists, ENT, neurologists, and speech-language pathologists in patient care
- **Case-Based Learning**
 - Genetic case studies in hearing impairment, cleft lip and palate, aphasia, and developmental disorders
- **Future Trends**
 - Personalized medicine, pharmacogenomics, CRISPR applications in neuro-communication disorders
- **Professional Responsibilities**
 - Counseling families, ethical decision-making, role of BASLP professionals in genetic advocacy

Recommended Readings

1. Jung, J.H. et al. *Genetic Syndromes in Communication Disorders*. Proed.
2. Ludlow, C.L. & Cooper, J.A. *Genetic Aspects of Speech and Language Disorders*. Academic Press.
3. Martin, A. et al. *Genetics and Hearing Impairment*. Whurr Publishers.

4. Shprintzen, R.J. *Genetics, Syndromes and Communication Disorders*. Singular Publishing.
5. Rankin, J.H.M. *ABC of Clinical Genetics* (3rd Ed).
6. Lynn B. Jorde et al. *Medical Genetics* (5th Ed).
7. Thompson & Thompson. *Genetics in Medicine* (7th Ed).
8. Ahluwalia, K.B. *Genetics* (2nd Ed).
9. Rimoin, D.L. et al. *Emery and Rimoin's Essential Medical Genetics*.
10. Scriver, C.R. et al. *The Metabolic and Molecular Bases of Inherited Diseases* (8th Ed).

Optional Minor 2: MO 2: Computer Fundamentals and Artificial Intelligence

Hours: 30

Marks: 50/ Credits: 2

Course Outcomes Programme Name: B.ASLP Course code: MO 2			
S. No	By the end of the programme, the B.ASLP students will be able to	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Describe the basic structure and applications of computers.	P01, P02, P03, P05	PS01, PS02, PS08
CO - 02	Understand and operate various hardware and software components securely.	P01, P02, P03, P05	PS01, PS02, PS08
CO - 03	Utilize productivity tools for academic and clinical purposes.	P01, P02, P03, P05, P06, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09
CO - 04	Understand computer networks and their healthcare applications.	P01, P02, P03, P05, P06, P08	PS01, PS02, PS03, PS04, PS08
CO - 05	Explain the fundamentals of AI and ML with relevance to Audiology and Speech-Language Pathology.	P01, P02, P03, P05, P06, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	Introduction to Computers and Their Applications	10 - 20
2	Basics of Computer Hardware and Software	10 - 20
3	Productivity Tools and Basic Programming	10 - 20
4	Computer Networks and Internet Applications	10 - 20
5	Artificial Intelligence (AI) and Machine Learning (ML)	10 - 20

Note: LEQs can be asked from any unit.

Unit 1: Introduction to Computers and Their Applications

- General features of computers
- Generations of computers
- Types of computers: Personal computers (PCs), desktops, laptops, workstations, mainframes, and supercomputers
- Applications of computers:
 - Signal processing
 - Data and information processing
 - Commercial and office automation
 - Industrial and engineering applications
 - Healthcare and education
 - Graphics and multimedia
- Computer organization:
 - Central Processing Unit (CPU)
 - Computer memory: Primary and secondary memory
 - Secondary storage devices: Magnetic, semiconductor, and optical media
 - Input and output units: OMR, OCR, MICR, scanners, mouse, modem

Unit 2: Basics of Computer Hardware and Software

- Overview of computer hardware and software
- Machine language and high-level languages
- Application software and operating systems
- Introduction to computer viruses, antivirus, and cybersecurity
- Operating Systems: MS-DOS, Windows OS, Mac OS
- Processors:
 - CPU: Function and architecture
 - Types of processors: Microprocessors, multi-core processors
 - Processor performance: Clock speed, cores, threads
 - RISC vs. CISC architecture
- Number systems: Binary, octal, and hexadecimal
- Algorithm and flowcharts
- Basics of databases and their applications

Unit 3: Productivity Tools and Basic Programming

- Word processing and electronic spreadsheets
- Overview of MS-Word, MS-Excel, and MS-PowerPoint
- Common file formats: Images, audio, video, and print
- Basics of programming: Simple algorithms and illustrative examples

Unit 4: Computer Networks and Internet Applications

- Introduction to computer networks
- Types of networks: LAN, intranet, internet
- Internet applications: World Wide Web (WWW), email, browsing, and search engines
- Multimedia applications
- Specialized networking applications:

- Speech and hearing clinics
- Telerehabilitation

Unit 5: Artificial Intelligence (AI) and Machine Learning (ML)

- Fundamentals of AI and ML
- Applications of AI and ML in daily life
- Chatbots, voice recognition, recommendation systems
- Smart assistants (e.g., Alexa, Siri)
- AI and ML applications for students
- Role of AI and ML in Audiology and Speech-Language Pathology

Recommended Reading

1. Sinha, P. K., & Sinha, Priti. *Computer Fundamentals*.
2. ITL Education Solutions. *Introduction to Computer Science*.
3. Silberschatz, A. *Operating System Concepts*.
4. Stallings, W. *Computer Architecture and Organization*.
5. Mano, M. Morris. *Digital Logic and Computer Design*.
6. Wang, Wallace. *Microsoft Office Professional 2021 for Dummies*.
7. Farrell, Joyce. *Programming Logic and Design*.
8. Kurose, J. F., & Ross, K. W. *Computer Networking: A Top-Down Approach*.
9. Forouzan, B. A. *Data Communications and Networking*.
10. Russell, S., & Norvig, P. *Artificial Intelligence: A Modern Approach*.
11. Mitchell, T. M. *Machine Learning*.

Optional Minor 3: MO 3: Developmental Pediatrics

Hours: 30

Marks: 50 / Credits: 2

Course Outcomes Programme Name: B.ASLP Course code: MO 3			
S. No	By the end of the programme, the B.ASLP students will be able to	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Explain principles of growth and development from infancy to adolescence.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS05, PS07, PS08, PS09
CO - 02	Describe the anatomical and physiological changes in speech and hearing systems during childhood.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09
CO - 03	Identify pediatric nutritional disorders and their impacts on development.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS05, PS06, PS07, PS08
CO - 04	Understand the impact of perinatal disorders leading to speech and hearing impairments.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS05, PS06, PS07, PS08
CO - 05	Integrate pediatric knowledge into the early identification and referral for developmental communication disorders.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	Basics Concepts in Pediatrics	10 - 20
2	Anatomy and Physiology of Speech and Hearing Systems	10 - 20
3	Pediatric Disorders Related to Speech and Hearing	10 - 20
4	Perinatal Pediatric Disorders and Communication Impact	10 - 20
5	Developmental Pediatrics in Clinical Practice	10 - 20

Note: LEQs can be asked from any unit.

Unit 1: Basic Concepts in Pediatrics

- Principles of growth and development.
- Growth patterns: intrauterine, infancy, childhood, and puberty.
- Growth during adolescence: physical, hormonal, and psychosocial changes.
- Developmental milestones:
 - **Motor milestones** (gross and fine).
 - **Cognitive milestones** (attention, memory, problem-solving).
 - **Speech and language milestones** (babbling, first words, sentences, pragmatics).
 - **Social and emotional milestones** (attachment, peer interaction, self-regulation).
- Normal variations and “red flags” in development.
- Introduction to developmental screening tools (Denver II, Ages & Stages).

Unit 2: Anatomy and Physiology of Speech and Hearing Systems

- Ontogeny of the auditory system: cochlea, auditory nerve, and central pathways.
- Development of speech and language mechanisms: orofacial structures, vocal tract growth, laryngeal changes.
- Brain maturation and critical/sensitive periods for speech, language, and auditory learning.
- Pediatric anatomical and physiological variations:
 - Cleft lip and palate.
 - Craniofacial anomalies.
 - Middle ear differences in children.
- Influence of environment and neuroplasticity on communication development.

Unit 3: Pediatric Disorders Related to Speech and Hearing

- Nutritional disorders in children:
 - Protein-Energy Malnutrition (PEM).
 - Vitamin deficiencies (B-complex, C, A, D, E, K).
 - Role of trace elements: zinc, iron, iodine.
- Malnutrition and its effect on brain growth, cognition, and communication.
- Common pediatric medical conditions with communication impact:
 - Recurrent otitis media.
 - Allergies and upper airway issues.
 - Endocrine disorders (thyroid, growth hormone).
- Case illustrations of nutrition-related speech, language, and hearing delays.

Unit 4: Perinatal Pediatric Disorders and Communication Impact

- **Perinatal conditions affecting speech and hearing:**
 - Hypoxic-Ischemic Encephalopathy (HIE).
 - Neonatal jaundice, kernicterus, and auditory neuropathy.
 - Prematurity and low birth weight complications.
 - Congenital infections (TORCH, CMV, rubella).
 - Genetic syndromes (Down, Fragile X, Waardenburg, Usher).
- Early identification and newborn hearing screening protocols.
- Role of pediatric audiology in NICU follow-up.
- Multidisciplinary team management: neonatology, pediatrics, ENT, SLP, and audiology.
- Importance of early intervention: speech-language therapy, auditory-verbal therapy, parental training.

Unit 5: Developmental Pediatrics in Clinical Practice

- Classification of developmental disorders: global vs. specific delays.
- Common childhood neurodevelopmental conditions:
 - Autism Spectrum Disorder (ASD).
 - ADHD.
 - Cerebral palsy.
 - Learning disabilities.
- Screening, diagnosis, and referral pathways in pediatric care.
- Role of BASLP professionals in pediatric healthcare teams.
- Principles of family-centered care and counseling.
- Community-based pediatric rehabilitation in India.
- Ethical considerations in pediatric practice.

Recommended Readings

1. Batshaw ML, Roizen NJ, Lotrecchiano GR. *Children with Disabilities*. Brookes Publishing.
2. Allen C, Vargo M. *Developmental Disabilities: A Handbook for Occupational Therapists*.
3. Singhi P. *Neurodevelopmental Disabilities in India: Past, Present and Future*.
4. Greenspan SI, Wieder S. *The Child with Special Needs*.
5. Behrman RE, Kliegman RM, Jenson HB. *Nelson Textbook of Pediatrics*
6. WHO and UNICEF reports on Child Growth Standards.

Optional Minor 4: MO 4: Community-Based Rehabilitation and Disability Certification**Hours: 30****Marks: 50 / Credits: 2**

Course Outcomes Programme Name: B.ASLP Course code: MO 4			
S. No	By the end of the programme, the B.ASLP students will be able to	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Explain the concepts, principles, and practices of CBR.	P01, P02, P03, P05, P06	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09
CO - 02	Promote public participation and awareness strategies in CBR.	P01, P02, P03, P05, P06	PS01, PS02, PS07, PS08, PS09
CO - 03	Assess persons with disabilities for rehabilitation within the community.	P01, P02, P03, P05, P06, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08, PS09
CO - 04	Prepare and train persons with disabilities for community integration.	P01, P02, P03, P05, P06	PS01, PS02, PS03, PS04, PS05, PS06, PS08, PS09
CO - 05	Describe disability definitions, types, and certification procedures.	P01, P02, P03, P08	PS01, PS02, PS03, PS05, PS08, PS09

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	Introduction to Community-Based Rehabilitation	10 - 20
2	Preparing Community and Persons with Disability for CBR	10 - 20
3	Preparing Persons with Disability for CBR and Models of CBR	10 - 20
4	Disability and its Certification	10 - 20
5	Field Applications and Future Directions in CBR & Disability Certification	10 - 20

Note: LEQs can be asked from any unit.

Unit 1: Introduction to Community-Based Rehabilitation

- Concept and definitions of CBR (WHO, ICF, Indian perspectives)
- Principles and objectives of CBR
- Differences between CBR and institutional rehabilitation
- Socio-cultural, linguistic, and economic influences in rehabilitation practices
- Scope of CBR in national health, education, and welfare systems
- Role of international bodies (WHO, UNCRPD) in shaping CBR
- Inclusion of CBR in government policies and schemes (e.g., Deendayal Rehabilitation Scheme, National Health Mission)
- Emerging trends: Community empowerment, technology-enabled CBR

Unit 2: Preparing Community and Persons with Disability for CBR

- Awareness creation:
 - Types of programs (health camps, street plays, IEC material, social media campaigns)
 - Methods: participatory approaches, folk media, digital awareness
- Advocacy strategies:
 - Citizen-led advocacy and community mobilization
 - Self-advocacy: empowering persons with disabilities to voice rights
- Conducting focus group discussions: planning, facilitation, documentation
- Role of Panchayati Raj institutions, NGOs, and SHGs in CBR
- Promoting community-based opportunities:
 - Inclusive higher education initiatives
 - Employment linkages and entrepreneurship support
 - Leveraging government welfare schemes for livelihood

Unit 3: Preparing Persons with Disability for CBR and Models of CBR

- Family counselling and training: equipping families for active participation
- Role of family support groups and peer networks
- CBR in Corporate Social Responsibility (CSR): industry partnerships for training and employment
- Inclusive education in schools:
 - Person-centered planning and accommodations
 - Peer group support and buddy systems
- Transition planning:
 - Individualized transition plans for education–employment shift
 - Self-determination and self-management skills development
- Vocational training within the community (tailored to local resources and job markets)
- Skill training for independent living (daily living, financial literacy, communication)

- Models of CBR: vertical vs. horizontal, health-centered vs. rights-based, WHO matrix model
- Disability issues and their relevance to CBR (stigma, accessibility, gender)
- Speech and hearing-specific CBR programs:
 - Community-based screening and early identification camps
 - Home-based therapy modules and tele-rehabilitation
 - Role of speech-language pathologists and audiologists in CBR
- Overview of notable Indian CBR programs (e.g., Tamil Nadu Empowerment and Poverty Reduction Project, Navajyothi CBR programs)

Unit 4: Disability and its Certification

- Definitions of disability: medical vs. social models
- Types and classification of disability (ICF, RPWD Act, WHO)
- Rights of Persons with Disabilities (RPWD) Act, 2016: provisions relevant to speech and hearing
- Unique Disability Identity (UDID) Card: process, benefits, challenges
- Test materials and procedures for certification of speech and hearing disabilities:
 - PTA, BERA, ASSR, CAPD tests, language assessment tools
 - Functional communication and participation-based measures
- Multidisciplinary team members in certification: roles of ENT, SLP, audiologist, psychologist, physician, social worker
- Certification procedures: application, medical boards, documentation, validity, and appeals
- Ethical considerations in certification: transparency, equity, and patient rights

Unit 5: Field Applications and Future Directions in CBR & Disability Certification

- Planning and executing CBR camps (screening, awareness, therapy, counselling)
- Documentation, reporting, and evaluation of CBR programs
- Case studies of successful CBR projects (India and international)
- Role of technology in CBR: tele-rehabilitation, mobile apps, AI tools for accessibility
- Interdisciplinary collaboration in CBR (health, education, social welfare, NGOs)
- Policy frameworks and future challenges in disability management
- Fieldwork/Internship component:
 - Community survey for identifying PwDs
 - Observing/participating in disability certification camps
 - Mini-project: awareness or advocacy campaign design
- Research trends: community outcomes in speech and hearing rehabilitation, participatory action research in CBR

Recommended Reading

1. World Health Organization (WHO) publications on CBR:
 - WHO Disabilities and CBR Portal
 - WHO CBR Guidelines
 - WHO CBR Indicators Manual
 - WHO CBR Matrix
 - WHO Inclusion Guidelines
2. Goel, S. (2006). *An Introduction to Community-Based Rehabilitation*. The Internet Journal of Health, 6(2), 1-4.
3. CBR Resources Website
4. Disability Assessment Guidelines - Department of Empowerment of Persons with Disabilities (India)

Optional Minor 5: MO 5: Clinical Counselling

Hours: 30

Marks: 50 / Credits: 2

Course Outcomes Programme Name: B.ASLP Course code: MO 5			
S. No	By the end of the programme, the B.ASLP students will be able to	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Acquire basic knowledge of psychological concepts relevant to communication disorders.	P01, P02, P03, P06, P07	PS01, PS02, PS08
CO - 02	Develop foundational clinical counselling skills for diverse communication disorders.	P01, P02, P03, P05, P06, P07, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS08, PS09
CO - 03	Analyze client needs using established psychological theories and frameworks.	P01, P02, P03	PS01, PS02, PS04, PS05, PS06, PS08, PS09
CO - 04	Demonstrate ethical practice and professional responsibility in clinical counselling.	P01, P02, P03, P05, P07	PS01, PS02, PS05, PS08
CO - 05	Adapt clinical counselling principles considering cultural and societal contexts in India.	P01, P02, P03, P05, P06, P08	PS01, PS02, PS03, PS04, PS05, PS06, PS07, PS08, PS09

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	Introduction to Counselling	10 - 20
2	Types and Skills of Counselling	10 - 20
3	Theoretical Perspectives of Clinical Counselling	10 - 20
4	Issues in Counselling	10 - 20
5	Applications of Counselling in Speech and Hearing Practice	10 - 20

Note: LEQs can be asked from any unit.

Unit 1: Introduction to Counselling

- **Objectives of counselling** – purpose and importance in healthcare and rehabilitation
- **Definition and nature of clinical counselling** – key concepts, distinctions from guidance, psychotherapy, and medical consultation
- **Scope of clinical counselling** – relevance in speech-language pathology and audiology
- **Current status of clinical counselling** – historical development, global vs. Indian context
- **Contemporary counselling models** – person-centered, solution-focused, systemic approaches
- **Introduction to psychotherapy** – distinctions, overlaps, and referral guidelines
- **Goals of counselling** – client empowerment, behavior change, emotional adjustment
- **Counselling practices in India** – challenges, cultural considerations, legal framework

Unit 2: Types and Skills of Counselling

- **Types of counselling** –
 - Levels: preventive, developmental, remedial
 - Modes: individual, group, family counselling
 - Formats: face-to-face, tele-counselling, peer counselling
- **Problem areas needing counselling** – speech and hearing disorders, adjustment issues, family stress, psychosocial concerns
- **Counselling settings** – schools, hospitals, rehabilitation centers, community health, private practice
- **Essential skills and characteristics of a counsellor** – empathy, genuineness, acceptance, cultural sensitivity
- **Micro-skills in counselling** – attending, listening, questioning, paraphrasing, summarizing, confronting
- **Counselling interviews** – structure, rapport building, goal setting
- **Role of psychological tests in counselling practice** – aptitude, personality, stress, quality of life assessments

Unit 3: Theoretical Perspectives of Clinical Counselling

- **Need for theory in counselling** – framework for understanding client behavior and planning interventions
- **Overview of major counselling theories** –
 - **Psychoanalytic theories** (Freud, Jung, Adler)
 - **Cognitive theories** (Ellis' Rational Emotive Therapy, Beck's Cognitive Therapy)

- **Behavioural theories** (classical conditioning, operant conditioning, social learning)
- **Humanistic theories** (Rogers, Maslow, Existential approaches)
- **Directive and non-directive approaches**
- **Integrative theoretical perspectives** – eclectic counselling, culturally responsive models

Unit 4: Issues in Counselling

- **Confidentiality and its limits** – ethical, legal, and professional considerations
- **Termination of counselling relationships** – when, how, and ensuring continuity of care
- **Client-counsellor relationship dynamics** – transference, countertransference, rapport, power imbalance
- **Ethical considerations in clinical counselling practice** – informed consent, autonomy, non-maleficence, beneficence
- **Barriers to counselling** – stigma, cultural taboos, lack of awareness, systemic limitations
- **Counsellor self-care** – burnout prevention, supervision, reflective practice

Unit 5: Applications of Counselling in Speech and Hearing Practice

- **Counselling in audiology** – pre- and post-hearing aid/CI fitting, tinnitus management, family counselling in hearing loss
- **Counselling in speech-language pathology** – stuttering, voice disorders, aphasia, developmental disorders
- **Working with families** – parental counselling, caregiver training, sibling/family adjustment
- **Interdisciplinary approaches** – collaborating with psychologists, psychiatrists, neurologists, educators
- **Case management and documentation** – case history, counselling notes, outcome evaluation
- **Emerging trends in counselling** – tele-counselling, technology-assisted counselling, culturally adaptive practices
- **Practical component** – role-plays, simulated counselling sessions, observation of real cases

Recommended Readings

1. Clinical Counselling in Context: An Introduction. (2014). United Kingdom: Taylor & Francis.
2. The Practice of Counselling in Primary Care. (1999). United Kingdom: SAGE Publications.
3. A Beginner's Guide to Training in Counselling & Psychotherapy. (2001). United Kingdom: SAGE Publications.
4. What is Psychotherapy?. (2018). United Kingdom: Duckworth Books.
5. Bayne, R. (1995). Psychological type and counselling. *British Journal of Guidance & Counselling*, 23(1), 95-106.
6. Edwards, D. J. A., & Young, C. (2013). Assessment in routine clinical and counselling settings. *Psychological assessment in South Africa: Research and applications*, 320-335.
7. Lees, J. (2014). What is clinical counselling in context?. In *Clinical Counselling in Context* (pp. 6-19). Routledge.
8. Stimpson, Q. (Ed.). (2003). *Clinical counselling in voluntary and community settings*. Psychology Press.

Optional Minor 6: Basics in Sign Language

Hours: 30

Marks: 50 / Credits: 2

Course Outcomes Programme Name: B.ASLP Course code: MO 6			
S. No	By the end of the programme, the B.ASLP students will be able to	Mapped Programme Outcomes	Mapped Programme Specific Outcomes
CO - 01	Describe the fundamentals, history, and evolution of ISL.	P01, P02, P03	PS01, PS02, PS06, PS08, PS09
CO - 02	Analyze Deaf culture in India.	P01, P02, P03, P06, P08	PS01, PS02, PS06, PS08, PS09
CO - 03	Analyse role of ISL in Indian society.	P01, P02, P03, P06, P08	PS01, PS02, PS06, PS08, PS09
CO - 04	Demonstrate basic ISL vocabulary, grammar, and communication skills.	P01, P02, P03, P05, P06	PS01, PS02, PS05, PS06, PS08, PS09
CO - 05	Compare ISL with other international sign languages and spoken languages.	P01, P02, P03, P05, P06, P08	PS01, PS02, PS06, PS08, PS09

Weightage of marks/ blueprint for each topic in theory examination:

Unit No	Topic	Weightage of marks
1	Understanding Indian Sign Language	10 - 20
2	Indian Sign Language in Society	10 - 20
3	Structure and Grammar of Indian Sign Language	10 - 20
4	Other Sign Languages	10 - 20
5	Clinical and Professional Relevance of Sign Language	10 - 20

Note: LEQ can be asked from any units.

Unit 1: Understanding Indian Sign Language (ISL)

- **Definition and Characteristics of ISL**
 - Handshapes, movement, palm orientation, location, facial expressions, and body language
 - Regional variations and dialects of ISL in India
- **History and Development of ISL**
 - Evolution of sign language in India
 - Role of schools for the deaf and deaf organizations
- **ISL and the Deaf Community**
 - Communication, identity, and empowerment
- **Challenges for ISL Users**
 - Social barriers, stigma, and accessibility issues
 - Educational challenges: bilingual-bicultural vs oral-only approaches
 - Policy acceptance and gaps in implementation
 - Technology (captioning, apps, AI-based tools)
- **Role of Sign Language Interpreters**
 - Scope of practice, certification (RCI, ISLRTC), ethics, and responsibilities

Unit 2: Indian Sign Language in Society

- **Deaf Culture in India**
 - Values, norms, shared identity, Deaf pride
 - Distinction between "Deaf" (cultural identity) and "deaf" (audiological condition)
- **ISL in Deaf Education**
 - Current status in special schools, mainstream, and inclusive education
 - Challenges for teachers and speech-language pathologists in bilingual classrooms
- **Government Policies Supporting ISL**
 - Rights of Persons with Disabilities (RPWD) Act 2016
 - Role of Rehabilitation Council of India (RCI) and ISLRTC
- **Technological Advancements in ISL**
 - ISL dictionaries, mobile apps, online platforms, AI tools, subtitles, and sign avatars
 - Social media as a platform for ISL awareness

Unit 3: Structure and Grammar of Indian Sign Language

- **Manual Components of ISL**
 - Handshape, movement, orientation, place of articulation
- **Non-Manual Signals**
 - Facial expressions, head tilt, eye gaze, and upper body movement
- **Manual Alphabet (Fingerspelling in ISL)**

- Use for names, technical terms, and foreign words
- **Basic ISL Vocabulary**
 - Greetings, kinship terms, daily activities, colors, numbers, WH-questions
 - Practice through role-play activities
- **Unique Grammar Features of ISL**
 - Word order (topic-comment structure)
 - Time markers and tense
 - Negation and question forms
 - Classifiers and spatial grammar

Unit 4: Other Sign Languages and Global Perspectives

- **Overview of American Sign Language (ASL)**
 - Historical roots, structure, and usage
- **Overview of British Sign Language (BSL)**
 - Key features and differences from ASL and ISL
- **Differences between Sign and Spoken Languages**
 - Visual-gestural modality vs oral-auditory modality
 - Simultaneity vs linearity in expression
- **Classification and Variations of Global Sign Languages**
 - Families of sign languages (e.g., French Sign Language family)
 - Regional and community variations
 - International Sign (IS) for global communication

Unit 5: Clinical and Professional Relevance of Sign Language

- **Role of BASLP Professionals in ISL Context**
 - Need for basic ISL knowledge in audiology and speech-language pathology practice
 - Enhancing accessibility in assessment, therapy, and counseling
- **Using ISL with Clients and Families**
 - Strategies for communication during assessments and therapy
 - Building rapport with Deaf clients
- **Ethics and Professional Boundaries**
 - Collaboration with interpreters
 - Confidentiality and respect for Deaf culture
- **Practical Training**
 - Conversational practice in ISL (introductions, everyday interactions)
 - Role-play: clinician-client scenarios
- **Future Directions**
 - Integration of ISL in rehabilitation
 - Opportunities for advanced certification

Recommended Reading

1. Akmajian, A., et al. (2017). *Linguistics: An Introduction to Language and Communication*. MIT Press.
2. Bickford, J. A. (2020). *The Legal Recognition of Sign Languages*.
3. British Deaf Association. (1992). *Dictionary of British Sign Language*. Faber and Faber.
4. Davis, J. E. (2010). *Hand Talk: Sign Language among American Indian Nations*. Cambridge University Press.
5. Jepsen, J. B., et al. (Eds.). (2015). *Sign Languages of the World: A Comparative Handbook*. De Gruyter.
6. Goodstein, H. (2006). *The Deaf Way II Reader*. Gallaudet University Press.
7. Napier, J., & Roy, C. B. (2015). *The Sign Language Interpreting Studies Reader*.
8. Spencer, P. E., & Marschark, M. (2010). *Evidence-Based Practice in Educating Deaf and Hard-of-Hearing Students*. Oxford University Press.
9. Sugandhi, Kumar, P., & Kaur, S. (2020). *Sign Language Generation System based on ISL Grammar*. ACM TALLIP.
10. ISLRTC Online Basic ISL Course (<https://islrtc.nic.in/>)
11. *Sign Language Studies Journal*, Gallaudet University.

