# 25-0002-AE

## **TEST BOOKLET**

Time Allowed: 3:00 hrs

#### MAIN PAPER

Maximum Marks: 120

## AUDIOLOGIST CUM SPEECH THERAPIST

#### INSTRUCTIONS TO CANDIDATES

Read the instructions carefully before answering the questions: -

- 1. This Test Booklet consists of 12 (twelve) pages and has 72 (seventy two ) items (questions).
- IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
- 3. Please note that it is the candidate's responsibility to fill in the Roll Number and other required details carefully and without any omission or discrepancy at the appropriate places in the OMR Answer Sheet and the Separate Answer Booklet, Any omission/discrepancy will render the OMR Answer Sheet and the Separate Answer Booklet liable for rejection.
- Do not write anything else on the OMR Answer Sheet except the required information. Before you
  proceed to mark in the OMR Answer Sheet, please ensure that you have filled in the required
  particulars as per given instructions.
- 5. Use only Black Ball Point Pen to fill the OMR Answer Sheet,
- This Test Booklet is divided into 4 (four) parts Part I, Part II and Part III
  - 7. All THREE parts are Compulsory.
  - Part-I consists of Multiple Choice-based Questions. The answers to these questions have to be marked in the OMR Answer Sheet provided to you.
  - Part II and Part III consists of Conventional Questions. The answers to these questions have to be written in the Separate Answer Booklet provided to you.
  - 10. In Part-I, each item (question) comprises of 04 (four) responses (answers). You are required to select the response which you want to mark on the OMR Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose ONLY ONE response for each item.
  - After you have completed filling in all your responses on the OMR Answer Sheet and the Answer Booklet(s) and the examination has concluded, you should hand over to the Invigilator only the OMR Answer Sheet and the Answer Booklet(s). You are permitted to take the Test Booklet with you.
  - 12 Penalty for wrong answers in Multiple Choice-based Questions:

THERE WIL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE.

- (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one-third of the marks assigned to the question will be deducted as penalty.
- (ii) If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will be same penalty as above to the question.
- (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no penalty for that question.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

#### PART-I

## MULTIPLE CHOICE BASED QUESTIONS

Instructions for Questions 1 to 60:

- · Choose the correct answer for the following questions
- · Each question carries 1 marks

 $(60 \times 1 = 60 \text{ marks})$ 

- 1) The presence of shadow curve is an indication of
  - A) Psychogenic hearing loss
  - B) Malingering
  - C) Functional hearing loss
  - D) Organic hearing loss
- Reducing the distance between the hearing aid user and to the speaker will help in improvement of
  - A) Noise level
  - B) Noise frequency
  - C) Signal-to-noise ratio
  - D) Signal to noise index
- 3) Which of the following is not a goal of auditory training
  - A) Improvement of residual hearing
  - B) Improvement of listening
  - C) Improvement of speech
  - D) Improvement of communication
- 4) Left hemisphere is characterized as
  - A) Intuitive
  - B) Logical
  - C) Holistic
  - D) Perceptual-spatial
- 5) Which of these muscles are extrinsic laryngeal depressors and act to lower the larynx
  - A) Suprahyoids
  - B) Intrahyoids
  - C) Posterior cricoarytenoid
  - D) Lateral cricoarytenoid

A) /s/
B) /z/
C) /f/
D) /I/
Reduplicated babbling is seen by the age of
A) 7 months
B) 2 months
C) 18 months
D) 12 months
3) The human cochlea acquire normal adult function after
A) 18 week of gestation
B) 19week of gestation
C) 20 week of gestation
D) 21 week of gestation
The primary motor area in the cortex is located in
A) Brocas area
B) Corpus callosum
C) Precentral gyrus
D) Angular gyrus
0) What does a biphasic acoustic reflex indicate?
A) Acoustic neuroma
B) Ossicular discontinuity
C) Otitis media
D) Stapes fixation
1) The communication between scala vestibule and scala tympani is established through
A) Helicotrema
B) Hamulus
C) Hebemulaperforata
D) Scala media

6) Which of the following is a lingualveolar, voiceless, fricative consonant

12) Chomsky's work is recognized as
A) Behavior therapy
B) Cognitive therapy
C) Speech act theory
D) Syntactic theory
13) Which type of Bekesy audiogram is seen in individuals with cochlear hearing loss
A) Type III
B) Type I
C) Type II
D) Type IV
14) Agenesis of corpus callosum is commonly seen in
A) Aicardi syndrome
B) Rett's syndrome
C) Ohtahara syndrome
D) Angleman's syndrome
15) The extent to which a test identifies individuals with real problems in the targeted area of communication is
Communication is
A) Test sensitivity
B) Test specificity
C) False positive
D) False negative
16) Which of the following is not a sonorant?
A) /I/
B) /n/
C) /s/
D) /r/
17) The process by which meaning of a message is obtained as a whole from an incomplete auditory information is called
A) Auditory expansion
B) Auditory integration
C) Auditory separation
D) Auditory closure

18) The n	nicrophone used in OAEs recording should have
A) H	igh internal noise and narrow bandwidth
B) L	ow internal noise and narrow bandwidth
C) L	ow internal noise and wide bandwidth
D) H	igh internal noise and wide bandwidth
19) What	is the benchmark disability as per the Rights of Persons with Disabilities Act 2016
for av	vailing various privileges
A) 20	0%
B) 30	)%

20) Which of these is not a subtype of CAPD listed under buffalo model?

22) Which layer of the true vocal folds is actually a combination of the epithelial lining and

23) Which of the following cannot be assessed using Western Aphasia Battery?

C) 40% D) 50%

A) decodingB) encoding

D) integration

C) tolerance Fading

A) Spastic paralysisB) Hyperactive reflexes

A) Transition layer

C) Mucosal layer

A) RepetitionB) FluencyC) AgnosisD) Content

B) Intermediate lamina propria

D) Superficial lamina propria

21) Damage in the upper motor neurons leads to

C) Spastic paralysis and hyperactive reflexes
 D) Flaccid paralysis and reduced reflexes

the disorganized first primary lamina propria layer?

A) 3-15	
B) 3-12	
C) 3-9	
D) 3-6	
25) Mand approach focuses primarily on which of the following skills	
A) Turn taking	
B) Requesting	
C) Topic maintenance	
D) Reasoning	
26) Which of the following is enhanced in a recording of ABR using horizontal electrode	
montage?	
A) Wave V	
B) Wave III	
C) Wave I	
D) Wave I and Wave V	
27) At what frequency would you carry out MLD to identify brainstem lesion?	
A) 4000 Hz	
B) 1000Hz	
C) 2000 Hz	
D) 500Hz	
28) Patient with cleft palate are always evaluated for	
A) Stickler syndrome	
B) Seckel syndrome	
C) Streiff syndrome	
D) Crouzon syndrome	
29) Fusion of palatal shelves begins at	
A) 8 <sup>th</sup> week	
B) 9 <sup>th</sup> week	
C) 10 <sup>th</sup> week	
D) 7 <sup>th</sup> week	

24) Glasgow Coma Scale ranges from

	nere the word 'psychology" does come from?
A)	Italian
B)	Greek
C)	Latin
D)	None of the above
32) Wh	no is the father of Experimental psychology?
A)	Wilhelm Wundt
B)	G. Jung
C)	Sigmund Freud
D)	None of the above
33) Wh	nich of the following is an example of the negative attitude toward people?
A)	Stereotype
B)	Prototype
C)	Prejudice
D)	Discrimination
34) AC	E speech coding strategy in a cochlear implant is a combination of
A)	SPEAK and CIS
B)	MSPEAK and CIS
C)	SAS and CIS
D)	SPEAK and HiRes
35) Wh	nich of the following part of the brain is responsible for transferring short-term
mer	mory to long-term memory?
A)	Cerebellum
B)	Hippocampus
	Amygdala
C)	

30) Why the oval window vibrates 20 times more faster than the eardrum?

A) Large surface area of oval window
 B) Small surface area of oval window
 C) Large vibrations in the oval window

D) Both B & C

	Judgment
B)	Style of behaving
C)	Memory
D)	Motor skills
38) Th	ne term used for describing a child's one-word utterances is
A)	Holophrases
B)	Telegraphic speech
C)	Under extension
D)	None of the above
39) Th	ne range of IQ in the people with moderate mental retardation is
A)	35 to 54
B)	10 to 19
C)	20 to 34
D)	55 to 70
40) De	ecibel expresses the logarithm of the ratio between two sound
	Intensities
B)	Powers
C)	Pressures
D)	Intensities, powers and pressures
41) Ui	nit of sound intensity is
A)	Joules per sq. cm
B)	Watt per sq. cm
C)	Joules per cm
-	Watt per cm

36) Which of the following is another term of reinforcement?

37) Which of the following is a part of the psychosocial domain?

A) RewardB) ConditionC) Response

D) None of the above

D) Endolymph
43) The lateral vestibulospinal tract originates in the
A) Vestibular ganglion
B) Inferior vestibular nucleus
C) Superior vestibular nucleus
D) Lateral vestibular nucleus
44) Development of Reflexive vocalization is marked at age
A) 2-3 years
B) 0-1 years
C) 4-6 months
D) 3-4 months
45) Words like utterances produced during language development are called
A) Jargon
B) Echolalia
C) Protowords
D) A and B
46) Ability to use language appropriately as per demand refers to
A) Duality
B) Performance
C) Code switching
D) Competence
47) Auditory training method given by Carhart consists of
A) 3 stages
B) 6 stages
C) 2 stages
D) 4 stages

42) The membranous labyrinth contains

A) CystolymphB) OtolymphC) Perilymph

A) 2 rows
B) 1 rows
C) 3 rows
D) 4 rows
49) Percentage of hearing disability required for the procurement of hearing aids free of costs under ADIP scheme is
A) 20%
B) 50%
C) 40%
D) 60%
50) Someone becomes bilingual by living in a bilingual environment is called as
A) Circumstantial bilingual
B) Simultaneous bilingual
C) Sequential bilingual
D) Elective bilingual
51) Roll-Over index is calculated using following formula
A) (PB max – PB min)/PB max
B) (PB max + PB min)/PB max
C) (PB max – PB min)/PB min
D) (PB max x PB min)/PB max
52) Synthetic Sentence identification test with ipsilateral competing message is
A) Monaural interaction test
B) Binaural interaction test
C) Monaural low redundancy test
D) Binaural low redundancy test
53) Reverberation time refers to the amount of time it takes for a steady state sound to
A) Increase by 40dB from its peak amplitude
B) decrease by 30dB from its peak amplitude
C) decrease by 60dB from its peak amplitude
D) Increase by 60dB from its peak amplitude

48) Inner hair cells in cochlea are placed in

54) Lower motor neurons are designated as
A) First order neurons
B) Second order neurons
C) Third order neurons
D) First and second order neurons
55) The volume enclosed in a HA 1 coupler and CIC coupler is
A) 2 cc, 1.2 cc
B) 2 cc, 0.4 cc
C) 1.2 cc, 0.4 cc
D) 6 cc, 1.2 cc
56) Which of these is not a subtype of CAPD listed under buffalo model?
A) decoding
B) encoding
C) tolerance Fading
D) integration
57) Artificial mastoid is a replication of
A) Acoustic impedance of the human head
B) Mechanical impedance of the human mastoid
C) Acoustic impedance of the human mastoid
D) Mechanical impedance of the human head
58) Inhalation phonation is a technique of voice therapy designed to evoke true vocal fold vibrations in persons who exhibit
A) Ventricular Phonation
B) Hard Glottal Attack
C) High Pitch
D) Breathy voice
59) The term intervocalic position refers to

A) Consonants precedes a vowel

C) Consonants that follows a vowel

B) Consonant embedded between two vowels

D) Vowel embedded in between two consonants

- 60) Vowel /u/ is
  - A) Low Back Vowel
  - B) High Back Vowel
  - C) Front Low Vowel
  - D) High Front Vowel

#### PART-II

## SHORT ANSWER TYPE QUESTIONS

(Answer any 5 out of 8 questions) 5x 6 marks each = 30 marks

- 61. Discuss the principles and uses of otoacoustic emissions (OAEs) in audiology.
- 62. Explain the importance of early identification and intervention in hearing loss in children.
- 63. Explain the structure and function of the outer ear and its role in the hearing process.
- 64. Discuss the role of augmentative and alternative communication (AAC) in speechlanguage pathology.
- 65. Explain the different types of therapy techniques used for children with stuttering.
- 66. Discuss the role of speech-language pathologist in the assessment of a child with suspected language delay.
- 67. Write a note on auditory training.
- 68. What are the phonological processes, and explain with examples how do they influence speech development?

### PART- III

## LONG ANSWER TYPE QUESTIONS

(Answer any 2 out of 4 questions) 2 x 15 marks each = 30 marks

- 69. Discuss central auditory processing disorders (CAPD) in children. Explain five behavioral tests for the assessment of CAPD in children.
- 70. Describe the various methods used for voice assessment and the treatment approaches for common voice disorders.
- Explain auditory brainstem responses and their site of origin. Also explain the difference betweenpediatric ABR protocol and adult protocol.
- 72. Discuss the various types of dysarthria and associated neurological conditions. Explain the treatment approaches focusing on articulation, resonance, and prosody.