LEARNING OUTCOME BASED VOCATIONAL CURRICULUM

CLASS 11 & 12

SECTOR:
HEALTH CARE

JOB ROLE

SPEECH AND AUDIO THERAPY ASSISTANT

(QUALIFICATION PACK: HSS / Q7601)

State Council of Educational Research & Training (SCERT) Kerala
(Department of General Education, Government of Kerala)
Vidhya Bhavan, Poojappura, Thiruvananthapuram

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www.scert.kerala.gov.in

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FOREWORD

A collaborative initiative for developing learning outcome based vocational curriculum and courseware aimed at integrating both vocational and general qualifications has been implemented by the State Council of Educational Research and Training (SCERT) Kerala and the PSSCIVE Bhopal. This is intended to open up pathways of career progression for students and the SCERT Kerala is developing curricula under the project as an integral part of Vocationalisation of Education under Samagra Shiksha, approved by the Government of Kerala. Decisive improvement in the teaching-learning process and working competencies through learning outcomes that have been judiciously embedded in the vocational subject is expected to be the major impact that will be brought about by the learning outcome based vocational curriculum.

It is a matter of great pleasure to introduce this learning outcome based vocational curriculum as part of the vocational training package for the job role of Speech and Audio Therapy Assistant (HSS / Q7601).The curriculum has been developed for the higher secondary students of vocational education and is aligned to the National Occupation Standards (NOSs) of a job role identified and approved under the National Skill Qualification Framework (NSQF).

The key aim of the curriculum will be to provide children with employability and vocational skills that would in turn aid occupational mobility and lifelong learning. A major transformation in the teaching process is also aimed at, which will be brought about through interactive sessions in classrooms, practical activities in laboratories and workshops, projects, field visits, and professional experiences.

The curriculum has been meticulously developed and judiciously reviewed by a group of experts and their much-valued contributions are immensely acknowledged. The imminent utility of the curriculum will without doubt, be adjudged by the qualitative improvement that it brings about in teaching-learning. The feedback and suggestions on the content by the teachers and other stakeholders will be of immense value to us in bringing about further enhancement and augmentation to this document.

Dr. J Prasad
Director
SCERT Kerala
Vidhya Bhavan
Poojappura
Thiruvananthapuram

ACKNOWLEDGEMENTS

1. COURSE OVERVIEW

COURSE TITLE: SPEECH AND AUDIO THERAPY ASSISTANT

GENERAL OBJECTIVES

The ability to hear normally and speak fluently are integral part of quality of life. Speech and language development is an important part of learning also. Normal hearing is very important for the normal speech and language development. Identifying the problem at the early stage is very important for the intervention, hence, the job of a Speech and Audio Therapy Assistant can involve in enhancing public awareness regarding importance of early identification and management of speech and hearing disorders. He/she can also help in maintenance and administration of speech and hearing clinics.

On successful completion of the course, the learners are expected to develop skills ;

➢ to describe about different types of Speech – Language and Hearing related disabilities

➢ to manage different Speech-Language and Hearing related disabilities

➢ to use different medium for public awareness regarding the importance of early identification and intervention of disability

➢ to understand Speech- Language and Hearing disorders.

➢ to understand the basics of Speech- Language and Hearing re/ habitational science.

COURSE OUTCOMES

On completion of the course, students should be able to ;

➢ apply effective oral and written communication skills to interact with people and customers;

➢ identify the principal components of a computer system;

➢ demonstrate the basic skills of using computer;

➢ demonstrate self-management skills;

➢ demonstrate the ability to provide a self-analysis in context of entrepreneurial skills and abilities;

➢ demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection;

➢ assist an Audiologist for aural rehabilitation.

➢ assist a Speech Language Pathologist for speech and language intervention

➢ help differently abled people during therapy.

➢ develop skill in identifying and making suitable therapy materials for various speech and language disorders.

➢ manage devices and aids used by individuals with hearing disability

➢ setting up therapy room

> ➢ assist in subjective Calibration of Audiology equipment
> ➢ develop Basic skills in clinic administration.
> ➢ explain the importance of early identification and intervention of speech and hearing disability
> ➢ describe the stages of speech and language development
> ➢ list out different speech and hearing disabilities.
> ➢ assist in conducting camps and seminars.
> ➢ prepare materials like pamphlets, charts etc. for creating public awareness regarding disabilities.
> ➢ develop Awareness about Rights of Persons with Disabilities (RPwD) – 2016Act.
> ➢ create awareness among public regarding various aids, schemes and programs by the state Government and Central Government providing for the empowerment of the differently abled population.

COURSE REQUIREMENTS

The learner should have the basic knowledge of science.

COURSE DURATION: 600 hrs

Class 11	300 hrs
Class 12	300 hrs
Total	**600 hrs**

2. SCHEME OF UNITS

The unit-wise distribution of hours and scores for Class 11 is as follows:

CLASS 11			
	Units	**No. of Hours for Theory and Practical = 300**	**Max. scores for Theory and Practical =100**
Part A	**Employability Skills**		
1.	Communication Skills – III	25	
2.	Self-management Skills – III	25	
3.	Information and Communication Technology Skills – III	20	**10**
4.	Entrepreneurial Skills – III	25	
5.	Green Skills – III	15	
	Total	**110**	**10**
Part B	**Vocational Skills**		
6.	Introduction to Speech language and Hearing Science.	25	
7.	Basics of Speech and Hearing mechanism- Anatomy & Physiology.	30	
8.	Disability- An overview	20	
9.	Speech and Language Disorders- An	30	

		No. of Hours for Theory and Practical	Max. scores for Theory and Practical
	overview.		
10.	Assessment of Speech and Language disorders.	25	
11.	Hearing disorders and Assessment.	35	
	Total	**165**	**40**
Part C	**Practical Work**		
	Practical Examination	06	15
	Written Test	01	10
	Viva Voce	03	10
	Total	**10**	**35**
Part D	**Project Work/Field Visit/ OJT**		
	Practical File/Student Portfolio	10	10
	Viva Voce	05	05
	Total	**15**	**15**
	Grand Total	**300**	**100**

The unit-wise distribution of hours and scores for Class 12 is as follows:

CLASS 12			
	Units	**No. of Hours for Theory and Practical =300**	**Max. scores for Theory and Practical = 100**
Part A	**Employability Skills**		
1.	Communication Skills – IV	25	**10**
2.	Self-management Skills – IV	25	
3.	Information and Communication Technology Skills – IV	20	
4.	Entrepreneurial Skills – IV	25	
5.	Green Skills – IV	15	
	Total	**110**	**10**
Part B	**Vocational skills**		
6.	Early identification and intervention of speech and hearing disorders	20	
7.	Basic concepts in Speech and Language Therapy	30	
8.	Management of Speech and Language Disorders.	40	
9.	Management of Hearing Disorders.	25	
10.	Maintenance and administration of Speech and Hearing clinic	30	
11.	Role and responsibilities , Maintain Health& Safety at Workplace by a SATA	20	
	Total	**165**	**40**
Part C	**Practical Work**		
	Practical Examination	06	15
	Written Test	01	10
	Viva Voce	03	10
	Total	**10**	**35**

Part D	Project Work/Field Visit/OJT		
	Practical File/Student Portfolio	10	10
	Viva Voce	05	05
	Total	**15**	**15**
	Grand Total	**300**	**100**

3. LEARNING OUTCOME BASED ACTIVITIES

Classroom, Laboratory/workshop and field are the key spots where teaching and learning take place. Classroom and laboratory-based teaching and learning facilitate knowledge creation whereas field visits open venues for free interaction with experts and also helps acquaint learners with various tools, materials, equipment procedures and operations in the workplace. While considering these intensified ways of knowledge acquisition, emphasis should also be laid on the occupational safety, health and hygiene of the participants.

Classroom activities

Classroom activities are mainly interactive lecture sessions, followed by discussions and doubt clarifications. Classes are handled by trained vocational teachers and this is considered as an integral part of the course. The most attractive feature of the class is that the classes are in tune with the outcome-based curriculum. Teaching learning processes are well planned and implemented. Teaching learning materials such as audio-visual materials, colour slides, charts, diagrams, models, exhibits, handouts, on-line teaching materials etc., have been incorporated in accordance with the topic and this may help the teachers to impart the content in an effective manner.

Practical work in Laboratory / Workshop

Practical work is usually performed to enhance the skills of the learners which are indeed essential for them to become specialized technicians. Practical sessions may include hands on training, simulation training, role-play, case-based studies and exercises. Equipment and other appliances are available for use in abundance. Trained personnel teach and exercise specialized techniques. Practical classes involving laboratory/workshop are well planned with tools, equipment, materials and also other skill acquisition activities. Vocational teachers should submit the plan of laboratory/workshop work in advance to the head of the institution and get it sanctioned prior to use.

Field visits/ Educational Tour

Field visit is one of the ways and means of learning outside the classroom. It promotes knowledge acquisition by giving opportunity to learners to interact with renowned experts and to make observations of the activities performed by them. An observation check list may help the students to ensure the collection of required information and its analysis for further use. This may be developed

with the help of vocational teachers who are in charge of outdoor learning activities. All the field visits are well planned by taking into consideration of the learning requirements, distance to travel, time, health and hygiene. The Principal and teachers should plan to implement at least three field visits within a year by making all necessary arrangements.

Virtual Field Visits, Expert Interactions and Practical Activities

With the rapid potentials offered by information technology in digital classrooms, the extent of virtual field visits, online expert interactions and online demonstrations cum practical activities can be worked out. It may be helpful amid the current Covid 19 pandemic scenario. A State level cluster of teachers and experts in the concerned subject can be pooled together for the purpose. The guidelines for such activities can be issued by the concerned SCERTs.

Suggested topics for expert interaction

1.   Scope and practice of SATA.
2.   Basics of speech and hearing science.
3.   Scope and practice of an Audiologist and Speech Language Pathologist.
4.   Opportunities related to SATA course.
5.   Disability in India – Disability an overview.
6.   Types of hearing loss.
7.   Normal speech and language development.
8.   Early identification and intervention of speech and hearing disorders.
9.   Hearing evaluation- methods
10.   Speech Language evaluation.
11.   Speech Language therapy – Basics.
12.   Types of hearing aids.
13.   Maintaining Health and Safety at work
14.   Importance of multi disciplinary approach in disability management.
15.   Advances in the field of Speech and Hearing Science.

4. ASSESSMENT AND CERTIFICATION

The National Skill Qualification Framework (NSQF) is based on outcomes rather than inputs referred by the National Occupation Standards (NOSs). Learning outcomes, as per the NSQF level descriptors, include the Process, Professional Knowledge, Professional Skills, Core Skills and Responsibility. Knowledge in the job of a learner shall be the basis of assessment. It would also be considered if the learning program undertaken by the learner has delivered the required output. Certification is based on required standards so that the learner and the employer could come to know about the competency attained in the vocational subject/ course. In order to make the assessment reliable, valid, flexible, convenient, cost effective, fair and transparent standardised

assessment tools are to be used. Technology assisted assessment process is in vogue now.

Knowledge Assessment (Theory)

Knowledge Assessment usually includes two components – Internal Assessment and External Assessment. External assessment includes theory examination conducted by the concerned examination Boards. Tools for assessment contain components for testing the application of knowledge. Knowledge testing can be performed by making use of either objective or short answer type paper-based test. Source of the questions should be the content of the curriculum.

Written Test

A group, comprising of academicians, experts from existing vocational subject experts / teachers, subject experts from University/ College or from the industry prepare theory question paper for the vocational subjects. A panel of experts for question paper setting and conducting examination should be formed by the respective central / state boards. Written tests allow the learners to demonstrate that they have acquired the necessary knowledge and skill in the given topics.

The blue print for the question paper may be as follows:

Duration: 3 hrs   **Maximum Scores: 50**

	No. of Questions			
Typology of Question	**Very Short Answer (1 Score)**	**Short Answer (2 Scores)**	**Long Answer (3 Scores)**	**Scores**
1. Remembering – (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories; identify, define or recite, information)	3	3	3	18
2. Understanding – (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase, or interpret information)	2	4	3	19
3. Application – (Use abstract information in concrete situation, to apply knowledge to new situations: Use given content to interpret a situation, private an example, or solve a problem)	0	2	1	07
4. High Order Thinking Skills – (Analysis and Synthesis – Classify, compare, contrast, or differentiate between different pieces of information; Organize and/ or integrate unique pieces of information from a variety of sources)	0	2	0	04
5. Evaluation – (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values)	0	1	0	02
Total	**5x1=5**	**12x2=24**	**7x3=21**	**50 (24 questions)**

Skill Assessment (Practical)

Skill assessment should be done by considering the practical demonstration of skills by the candidate. It is assessed by making use of a competency checklist prepared by experts. The competency checklist should be developed as per the National Occupation Standards (NOSs). This should be in tune with the qualification pack for the Job Role to ensure necessary consistency in the quality of assessment across different sectors and institutions. As per the performance criteria defined in the National Occupation Standards, the students have to demonstrate their competencies in front of the examiners. Assessment will indicate whether they are competent or incompetent. The assessors assessing the skills of the students should possess enough industrial experience and should have undergone a rigorous training in assessment principles and practices. The Sector Skill Councils (SSCs) should ensure that the assessors are given the required training on the assessment of competencies.

The demonstration of knowledge and skill in performing a task of the learners, is the purpose of the practical examination. This include practical examination where hands on experience will be displayed and a viva voce. A team of two evaluators, one a subject teacher and the other an expert from the relevant industry certified by the relevant Board or SSCs concerned can conduct practical examination as well as viva voce.

Project Work

Project is an efficient strategy to assess the practical skills acquired along a certain timeline. Project is chosen and given to candidates only on the basis of their capabilities, because it needs specific skills. It is performed step by step and the first and foremost step is classroom discussion and selection of the topic for the project. After fixing the topic and objectives, the methodology of the project work should be decided during the classroom discussions. Monitoring and evaluation should be done at each stage. Proper feedback shall be provided to the learners for improvement and innovation. Field visits can be organized as part of the project work. The data collected may be used for presentations and report writing. Accuracy of the data is to be ensured. The entire project work is maintained as a practical work file or as student's portfolio.

Student Portfolio

It is a document that supports the candidate claim of competencies acquired as a part of the teaching learning process. The student portfolio is a compilation of project reports, articles, photos of products prepared by the student.

Viva Voce

Viva voce provides chance to each candidate to demonstrate communication skills and content knowledge. It is a way of obtaining feedback on the student's experience, learning, project work

and field visit. Audio visual recording of the whole procedure can be done for future reference and documentation. A Board, including external examiners, is constituted as per the norms which in turn should be suitably adapted to the specific requirement of the vocational subjects.

The central/state examination board for secondary education and the respective Sector Skill Councils can certify the competencies of the learner upon the successful completion of the course.

5. UNIT CONTENTS

CLASS 11		

Part A: Employability Skills

Sl.No.	Units	Duration (hrs)
1.	Communication Skills- III	25
2.	Self-management Skills – III	25
3.	Information and Communication Technology Skills - III	20
4.	Entrepreneurial Skills – III	25
5.	Green Skills – III	15
	Total	**110**

Unit 1: Communication Skill– III			
Expected Learning Outcome	**Theory (10 hrs)**	**Practical (15 hrs)**	**Duration (25 hrs)**
1. Demonstrate knowledge of various methods of communication	➢ Methods of communication • Verbal • Non-verbal • Visual	• Writing pros and cons of written, verbal and non-verbal communication • Listing do's and don'ts for avoiding common body language mistakes	05
2. Identify specific communication styles	• Communication styles- assertive, aggressive, passive-aggressive, submissive, etc.	• Observing and sharing communication styles of friends, teachers and family members and adapting the best practices • Roleplays on communication styles.	10
3. Demonstrate basic writing skills	➢ Writing skills to the following: • Sentence • Phrase • Kinds of Sentences • Parts of Sentence • Parts of Speech • Articles • Construction of a Paragraph	• Demonstration and practice of writing sentences and paragraphs on topics related to the subject	10
Total			**25**

Unit 2: Self-Management – III			
Expected Learning Outcome	**Theory (10 hrs)**	**Practical (15 hrs)**	**Duration (25 hrs)**
1. Demonstrate impressive appearance and grooming	• Describe the importance of dressing appropriately, looking decent and positive body language • Describe the term grooming • Prepare a personal grooming checklist • Describe the techniques of self-exploration	• Demonstration of impressive appearance and groomed personality • Demonstration of the ability to self- explore	10
2. Demonstrate team work skills	• Describe the important factors that influence in team building • Describe factors influencing team work	• Group discussion on qualities of a good team • Group discussion on strategies that are adopted for team building and team work	10
3. Apply time management strategies and techniques	• Meaning and importance of time management – setting and prioritizing goals, creating a schedule, making lists of tasks, balancing work and leisure, using different optimization tools to break large tasks into smaller tasks.	• Game on time management • Checklist preparation • To-do-list preparation	05
Total			**25**

Unit 3: Information and Communication Technology - III			
Expected Learning Outcome	**Theory (08 hrs)**	**Practical (12 hrs)**	**Duration (20 hrs)**
1. Create a document on word processor	• Introduction to word processing. • Software packages for	➤ Demonstration and practice of the following: • Listing the features of word processing • Listing the software	10

	word processing. • Opening and exiting the word processor. • Creating a document	packages for word processing • Opening and exit the word processor • Creating a document	
2. Edit, save and print a document in word processor	• Editing text • Wrapping and aligning the text • Font size, type and face • Header and Footer • Auto correct • Numbering and bullet • Creating table • Find and replace • Page numbering • Printing document • Saving a document in various formats	➢ Demonstration and practising the following: • Editing the text • Word wrapping and alignment • Changing font type, size and face • Inserting header and footer • Removing header and footer • Using autocorrect option • Insert page numbers and bullet • Save and print a document	10
Total			**20**

Unit 4: Entrepreneurial Skills – III			
Expected Learning Outcome	**Theory (10 hrs)**	**Practical (15 hrs)**	**Duration (25 hrs)**
1. Describe the significance of entrepreneurial values and attitude	• Values in general and entrepreneurial values • Entrepreneurial value orientation with respect to innovativeness, independence, outstanding performance and respect for work	• Listing of entrepreneurial values by the students. • Group work on identification of entrepreneurial values and their roles after listing or reading 2-3 stories of successful entrepreneur • Exhibiting entrepreneurial values in Ice breaking, rapport building, group work and home assignments	10
2. Demonstrate the knowledge of	• Attitudes in general and entrepreneurial	• Preparing a list of factors that influence attitude in	15

attitudinal changes required to become an entrepreneur	attitudes • Using imagination/ intuition • Tendency to take moderate risk • Enjoying freedom of expression and action • Looking for economic opportunities • Believing that we can change the environment • Analyzing situation and planning action • Involving in activity	general and entrepreneurial attitude • Demonstrating and identifying own entrepreneurial attitudes during the following micro lab activities like thematic appreciation test • Preparing a short write-up on "who am I" • Take up a product and suggest how its features can be improved • Group activity for suggesting brand names, names of enterprises, etc.	25
Total			**25**

Unit 5: Green Skills – III			
Expected Learning Outcome	**Theory (07 hrs)**	**Practical (08 hrs)**	**Duration (15 hrs)**
1. Describe importance of main sector of green economy	• Main sectors of green economy- E-waste management, green transportation, renewal energy, green construction, water management • Policy initiatives for greening economy in India	• Preparing a poster on any one of the sectors of green economy • Writing a two-page essay on important initiatives taken in India for promoting green economy	08
2. Describe the major green Sectors/Areas and the role of various stakeholder in green economy	• Stakeholders in green economy • Role of government and private agencies in greening cities, buildings, tourism, industry, transport, renewable energy, waste management, agriculture, water, forests and fisheries	• Preparing posters on green Sectors/Areas: cities, buildings, tourism, industry, transport, renewable energy, waste management, agriculture, water, forests and fisheries	07
Total			**15**

PART B : VOCATIONAL SKILLS

Sl.No.	Units	Duration (hrs)
1.	Introduction to Speech Language and Hearing Science.	25
2.	Basics of Speech and Hearing mechanism- Anatomy & Physiology.	30
3.	Disability- an overview	20
4.	Speech and Language Disorders- An overview.	30
5.	Assessment of Speech and Language Disorders.	25
6.	Hearing Disorders and Assessment.	35
	Total	**165**

Unit 1 :Introduction to Speech language and Hearing Science			
Expected Learning Outcome	**Theory (10 hrs)**	**Practical (15 hrs)**	**Duration (25 hrs)**
1. Describe Speech, language and communication	• Definitions of speech, language, communication, and their components • Importance of communication.	• To identify different modes and models of communication	5
2. Describe Sound and Hearing	• Definition of audiology. • Basics of Sound and hearing	• TF experiments	5
3. Explain various stages of Speech and language development.	• Normal development of speech & language. • Normal development of articulation • Normal development of fluency • Normal development of voice	• Prepare Speech Development Chart. • Collect the speech and language milestones data of 5 children with age range of 0 – 5 yrs • Make a note on obtained data.	15
Total			**25**

Unit 2: Basics of Speech and Hearing mechanism – Anatomy and Physiology			
Expected Learning Outcome	**Theory (12 hrs)**	**Practical (18 hrs)**	**Duration (30 hrs)**
1. Describe speech production.	➢ Anatomy and physiology of speech mechanism a) Respiratory system b) Phonatory system c) Articulatory system Resonance	• Prepare Speech production mechanism chart • Administer Oral cavity mechanism examination of 5 adults (lips, Tongue, teeth, palate, uvula)	15

2. Describe hearing mechanism	• Anatomy and physiology of hearing mechanism	• Presentation on hearing mechanism • Otoscopic examination of five subjects. • Prepare a chart. a) Anatomy of hearing b) Physiology of hearing	15
Total			**30**

Unit 3: Disability- An Overview

Expected Learning Outcome	Theory (7 hrs)	Practical (13 hrs)	Duration (20 hrs)
1. Explain disability	• Definition of Disability. • Disability and society	• Group discussion on the challenges and needs of Differently abled persons based on the video presentation.	5
2. Explain RPwD-2016 act	• Types of Disability according to RPwD Act 2016. • Speech Language and Hearing disabilities from RPwD Act 2016	• Prepare a chart showing different type of disability. • Listing of different speech language and hearing disorders from RPwD Act 2016	10
3. List out different Government schemes, projects and institutions for the empowerment of disability.	• Government schemes, projects and institutions for the empowerment of disability.	• Prepare a pamphlet about different State Government and central Government scheme. • Video show on different Government institutions, projects and schemes	5
Total			**20**

Unit 4: Speech and language Disorders – An overview

Expected Learning Outcome	Theory (12 hrs)	Practical (18 hrs)	Duration (30 hrs)
1. Identify different speech disorders	• Classification of speech Disorder • .Child Speech Disorders (Stuttering, Cleft lip and / or palate, CP,) • Adult Speech Disorders (Dysarthria, Hoarse Causes • Signs and Symptoms	• Video show on different speech disorders • Observing features of different speech disorders • Group discussion on different speech disorders	15
2. Identify different language disorders	• Classification of Language Disorder • Child Language	• Presentation on different Language disorders	15

	Disorders (DSL, ASD, SLD) • Adult Language Disorders (Aphasia) • Causes • Signs and Symptoms	• Observing features of different language disorders • Group discussion on different language disorders	15
	Total		**30**

Unit 5: Assessment of speech and language disorders			
Expected Learning Outcome	**Theory (10 hrs)**	**Practical (15 hrs)**	**Duration (25 hrs)**
1. Identify appropriate assessment tool for different speech disorder.	• Assessment of Speech and Language disorders. • Importance of case history	• Observation of case history taking of 5 subjects with speech and language disorders.	12
2. Identify appropriate assessment tool for different language disorder.	• General Proforma for speech and language disorders • Common test materials used for speech and language evaluation.	• List out different assessment tools for speech and language evaluation. • Observe the administration of various test materials like REELS, 3DLAT, WAB, MAT, SSI, SPI, LD screening – Prepare a report.	13
Total			**25**

Unit 6: Hearing disorders and Assessment			
Expected Learning Outcome	**Theory (15 hrs)**	**Practical (20 hrs)**	**Duration (35 hrs)**
1. Identify types, signs and symptoms of Hearing disorders	• Hearing loss • Classification of HL • Signs and symptoms of HL • Causes	• Prepare a chart on different types of HL • Observation of case history administration in 5 subjects and prepare a presentation. • Presentation on hearing loss	8
2. Describe the effects of hearing loss on speech and language development of a child.	• Effect of HL on speech and language development of a child.	• Conduct a public awareness program - Effect of hearing loss on Speech and language development. • Listening to recorded speech of HI children and discussion about the sample	7

3. Identify different tests in audiological evaluation	• TFT (Rinne test, Weber test) • PTA • Speech Audiometry • Objective tests • Patient preparation for audiological evaluation.	• TFT (Rinne test, Weber test) • Patient preparation for PTA and other objective tests. • Prepare a report on video demonstration of administration of speech audiometry and other objective tests.	10
4. Identify Types and degree of hearing loss from an audiogram	• Audiogram – AC and BC • Notation used in audiogram • Calculation of PTA • Type and Degree of HL	• Observation of video demonstration of PTA evaluation. • Presentation of PTA procedure. • Audiogram plotting of 10 individuals. • Calculating PTA.	10
Total			**35**

CLASS 12

Part A: Employability Skills

Sl.No.	Units	Duration (hrs)
1.	Communication Skills- IV	25
2.	Self-management Skills - IV	25
3.	Information and Communication Technology Skills - IV	20
4.	Entrepreneurial Skills - IV	25
5.	Green Skills - IV	15
	Total	**110**

Unit 1: Communication Skills - IV			
Expected Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
1. Describe the steps to active listening skills	• Importance of active listening at workplace • Steps to active listening	• Demonstration of the key aspects of becoming active listener • Preparing posters of steps for active listening	10
2. Demonstrate basic writing skills	➢ Writing skills to the following: • Sentence • Phrase • Kinds of Sentences • Parts of Sentence • Parts of Speech • Articles • Construction of a Paragraph	• Demonstration and practice of writing sentences and paragraphs on topics related to the subject	15
Total			**25**

Unit 2: Self-Management Skills – IV			
Expected Learning Outcome	**Theory (10 hrs)**	**Practical (15 hrs)**	**Duration (25 hrs)**
1. Describe the various factors influencing self-motivation	• Finding and listing motives (needs and desires); • Finding sources of motivation and inspiration (music, books, activities);expansive thoughts; living fully in the present moment; dreaming big	• Group discussion on identifying needs and desire • Discussion on sources of motivation and inspiration	10
2. Describe the basic personality traits, types and disorders	• Describe the meaning of personality • Describe how personality influence others • Describe basic personality traits • Describe common personality disorders-paranoid, antisocial, schizoid, borderline, narcissistic, avoidant, dependent and obsessive	• Demonstrate the knowledge of different personality types	15
Total			**25**

Unit 3: Information and Communication Technology Skills - IV			
Expected Learning Outcome	**Theory (06 hrs)**	**Practical (14 hrs)**	**Duration (20hrs)**
1. Perform tabulation using spreadsheet application	• Introduction to spreadsheet application • Spreadsheet applications • Creating a new worksheet • Opening workbook and entering text • Resizing fonts and styles • Copying and moving • Filter and sorting • Formulas and functions	➢ Demonstration and practice on the following: • Introduction to the spreadsheet application • Listing the spreadsheet applications • Creating a new worksheet • Opening the workbook and enter text • Resizing fonts and styles • Copying and move the cell data • Sorting and Filter the data • Applying elementary formulas and functions	10

	• Password protection. • Printing a spreadsheet. • Saving a spreadsheet in various formats.	• Protecting the spreadsheet with password • Printing a spreadsheet • Saving the spreadsheet in various formats.	
2. Prepare presentation using presentation application	• Introduction to presentation • Software packages for presentation • Creating a new presentation • Adding a slide • Deleting a slide • Entering and editing text • Formatting text • Inserting clipart and images • Slide layout • Saving a presentation • Printing a presentation document.	➢ Demonstration and practice on the following: • Listing the software packages for presentation • Explaining the features of presentation • Creating a new presentation • Adding a slide to presentation. • Deleting a slide • Entering and edit text • Formatting text • Inserting clipart and images • Sliding layout • Saving a presentation • Printing a presentation document	10
Total			**20**

Unit 4: Entrepreneurial Skills - IV			
Expected Learning Outcome	**Theory (10 hrs)**	**Practical (15 hrs)**	**Duration (25 hrs)**
1. Identify the general and entrepreneurial behavioural competencies	• Barriers to becoming entrepreneur • Behavioural and entrepreneurial competencies – adaptability/ decisiveness, initiative/perseverance, interpersonal skills, organizational skills, stress management, valuing service and diversity	• Administering self-rating questionnaire and score responses on each of the competencies • Collect small story/ anecdote of prominent successful entrepreneurs • Identify entrepreneurial competencies reflected in each story and connect it to the definition of behavioural competencies • Preparation of competencies	10

		profile of student	
2. Demonstrate the knowledge of self-assessment of behavioural competencies	• Entrepreneurial competencies in particular: self - confidence, initiative, seeing and acting on opportunities, concern for quality, goal setting and risk taking, problem solving and creativity, systematic planning and efficiency, information seeking, persistence, influencing and negotiating, team building	• Games and exercises on changing entrepreneurial behaviour and development of competencies for enhancing self-confidence, problem solving, goal setting, information seeking, team building and creativity	15
Total			**25**

Unit 5: Green Skills - IV			
Expected Learning Outcome	**Theory (05 hrs)**	**Practical (10 hrs)**	**Duration (15 hrs)**
1. Identify the role and importance of green jobs in different sectors	• Role of green jobs in toxin-free homes, • Green organic gardening, public transport and energy conservation, • Green jobs in water conservation • Green jobs in solar and wind power, waste reduction, reuse and recycling of wastes, • Green jobs in green tourism • Green jobs in building and construction • Green jobs in appropriate technology • Role of green jobs in Improving energy and raw materials use • Role of green jobs in limiting greenhouse gas emissions • Role of green jobs minimizing waste and pollution	• Listing of green jobs and preparation of posters on green job profiles • Prepare posters on green jobs.	15

• Role of green jobs in protecting and restoring ecosystems • Role of green jobs in support adaptation to the effects of climate change		
Total		**15**

Part B–Vocational Skills

Sl.No.	Units	Duration (hrs)
1.	Early identification and intervention of speech and hearing disorders	20
2.	Basic concepts in speech and language therapy	30
3.	Management of speech and language disorders.	40
4.	Management of hearing disorders.	25
5.	Maintenance and administration of speech and hearing clinic	30
6.	Role and responsibilities , Maintain Health& Safety at Workplace by a SATA	20
	Total	**165**

Unit 1: Early identification and intervention of speech and hearing disorders			
Expected Learning Outcome	**Theory (12 hrs)**	**Practical (8 hrs)**	**Duration (20 hrs)**
1. Explain the importance of early identification and intervention	• Importance of early identification and intervention. • Critical age concept	• Prepare awareness posters and pamphlets regarding the importance of early identification and intervention • Group discussion on critical age concept.	10
2. List out the tools used for early identification of speech and hearing disorders.	• New-born hearing screening • HRR • Apgar score.	• Prepare chart showing risk factors for speech and hearing disorders • Prepare materials for public awareness regarding new born hearing screening. • Identify the risk factors affecting speech and language development	10
Total			**20**

Unit 2: Basic concepts in speech and language therapy			
Expected Learning Outcome	**Theory (12 hrs)**	**Practical (18 hrs)**	**Duration (30 hrs)**
1. Explain prerequisites of language acquisition	• Attention span • Eye contact • Sitting behaviour.	• Prepare chart showing prerequisites of language acquisition up to 5 years of age.	10

		• Group discussion on importance of prerequisites of language acquisition	
2. Explain goal setting in Speech Language Therapy	• Long term goal • Short term goal	• Refer Any 5 therapy reports and find out short term and long term goals for Delayed Speech and Language development (DSL)	10
3. List out the reports to be documented in a Speech therapy clinic	• Pre therapy reports • Lesson plan • Progress reports • Summary reports	• Prepare model therapy reports for delay in speech and language development disorders. • Group discussion on importance of documentation of speech therapy sessions	10
Total			**30**

Unit 3: Management of speech and language disorders.			
Expected Learning Outcome	**Theory (16 hrs)**	**Practical (24 hrs)**	**Duration (40 hrs)**
1. Describe the management of common Speech disorders (Child and Adult)	• Management of child speech disorders (Speech sound disorders, cerebral palsy, Stuttering, Cleft lip and palate) • Management of adult speech disorders (Dysarthria, Voice abuse)	• Observation of speech therapy sessions for speech disorders (Speech Sound Disorder/ Stuttering/ Cerebral Palsy/ Cleft of lip and/or Palate) and prepare case report • Prepare therapy materials for Speech sound disorders (Flash cards, materials to improve blowing skills) • Video presentation of management of dysarthria and voice abuse.	20
2. Describe various therapy technique for Language disorders	• Management of child language disorders. (DSL, ASD, SLD) • Management of adult Language Disorders (Aphasia)	• Observation of therapy sessions for language disorders • Prepare case report on the observed sessions • Prepare therapy materials for DSL (materials to improve attention,	20

		vocabulary and narrative skills)	
Total			**40**

Unit 4: Management of hearing disorders			
Expected Learning Outcome	**Theory (10 hrs)**	**Practical (10 hrs)**	**Duration (25 hrs)**
1. List out different types of hearing aids	• Introduction to Hearing Aids • Classification of hearing aids • Parts of Hearing aids	• Identification of hearing aid parts with the help of models • Prepare a chart showing advantage and disadvantage of different types of hearing aids • Group discussion on the importance of Hearing aid use. • Presentation on different types of hearing aids.	10
2. Explain care and maintenance of hearing aids	• Care and maintenance of hearing aids • Troubleshooting of a hearing aid	• Listening checkup of hearing aid • Battery testing of hearing aids • Prepare a checklist on care and maintenance of hearing aid.	5
3. Explain about cochlear implant	• Cochlear implantation and candidacy selection	• Presentation on Cochlear Implant. • Presentation on Auditory Verbal therapy	5
4. List out the types of assistive learning devices	• Assistive listening devices for hearing impaired children	• Special school visit • Presentation on assistive listening devices. • Prepare a project on future of rehabilitation of hearing impaired.	5
Total			**25**

Unit 5: Maintenance and administration of speech and hearing clinic			
Expected Learning Outcome	**Theory (12 hrs)**	**Practical (18 hrs)**	**Duration (30 hrs)**
1. List out the essentials requirements in speech and hearing clinic	• Speech therapy room • Sound treated/ sound proof room	• Speech and hearing clinic visit. • Virtual video visit of a Speech Therapy Clinic. • Virtual video visit of an Audiology Clinic.	10
2. List out the documents to be maintained in a speech and hearing clinic.	• Importance of record keeping in a speech and hearing clinic	• Visit a speech and hearing clinic and list out the documents/ files maintained.	10
3. List out the	• Calibration of	• To prepare an inspection	

instruments which require routine inspection.	audiology instruments	proforma for the instruments which require daily inspection	10
Total			**30**

Unit 6: Role and Responsibiliies, Maintaining Health and Safety at workplace by a SATA			
Expected Learning Outcome	**Theory (12 hrs)**	**Practical (18 hrs)**	**Duration (30 hrs)**
1. Explain responsibilities of SATA	• Role and responsibility of SATA in rehabilitation of speech and hearing disability • Different professionals involved in speech and hearing disability rehabilitation.	• Preparation of pamphlets/ • Charts on different professionals involved in speech and hearing disability rehabilitation. • Conduct awareness camps / survey. • Group discussion on role and responsibilities of SATA	15
2. Explain code of ethics in speech and hearing profession 3. Health and safety measures in speech and hearing department / clinic.	• Keeping confidentiality about the cases • Role and responsibilities of SATA- Maintaining health and safety at work	• Prepare a chart on various measures to be taken for personal hygiene and handling technique while performing duties • Group discussion on importance of code of ethics and keeping confidentiality of patients. • Preparation of pamphlets/ • Charts on different Health and safety issues in speech and hearing department / clinic.	15
Total			**30**

6. ORGANISATION OF FIELD VISITS/ ON-THE-JOB TRAINING

In a year, at least 3 field visits/educational tours should be organised for the students to expose them to the activities in the workplace.

Visit a Speech and hearing centre/ hospital/ special school and observe the following: Clinical administration, construction of audiology room, itineraries in speech therapy department. During the visit, students should obtain the following information from the owner or the supervisor of the center.

    1.   Clinical setup of Speech Pathology and Audiology department

    2.   Speech therapy and Audiology room

3. Instruments and tools used in Audiology and Speech therapy.
4. Different clinical populations.
5. Procedures and day to day affairs of the centre/ special school.
6. Early intervention programme.

On-the-job training of at least 80 hours is to be organized by the institution to provide hands-on training to the students.

7. LIST OF EQUIPMENT AND MATERIALS

The list given below is suggestive and an exhaustive list should be prepared by thevocational teacher. Only basic tools, equipment and accessories should be procured by theInstitution so that the routine tasks can be performed by the students regularly for practiceand acquiring adequate practical experience.

1. Audiology room
2. Audiometer
3. Otoscope
4. Turning fork
5. Ear mold impression material
6. Impression syringe
7. Otoblock
8. Otolight
9. Ear probe
10. Torch
11. Hearing aid models
12. Hearing aid stethoscope
13. Ear mold model
14. Anatomical models
15. Proformas for specific disorders and general case history
16. Test materials for speech and language assessment.
17. Speech therapy materials
18. Tongue depressor
19. Child friendly chair.

8. LIST OF CONTRIBUTORS

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