# Syllabus and Curriculum of Diploma in Audio and peech therapy Technician course

Uttar Pradesh State Medical Faculty, Lucknow.

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#### **OBJECTIVES OF THE COURSE**

To Prepare an audio & speech technician who can:-

- 1. Understand & conduct assessment of hearing loss.
- 2. Can evaluate person with hearing loss.
- 3. Can prescribe appropriate aids.
- 4. Can assess & evaluate speech disorders.
- 5. Can help in treatment of speech disorder.

#### Outline of Curriculum of Diploma in Audio and speech therapy Technician course

#### FIRST YEAR

#### **THEORY** (Classes: 9 AM to 12 Noon)

	First paper : Syllabus covers -
1. Anatomy & physiology of	hearing.
2. Diseases related to Ear.	

Second paper : Syllabus covers 
1. Audiology.

#### FIRST YEAR

#### PRACTICAL (Classes: 1 PM to 4 PM)

Practical classes will be after lunch; from 1 PM to 4 PM.

Students must present in the hospital for practicals.

#### During first year, they should be there only as "Observers" in practical classes.

#### Following subjects must be taught; though there will not be any exam from these-

- 1. Basic Computer skills.
- 2. Basic English.
- 2. **Soft skills like** Interpersonal relationship skills & moral education.

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## Outline of Curriculum of Diploma in Audio and speech therapy Technician course

#### SECOND YEAR

#### THEORY (claases: 9 AM to 12 Noon)

First paper : Syllabus covers -

- 1. Anatomy & physiology of voice & speech.
- 2. Disease related to voice & speech.

Second paper: Syllabus covers -

1. Speech & language Pathology & rehabilitation.

#### SECOND YEAR

PRACTICAL ( claases:9 AM to 12 Noon)

Described on page number 21.

#### ELIGIBILITY CRITERIA FOR ADMISSION & DURATION OF THE COURSE

#### **COURSE DURATION:-**

• It is 2 years, **full time** Diploma Course.

#### **ELIGIBITY:-**

• Candidate must have passed 12<sup>th</sup> with

Physics, Chemistry, Biology

Or

Physics, Chemistry, Maths

with 35% marks in Intermediate exams.

(From UP board or any other recognised board).

• Candidate must have completed age of 17 years of age as on 31<sup>st</sup> December of admission year. There is no maximum age limit for the admission.

#### SCHEDULE OF EXAMINATION

#### **FIRST YEAR**

<u>Paper</u>	<u>Subjects</u>	<u>Mark</u>	Internal Assessme nt Marks	<u>Total</u> <u>Marks</u>	Pass Marks	Duration of Exam.
<u>First</u> <u>Paper</u> <u>Theory</u>	<ol> <li>Anatomy &amp; physiology of hearing.</li> <li>Diseases related to Ear.</li> </ol>	75	25	100	50	3 Hours
Second Paper Theory	1. Audiology.	75	25	100	50	3 Hours
Practical	Oral & Practical	75	25	100	50	3 Hours

#### SCHEDULE OF EXAMINATION

#### **SECOND YEAR**

<u>Paper</u>	<u>Subjects</u>	<u>Mark</u>	Internal Assessme nt Marks	<u>Total</u> <u>Marks</u>	Pass Marks	Duration of Exam.
First Paper Theory	<ol> <li>Anatomy &amp; physiology of voice &amp; speech.</li> <li>Disease related to voice &amp; speech.</li> </ol>	75	25	100	50	3 Hours
Second Paper Theory	Speech & language Pathology & rehabilitation.	75	25	100	50	3 Hours
<u>Practical</u>	Oral & Practical	75	25	100	50	3 Hours

#### SCHEDULE OF COURSE

(List of holidays, Total hours, Subject wise allottement of hours)

#### • List of Holidays:-

Total Holidays	- 105 days
Preparatory holidays	- 10 days
Gazetted holidays	- 23 days
Winter vacation	- 10 days
Summer vacation	- 10 days
Sundays	- 52 days

#### • Total Hours:-

Theory classes per day

- 3 Hours

Practical classes per day

- 3 Hours

Total hours per day

- 6 Hours

Total days & hours in One year
(after deduction of holidays)

or
- 1560 Hours

#### SCHEDULE OF COURSE

#### **Subject wise allottement of hours**

#### **FIRST YEAR**

#### Theory (780 Hours) Practical (780 Hours)

	1.Anatomy & physiology of hearing.	60Hrs
<u>First</u>		
<u>Paper</u> <u>Theory</u>	2. Diseases related to Ear.	110 Hrs
Second Paper Theory	1.Audiology.	560 Hrs
Third Paper Practical	As described in curriculum	780 Hrs
Theory: Other	1.Basic Computer skills.	30 Hrs
Subjects (These subjects must	2.Basic English.	30 Hrs
be taught; though there will not be any exam from these)	3.Soft skills like - Interpersonal relationship skills & moral education	10 Hrs

#### SCHEDULE OF COURSE

#### **Subject wise allottement of hours**

#### SECOND YEAR

#### Theory (780 Hours) Practical (780 Hours)

<u>First</u> <u>Paper</u>	1.Anatomy & physiology of voice & speech.	50 Hrs
Theory	2.Disease related to voice & speech.	100 Hrs
Second Paper Theory	1.Speech & language Pathology & rehabilitation.	630 Hrs
Third Paper Practical	As described in curriculum.	780 Hrs

## Details of Curriculum for First Year Diploma in Audio and speech therapy Technician course

PAPER 1st Theory	Topics	Hours.
	Anatomy of External ear.	05 Hrs
1.Anatomy & physiology of	2. Anatomy of middle ear.	05 Hrs
hearing.	3. Anatomy of internal ear.	15 Hrs
	4. Anatomy of Vestibulo-cochlear nerve and auditory pathway	15 Hrs
	5. Physiology and neurology of hearing.	10 Hrs

## Details of Curriculum for First Year Diploma in Audio and speech therapy Technician course

PAPER 1st	Topics	Hours.
Theory		
	1. Discharge from ear.	05 Hrs
	2. Pain in ear.	05 Hrs
	3. Types, causes and assessment of hearing loss.	20 Hrs
2.Diseases related to Ear.	4. Impacted wax in external ear, Otitis externa, FB in external ear.	10 Hrs
	5. Diseases of Eustachian tube.	05 Hrs
	6. ASOM.	10 Hrs
	7. CSOM.	15 Hrs
	8. Otosclerosis.	05 Hrs
	9. Meniere's disease.	05 Hrs
	10. Acoustic neuroma.	05 Hrs
	11. Deaf child: Causes, approach and evaluation.	25 Hrs

#### Details of Curriculum for First Year Diploma in Audio and speech therapy Technician course

PAPER 2nd Theory	Topics	Hours.
1.Audiology	1. <b>Sound and Hearing :-</b> Definition of sound, Generation and transmission of sound, physical and psychological attributes of sound, Range of human hearing, , Age-wise behavioural responses to sound, Description of hearing, Functions of hearing, role of hearing in learning.	100 Hrs
	2. <b>Hearing loss:-</b> Definition and meaning of hearing loss, Causes and types of hearing loss, Effects of hearing loss, Signs & symptoms of hearing loss, Prevention of hearing loss, Early identification and its importance, Associated problems.	100 Hrs
	3. Evaluation of hearing:- Methods of testing hearing, tuning fork, audiometry, parts of an audiometer, audiogram, Procedure for obtaining an audiogram, Care and maintenance of equipment, preparation and maintenance of check list.	120 Hrs
	4. <b>Hearing aids &amp; earmolds:-</b> Definition of hearing aid, Need for a hearing aid, Different parts of a hearing aid, Different types of hearing aids, Earmold, role of earmold, making custom earmolds, Selection of conventional hearing aids.	120 Hrs
	5. Counseling on use, trouble shooting and rehabilitation: Use care and maintenance of hearing aid, Trouble shooting and minor repairs of hearing aids, Counselling, Role of speech and hearing technician in relation to the school for the deaf/retarded.	100 Hrs
	6. Organization of community awareness programmes, exhibition and selecting the materials required, parent meeting. Team approach and role of speech and hearing technician in the team.	20 Hrs
	7. <b>Government schemes</b> available for the welfare of the handicapped.	20 Hrs

#### Curriculum for

## Practical :- First Year Diploma in Audio and speech therapy Technician course

	Topics
	1. Methods of testing hearing, tuning fork, <b>audiometry, parts of an audiometer, audiogram,</b> Procedure for obtaining an audiogram, Care and maintenance of equipment, preparation and maintenance of check list.
Practical	2. Definition of hearing aid, Need for a hearing aid, Different parts of a hearing aid, Different types of hearing aids, Earmold, role of earmold, making custom earmolds, Selection of conventional hearing aids.
	Use care and maintenance of hearing aid, Trouble shooting and minor repairs of hearing aids

#### Details of Curriculum for Second Year Diploma in Audio and speech therapy Technician course

PAPER 1st Theory	Topics	Hours.
	1. Anatomy and physiology of pharynx, oesophagus and oroperipheral structures.	10 Hrs
1.Anatomy & physiology of voice & speech.	2. Anatomy and physiology of trachea	02 Hrs
	3. Anatomy and physiology of larynx	08 Hrs
	4. Physiology of phonation and respiration.	20 Hrs
	5. Speech centres in brain: Broca's area, wernicke's area.	10 Hrs

#### Details of Curriculum for Second Year Diploma in Audio and speech therapy Technician course

PAPER 1st	Topics	Hours.
Theory		
	Aphasia: definition, types, causes and assessment.	10 Hrs
	2. Phonation disorders: definition, causes and assessment.	05 Hrs
2.Disease	3. Disorders of articulation of speech: causes and evaluation.	05 Hrs
related to voice		
& speech.	4. Disorders of mouth, tumors of jaw and oral cavity, nasopharynx, pharynx.	10 Hrs
	5. Oesophageal atresia, TOF, short oesophagus, oesophageal tumors.	05 Hrs
	6. Cleft lip and palate.	05 Hrs
•	7. Diseases of tonsils and adenoids.	05 Hrs
	8. Laryngeal stridor:causes and evaluation.	10 Hrs
	9. Laryngomalacia.	05 Hrs
	10. Laryngeal web, atresia, fistula, cleft.	05 Hrs
	11. Laryngeal growths and tumors and FB.	05 Hrs
	12. Laryngitis.	05 Hrs
	13. Laryngeal trauma.	05 Hrs
	14. Neuromuscular dysfunctions of larynx, vocal cord palsy.	15 Hrs
	15. Laryngectomy.	05 Hrs
	16. Artificial larynx.	05 Hrs
·	(10)	

## Details of Curriculum for Second Year Diploma in Audio and speech therapy Technician course

PAPER 1st	Topics	Hours.
1.Speech & language Pathology & rehabilitation.	1. Introduction to communication, language & speech: *Definitions of communication, language & speech, *Interrelation between speech, language & hearing, *Prerequisites of communication: speaker, listener, speech chain, *Functions of communication, *Types of language: Non-verbal: sings, symbols, gesture, verbal: speech, *Parameters of language; orientation to phonology, semantics, syntax & pragmatics, *Parameters of speech: voice, articulation, fluency, prosody, Voice: pitch, loudness, quality; *Fluency: rate, continuity, effort; *Prosody: stress, intonation & rhythm.	130 Hrs
	2. <b>Speech mechanism &amp; speech production :-</b> *Structure and functions of the speech mechanism, Nervous system, Respiratory system, Phonatory system, Resonatory system, Articulatory system, *Description of the speech sounds, Voicing, Manner of articulation, Place of articulation.	100 Hrs
	3. Acquisition/Development of language and speech:  *Characteristics of normal speech & language and communication, *Stages in the acquisition of speech sound/phonology & important milestones, *Development of communication, *Factors affecting the acquisition of speech, language & communication.	100 Hrs
	4. <b>Disorders of speech and language :-</b> *Classification of the disorders, *Disorders of language: *general behaviours, language characteristics: expressive & receptive, *Mental retardation, *Autism, *Cerebral palsy, *Childhood aphasia, *Attention deficit disorder,	100 Hrs
	5. <b>Disorder of speech: general characteristics, symptoms,</b> Disorders of voice, pitch, quality, Disorders of articulation: structural, neurological, environmental, Disorders of fluency: NNF, stuttering, neurogenic stuttering, cluttering.	100 Hr
	6. <b>Prevention and Early identification of communication disorders:-</b> *Definition, Types of prevention, *General preventive measures, *Checklist/Tools for prevention and Early identification of communication disorders, *Guidance to parents, *Screening tools/High Risk Register.	100 Hrs
	(20)	

#### Curriculum for

### Practical :- Second Year Diploma in Audio and speech therapy Technician course

	Topics
Practical	
Tractical	1. Speech language: Diagnostics.
	2. Speech language: Therapeutics.