ALI YAVAR JUNG NATIONAL INSTITUTE OF SPEECH AND HEARING DISABILITIES (DIVYANGJAN), MUMBAI – 4000 50

DIPLOMA IN HEARING AID AND EAR MOULD TECHNOLOGY (DHAEMT)

EXAMINATION FOR RCI RECOGNIZED CENTRES - SEPTEMBER, 2019

(FOR REGULAR (2018-19) BATCH CANDIDATES)

PAPER - I : HEARING AIDS

Date : 03.09.2019 **Duration : 3 hrs.**

Time : 10.00 a.m. to 01.00 p.m. **Max. Marks: 100**

==========

Q. I ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES (2 m x 5 = 10 marks)

(1) List the different components of hearing aids.
(2) Define Ohm's law.
(3) What are advantages of digital technology?
(4) What is analog hearing aid
(5) Write on sine wave oscillator

Q. II WRITE WITH BRIEF EXPLANATION (5 m x 4 = 20 marks)

(1) Trouble shooting of body level hearing aid
(2) AGC circuits
(3) Classification of filters based on frequency characteristics
(4) Explain in brief electrical power distribution

Q. III WRITE SHORT NOTES (ANY 5 OUT OF 6) (4 m x 5 = 20 marks)

(1) AGC circuits with their functions
(2) Frequency modulation
(3) Oscillators
(4) Advantages of compression circuits
(5) Infrared group amplification system
(6) PN junction diode

Q. IV ANSWER IN DETAIL (ANY 2 OUT OF 4) (10 m x 2 = 20 marks)

(1) Describe various electro acoustic characteristics measured in hearing aids.
(2) Describe the structure and working of condenser and electret condenser microphones.
(3) Describe push-pull amplifier in detail with a neat labeled diagram.
(4) Describe the structure and working of different types of receivers in a hearing aid.

Q. V ANSWER IN DETAIL (ANY 2 OUT OF 4) (15 m x 2 = 30 marks)

(1) Write an essay on the classification of different types of hearing aids. State their advantages and limitations.
(2) Explain direct coupled transistor amplifier. Describe the working of direct coupled transistor amplifier.
(3) What is modulation? Different types of modulation and describe amplitude modulation in detail.
(4) What are different group amplification devices? Describe in detail the advantages and disadvantages of each system.

****

ALI YAVAR JUNG NATIONAL INSTITUTE OF SPEECH AND HEARING DISABILITIES (DIVYANGJAN), MUMBAI – 4000 50

DIPLOMA IN HEARING AID AND EAR MOULD TECHNOLOGY (DHAEMT)

EXAMINATION FOR RCI RECOGNIZED CENTRES - SEPTEMBER, 2019

(FOR REGULAR (2018-19) BATCH CANDIDATES)

PAPER - II : EAR MOULD

Date : 04.09.2019 **Duration : 3 hrs.**

Time : 10.00 a.m. to 01.00 p.m. **Max. Marks: 100**

==========

Q. I ANSWER THE FOLLOWING QUESTIONS IN ONE OR TWO SENTENCES (2 m x 5 = 10 marks)

(1) What is a custom ear mould?
(2) Write any two causes for acoustic feedback because of ear mould problems.
(3) Write any one need for sound bore in an ear mould.
(4) What is conductive hearing loss?
(5) What is an otoscope?

Q. II WRITE WITH BRIEF EXPLANATION (ANY 4 OUT OF 5) (5 m x 4 = 20 marks)

(1) List the causes for sensorineural hearing loss.
(2) Uses of pinna.
(3) Write the problems that you can detect in ear moulds on visual inspection.
(4) Making of ear plugs
(5) Different stages in making soft ear mould

Q. III WRITE SHORT NOTES (ANY 5 OUT OF 6) (4 m x 5 = 20 marks)

(1) Conditions in which ear moulds can be used as protective devices
(2) Conditions in which ear impression cannot be taken
(3) Different types of ear moulds
(4) Problems faced while taking ear impression for a small child
(5) Precautions to be taken while taking ear mould impression
(6) Transmission of sound with reference to hearing

Q. IV ANSWER IN DETAIL (ANY 2 OUT OF 4) (10 m x 2 = 20 marks)

(1) Define sound. Describe in detail the transmission of sound with examples.
(2) What is hearing impairment? Describe in detail different ways of classifying hearing loss.
(3) Describe the need of an ear mould for hearing aid fitting. Describe in detail the advantages and limitations of hard and soft ear moulds.
(4) How do you counsel a parent of a young child with hearing impairment regarding care and maintenance of ear moulds?

Q. V ANSWER IN DETAIL (ANY 2 OUT OF 4) (15 m x 2 = 30 marks)

(1) What is the need for modifications in ear mould? Describe the various acoustic modifications in ear moulds.
(2) What is sensorineural hearing loss? Describe in detail the causes of sensorineural hearing loss.
(3) Draw a neat and labelled diagram of external ear. Describe the functions of the external ear.
(4) Describe in detail community based ear mould impression taking and ear mould making.

****