Total No. of Pages: 2

II Semester M.Sc. (SLP) Examination, June/July - 2017 (Scheme: CBCS)

SPEECH-LANGUAGE PATHOLOGY

Information Management in Speech, Language and Hearing (OE)

Time: 2 Hours

Max. Marks: 50

Instruction: Answer all questions.

Q1) a) i) Define Data, Information and Knowledge.

[5]

ii) Discuss the primary sources of information with special reference to the field of communication disorders. [10]

OR

b) i) Discuss the criteria for evaluating a health science website. [10]

ii) Explain the characteristic features of electronic information sources.

[5]

Q2) a) Compare the PubMed and COMDISDOME databases.

[10]

OR

b) Write short notes on:

[10]

Advanced search techniques.

ii) MeSH.

Q3) a) i) Justify the need for charing research information.

[5]

ii) Explain the basic rules for preparing reference list according to APA style. [10]

OR

b)	i) ·	What is Academic Writing? How does it differ				differ	from other v		writing
		contexts?							[10]

ii) Write short note on Mendeley Reference Management System.

[5]

Q4) a) What is Academic Integrity? Explain its importance in higher education.
[10]

OR

b) Explain the merits and demerits of Impact Factor.



Total No. of Pages: 2

II Semester M.Sc. (Audiology & S & H) Examination, June/July-2017 (Scheme: CBCS)

Neurophysiology of Hearing (SC)

Time: 2 Hours

Max. Marks: 50

Instruction: Answer all questions.

Q1) a) Describe the generation propagation and properties of action potential. Add a note on synapses in the auditory nerve. [10 + 5 = 15]

OR

- b) Explain the mechanisms involved in cooling of intensity and frequency in the auditory nerve. [15]
- Q2) a) Discuss the role of auditory brainstem in sound loaticotion. [15]

OR

- b) Describe the anatomy of Cochleor nucleus and superior minary complex. [15]
- Q3) a) Explain the neurobiological relationship between auditory center and other areas.

OR

b) Write note on:

[5 + 5 = 10]

- i) Plasticits in the auditory center.
- ii) Layers of the auditory cortex.

M-1699

Q4) a) Describe the anatomy of non classical auditory pathway.

[10]

OR

b) Discuss the physiology of Olivo-Cochleor bundle.



Total No. of Pages: 2

II Semester M.Sc. (Audiology) Examination, June/July - 2017 (Scheme: CBCS)

Psychophysics of Audition (HC)

Time: 2 Hours

Max. Marks: 50

Instruction: Answer All questions.

Q1) a) Define the spectral and temporal ques for auditory object perception.

[15]

OR

- b) Compare auditory pattern perception in individuals with and without hearing impairment. [15]
- Q2) a) Write notes on localization of complex tones in individuals with normal hearing.[15]

OR

- b) How are time-intensity trading & envelop cues used in perception of complex tones? [15]
- Q3) a) Explain the important cues that helps in binaural hearing. [10]

OR

b) What is the procedure and expected findings in MLD using complex signals? [10]

M-1697

Q4) a) What are the different methods of studying auditory adaptation? [10]

OR

b) What are the factors affecting auditory-adaptation?



Total No. of Pages: 2

II Semester M.Sc. (Audiology) Examination, June/July - 2017 (Scheme: CBCS)

Psychophysics of Audition (HC)

Time: 2 Hours

Max. Marks: 50

Instruction: Answer All questions.

Q1) a) Define the spectral and temporal ques for auditory object perception.

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M-1697

Q4) a) What are the different methods of studying auditory adaptation? [10]

OR

b) What are the factors affecting auditory-adaptation?



Total No. of Pages: 2

II Semester M.Sc. (Audiology) Examination, June/July - 2017 (Scheme: CBCS)

Electrophysiological Assessment of the Auditory System

Time: 2 Hours

Max. Marks: 50

Instruction: Answer All the questions.

Q1) a) Discuss the suitable stimuli to record late latency potentials. [10]

OR

- b) Discuss the various signal processing techniques used to record early potentials. [10]
- Q2) a) Discuss the clinical importance of various Electro Cochllography potentials. [15]

OR

- b) Discuss the various ways of recording frequency specific ABRs. [15]
- Q3) a) Elaborate on various factors that influences recording of ASSR. [15]

OR

b) Discuss the clinical application of LLR.

[15]

31912 M-1698

Q4) a) Explain the various stimulus and acquisition parameters that affects P300. [10]

OR

b) Discuss the importance and application of N400 and P600 potentials. [5 + 5 = 10]



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II Semester M.Sc. (Audiology)/M.Sc. (Speech Language Pathology) Examination, June/July 2017

(Scheme: CBCS)

CLINICAL BEHAVIOR ANALYSIS

Soft Core: Speech-Language Pathology

Time: 2 Hours Instruction: Answer all questions. Max.Marks:50						
I.	Q1) a	n)	Define learning. Highlight the major characteristics of behaviora approach.	al [5]		
	t	0)	Explain the application of ABC Model in behavior based intervention	_		
			OR			
	Q2) a	a)	Mention the differences between classical and operant conditioning	. [5]		
	ŀ	o)	Explain the major tenets and applications of dialectical behavior counseling.	ral [5]		
II.	Q3) a	a)	What is behavior assessment? Explain the steps involved in its use	e. [5]		
	ł	0)	Explain the applications of operant conditioning techniques in clin practice.	ical [10]		
			OR			
	Q4) a	a)	Describe the steps involved in systematic desensitization.	[5]		
	1	b)	Distinguish reward and punishment. Mention the negative effect Punishment.	s of [5]		
	(c)	Write a note on contingency contracting.	[5]		
III.	Q5) a	a)	Explain negative practice.	[5]		
	1	b)	Describe stress management techniques.	[5]		
	(c)	Write a note on aversive conditioning.	[5]		
	OR					
	Q6) :		Attempt an essay on behavior change techniques.	[10]		
		b)	Explain the guidelines to be followed in the use of time out. P.	[5] T.O.		

3	1916/	31969	M-1692
IV.	Q7) a)	What is biofeedback? Highlight its applications.	[5]
	b)	What is transactional analysis?	[5]
		OR	
	Q8) a)	Summarize the features of cognitive behavior techni-	ques. [5]
	b)	What is reality therapy?	[5]



Total No. of Pages: 3

II Semester M.Sc. (Audiology) Examination, June/July - 2017 (Scheme: CBCS)

Signal Processing Strategies and their Implementation in Hearing Aids

Time: 2 Hours Max. Marks: 50

Instruction: Answer All questions.

- Q1) a) With neat schematic diagram, explain the structure and working principle of the Microphone used in BTE hearing aids.[5]
 - b) Explain the difference between a passive tele-coil and an active tele-coil. Why an active tele-coil is required in hearing aids? [5]

OR

- Q2) a) Compare the features of a moving coil receiver and a balanced armature type receiver. Mention the implications of each of these features. [5]
 - b) Why zinc-air batteries are preferred in hearing aids? Explain the working of a zinc-air battery with supporting diagrams. [5]
- Q3) a) Explain the functions performed by a digital signal processor in a digital hearing aid.[5]
 - b) The analog signal from the output of the Microphone needs to be converted into digital form to process digitally in hearing aids. Explain in detail about this conversion. [5]

OR

- Q4) a) Comparing the block diagrams of analogue, trimmer controlled and digital hearing aids, highlight the difference in the amplifier structure. [5]
 - b) A hearing aid signal has to be filtered digitally for further signal processing. Which type of digital filter will be suitable for this? Justify. [5]

31917 M-1701

Q5) a) Explain the 3 approaches used for implementation of channel separation in hearing aids.[5]

- b) Name the three types of noise reduction strategies implemented in hearing aids. Briefly explain each one of them. [5]
- c) How will you decide the optimum attenuation level in each channel, when noise reduction is achieved through splitting the incoming signal into multiple frequency bands? Explain. [5]

OR

- Q6) a) "In multi channel WDRC systems, the more the number of channels, and faster the compression, the more will be the loss of spectral contrast".Justify.
 - b) Explain with an example, how spectral contrast influences the intelligibility of a phoneme when it processed through hearing aids. [5]
 - c) How adaptive directionality is achieved in hearing aids with multiple microphones? Explain. [5]
- Q7) a) Ear simulator measurements correspond better on average with real ear measurements than those made in the 2cc coupler. Why? Also mention why 2cc coupler is still preferred.[5]
 - b) Which type of coupler is preferred for electroacoustic measurements of an RIC hearing aid? Mention its features. [5]
 - c) Explain the electroacoustic procedure to get the input-output curve of a hearing aid with compression. Also illustrate how compression threshold and compression ratio are found out from this input-output curve. [5]

31917 M-1701

Q8) a) It is important to analyze how the temporal parameters of hearing aid output speech differs from the input speech. Justify. Show the equipment setup required to conduct such an analysis.[5]

- b) What is an ISTS stimulus? How is it used for electroacoustic evaluation of hearing aids? Highlight the merits of using this stimulus. [5]
- c) Comment on the shortcomings of the present procedure for electroacoustic evaluation of hearing aids. [5]

