2011
SPEECH PATHOLOGY AND AUDIOLOGY

Time Allowed : 3 Hours ]

Read the following instructions carefully before you begin to answer the questions.

IMPORTANT INSTRUCTIONS

1. This Booklet has a cover (this page) which should not be opened till the invigilator gives signal to open it at the commencement of the examination. As soon as the signal is received you should tear the right side of the booklet cover carefully to open the booklet. Then proceed to answer the questions.

2. This Question Booklet contains 200 questions.

3. Answer all questions.

4. All questions carry equal marks.

5. You must write your Register Number in the space provided on the top right side of this page. Do not write anything else on the Question Booklet.

6. An Answer Sheet will be supplied to you separately by the Invigilator to mark the answers. You must write your Name, Register No. and other particulars on side 1 of the Answer Sheet provided, failing which your Answer Sheet will not be evaluated.

7. You will also encode your Register Number, Subject Code etc., with Blue or Black Ink Ball point pen in the space provided on the side 2 of the Answer Sheet. If you do not encode properly or fail to encode the above information, your Answer Sheet will not be evaluated.

8. Each question comprises four responses (A), (B), (C) and (D). You are to select ONLY ONE correct response and mark in your Answer Sheet. In case you feel that there are more than one correct response, mark the response which you consider the best. In any case, choose ONLY ONE response for each question. Your total marks will depend on the number of correct responses marked by you in the Answer Sheet.

9. In the Answer Sheet there are four brackets [A] [B] [C] and [D] against each question. To answer the questions you are to mark with Ball point pen ONLY ONE bracket of your choice for each question. Select one response for each question in the Question Booklet and mark in the Answer Sheet. If you mark more than one answer for one question, the answer will be treated as wrong. e.g. If for any item, (B) is the correct answer, you have to mark as follows:

   [A] [B] [C] [D]

10. You should not remove or tear off any sheet from this Question Booklet. You are not allowed to take this Question Booklet and the Answer Sheet out of the Examination Hall during the examination. After the examination is concluded, you must hand over your Answer Sheet to the Invigilator. You are allowed to take the Question Booklet with you only after the Examination is over.

11. Failure to comply with any of the above instructions will render you liable to such action or penalty as the Commission may decide at their discretion.

12. Do not tick-mark or mark the answers in the Question Booklet.
1. Abnormal rapid increase in loudness with increasing sound level is called
   A) tone decay                           B) timbre
   C) recruitment                         D) phase locking.
2. Deiters' cells are
   A) associated with inner hair cells
   B) other name for inner hair cells.
   C) other name for outer hair cells
   D) a type of supporting cells called outer phalangeal cells.
3. The intensity of sound is determined in the basillar membrane of cochlea
   A) at basal turn of cochlea
   B) at apex
   C) by the point of maximum resonance
   D) by the amplitude of the wave at maximum resonance.
4. Cochlear microphonic is produced by
   A) movement of basillar membrane
   B) perilymph shunting
   C) modiolus
   D) scala tympani amplitude.
5. For stria vascularis all are true except
   A) lateral wall of scala media
   B) three layers of cells
   C) marginal cells towards spiral ligament
   D) rich in blood supply.
6. Biomechanical amplification which enhances the sensitivity and frequency selectivity of cochlea is done by
   A) afferent films
   B) inferior colliculus
   C) medial geniculate body
   D) outer hair cells.
7. Cochlear high tone loss is typically seen in
   A) Cisplatin
   B) Loop diuretics
   C) Quinine
   D) Salicylates.
8. Conditions that produce abnormal OAE's and normal behavioural thresholds are all except
   A) ototoxicity
   B) vestibular pathology
   C) excessive noise exposure
   D) central auditory disorder.
9. All the following are true about age related sensorineural hearing loss except:
   A) old terminology is Presbycusis
   B) mid to late adult onset
   C) progressive sensorineural hearing loss at higher frequencies
   D) recruitment is not present.

10. Semicircular canals provide information about
    A) Linear Acceleration
    B) Gravitational Vertical
    C) Angular Acceleration of head and body
    D) Angular Acceleration of only the head.

11. The test which uses familiar monosyllabic words presented to the subject at
    30 - 50 dB supra threshold level with lengthened sounds and pause is called
    A) Phonemic Synthesis test
    B) Completing Sentence test
    C) Binaural fusion test
    D) Staggered spondaic word test.

12. Basic otoacoustic emission recording set-up consists of all except
    A) miniature microphone
    B) computerized averaging system
    C) amplifier
    D) condenser.

13. Subjective methods of diagnosing non-organic hearing loss are all except
    A) Echoh-g
    B) Lombard test
    C) Stenger test
    D) Delayed audio feedback test.

14. Otolithic apparatus is sensitive to
    A) linear acceleration
    B) angular movement
    C) circular movement
    D) Slow side to side movement.

15. Arcuate eminence is good guide to locate
    A) lateral semicircular canal
    B) posterior semicircular canal
    C) superior semicircular canal
    D) part of cochlea.

16. Glycerol test is a valid test for
    A) Otosclerosis
    B) Meniere's disease
    C) Tympanosclerosis
    D) BPPV.
17. Which waveform is considered for threshold estimation in BERA?
   A) Only I  
   B) I and V  
   C) Only V  
   D) Only III.

18. The following factors support bilingual learning for Cochlear Implant (CI) children except:
   A) early age at implantation, especially before age 2  
   B) presence of additional disabilities  
   C) child exposed to rich and complex models of both languages  
   D) excellent speech perception skills with CI.

19. The characteristic(s) of Educational programs that support children with Cochlear Implants include(s):
   A) provides aggressive auditory instruction  
   B) places value on spoken language as an expressive communication tool  
   C) acknowledges the contribution that audition makes in spoken language learning  
   D) all of these.

20. The most common component(s) used for sound coupling in ALD's include(s):
   A) direct audio input  
   B) neck loop  
   C) silhouette inductor  
   D) all of these.

21. The term "auxiliary aids and services" include(s):
   A) computer aided transcription services  
   B) qualified interpreters & note takers  
   C) assistive listening devices only  
   D) all of these.

22. Among the following, which ALD method(s) can be used while watching television?
   A) Closed captioning  
   B) Real-time captioning  
   C) Open captioning  
   D) All of these.
23. The key elements of remediation strategies used with central auditory processing disorder proposed by Duff (1995) include
   A) repetitive stimulus presentation, with each stimulus eliciting a response
   B) feedback about accuracy of response should be provided
   C) intensive and systematic treatment should be provided
   D) all of these.

24. The Phoneme Training Program devised to improve central auditory skills includes the following except
   A) minimal pair discrimination activities
   B) imitation activities
   C) presentation of target sounds with increased loudness
   D) presentation of target sounds with prolonged production.

25. The Phoneme Training Program designed for central auditory processing disorder involves
   A) contextual utilization            B) phonetic placement
   C) minimal pair discrimination   D) successive approximation.

26. The tuning fork used for testing vibration is
   A) 512 Hz                          B) 128 Hz
   C) 1024 Hz                        D) 256 Hz.

27. In BERA abnormal wave 'V' interaural latency difference is due to
   A) Cochlear pathology            B) Retrocochlear pathology
   C) Mixed HC                     D) Auditory cortex pathway.

28. Level of sand above threshold of hearing for an individual is
   A) hearing level                 B) most comfortable level
   C) sensation level              D) loudness discomfort level.

29. Impedance of the medium consists of all except
   A) stiffness                      B) mass
   C) volume                         D) friction.
30. All are tests for non-organic hearing loss except.
   A) Stenger's test
   B) Chiamani-Moos test
   C) Teel's test
   D) Bing test.

31. For ABLB test all are true except.
   A) also known as Fowler's test
   B) two channel audiometer is required
   C) done in unilateral deafness
   D) it is an adaptation test.

32. True statement on the tympanic membrane is
   A) Tympanosclerosis increases compliance
   B) Ossicular disruption with intact tympanic membrane reduces compliance
   C) Fluid in the middle ear cavity increases compliance.
   D) Otosclerosis reduces compliance.

33. Match List I with List II correctly and select your answer using the codes given below:

<table>
<thead>
<tr>
<th>List I</th>
<th>List II</th>
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<tbody>
<tr>
<td>a) Ramsay-Hunt Syndrome</td>
<td>1. Gustatory lacrimation</td>
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<tr>
<td>b) Frey's syndrome</td>
<td>2. Otosclerosis</td>
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<tr>
<td>c) Crocodile tears</td>
<td>3. Geniculate Herpes</td>
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<tr>
<td>d) Schwartz sign</td>
<td>4. Gustatory sweating</td>
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</tbody>
</table>

   **Codes:**
   
<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
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34. Parameters measured in stapedial reflex are all except.
   A) Threshold
   B) Latency
   C) Decay
   D) Summation potential.

35. Magnification of otoscope is
   A) 2 ×
   B) 3 ×
   C) 4 ×
   D) 5 ×.
36. Normal middle ear pressure in Impedance Audiometry is seen in
   A) blocked eustachian tube  B) scanning of TM
   C) secretory otitis media    D) early acute otitis media.

37. Undue sensitivity of loud sounds is called
   A) autophony                 B) phonophobia
   C) diplacusis                D) objective tinnitus.

38. Among the following, which is not a part of noise desensitization activity for
    CAPD children?
   A) Level of competing multi-speaker babble with / without visual cues.
   B) Buffalo program for children with tolerance fading memory deficits
   C) Both (A) & (B)
   D) None of these.

39. For CAPD children, ............ skills are majorly impaired in noisy environments.
   A) auditory figure ground skills  B) auditory sequencing skills
   C) auditory recalling skills      D) auditory retention skills.

40. Among the following, which is not a different condition of speech perception and
    rehabilitation among profound deaf hearing aid listeners and cochlear implant
    listeners?
   A) Time course of learning
   B) High frequency sound detections
   C) Sequence of auditory learning
   D) Perception or access to others speech and over hearing of conversations.

41. Teaching curricula for Aural rehabilitation include(s)
   A) pattern perception       B) segmental identification
   C) comprehension           D) all of these.

42. Rehabilitation sessions should integrate goals of .............. with an
    environment that has appropriate social / emotional context.
   A) speech & language        B) perception
   C) pragmatics               D) all of these.

43. Almost all CI children acquire spoken language through
   A) didactic instruction     B) incidental learning
   C) both (A) & (B)           D) none of these.
44. Which is not a type of telephone amplifier?
   A) In-line amplifier
   B) Portable amplifier
   C) Real time amplifier
   D) Acoustic induction loop amplifier.

45. Which of the following does not include sound enhancement technology?
   A) Infrared systems
   B) Loop induction systems
   C) Frequency modulation systems
   D) Telephonic amplifying systems.

46. The maximum recommended magnetic field strength for a loop system is
   A) 400 mA/m (or) - 8dB re 1 A/m
   B) 600 mA/m (or) - 60dB re 1A/m
   C) 800 mA/m (or) - 80dB re 1A/m
   D) 750 mA/m (or) - 70dB re 1A/m.

47. Which of the following microphone styles is recommended for ALD's that are
    used in round table discussions in conference rooms?
   A) Lapel / Hand held style microphone
   B) Boom style Microphone
   C) Boundary Microphone
   D) None of these.

48. Cochlear potentials Recorded: Ecog electrocochleogram includes
   A) cochlear microphonic potentials
   B) summating potentials
   C) compound action potential of auditory nerve
   D) all of these.

49. In the specific management of Noise Induced Hearing Loss benefit to patient is
    in being filled with
   A) Monoaural Hearing Aid
   B) Binaural Hearing Aid
   C) Bone Anchoring Hearing Aid
   D) Cochlear Implant.

50. An individual can claim for damages due to Noise Induced Hearing loss if
    A) he worked for 5 years
    B) he worked for 10 years or more
    C) he worked for 10 years or more in one of the prescribed occupations
    D) he worked for 5 years in one of the prescribed occupations.
51. In pure tone Audiometry best frequency to start with is
   A) 125 Hz         B) 500 Hz
   C) 1000 Hz        D) 2000 Hz.

52. When testing the Bone conduction threshold in pure tone Audiometry, masking is done
   A) while the threshold difference to be 40 dB
   B) while the threshold difference to be 20 dB
   C) other ear should be always masked
   D) only when there is threshold difference.

53. In loudness recruitment
   A) quiet sounds cannot be heard by the patient
   B) loud sounds are heard at normal intensity
   C) (A) & (B) are correct
   D) (A) & (B) are wrong.

54. Sound Attenuation with Earmuff is
   A) 1 dB            B) 10 dB
   C) 15 dB           D) 5 dB.

55. Electronics used to provide inside Earmuff is
   A) 90 degrees out of phase with ambient sound
   B) 180 degrees out of phase with ambient sound
   C) 270 degrees out of phase with ambient sound
   D) 360 degrees out of phase with ambient sound.

56. To prevent Noise Induced Hearing Loss in the persons hearing protection choice is between
   A) Earplug         B) Earmuff
   C) Active Noise Reduction D) all of these.

57. 2 action levels for daily personal noise exposure description given Noise at work regulations of
   A) 1986            B) 1987

58. In the metabolic mechanism of cochlear injury in Noise Induced Hearing Loss
   A) change in cochlear blood flow
   B) outer hair cell-plasma membrane fluidity
   C) oxidation stress
   D) all of these.
59. Average noise emission level – calculation from
   A) noise level          B) time of exposure
   C) (A) & (B) are correct  D) (A) & (B) are wrong.

60. Eustachian tube function can be considered normal if
   A) peak pressure occurs near 0 dapa.
   B) peak pressure is negative – 100 dapa
   C) peak pressure is positive + 100 dapa
   D) none of these.

61. With Audicups the possible attenuation of environmental noise is
   A) 25 – 30 dB  B) 35 – 40 dB
   C) 30 – 35 dB  D) 20 – 25 dB.

62. The formula for minimum masking for bone conduction is
   A) $B_t + (A_m - B_m)$  B) $B_t - (A_m - B_m)$
   C) $B_t + (A_m + B_m)$  D) $B_t - (A_m + B_m)$.

63. Otoacoustic emissions are produced by
   A) inner hair cells  B) outer hair cells
   C) supporting cells  D) none of these.

64. For diagnosing a retrocochlear lesion the best test among the following is
   A) Impedance Audiometry  B) Speech Audiometry
   C) BERA  D) Electrocochleography.

65. The difference between most comfortable level and loudness discomfort level is known as
   A) Masking level  B) Sensation level
   C) Sound pressure level  D) Dynamic range.

66. Duration of forward masking is prolonged in
   A) retrocochlear disorder
   B) cochlear disorder
   C) both cochlear and retrocochlear disorders
   D) conductive disorder.
67. Type 3 tracings of Bekesy audiogram occurs in
   A) Normal cases          B) Meniere's syndrome
   C) Cochlear hearing loss D) VIIth nerve disorders.

68. The lowest hearing level in dB at which 50% of list of spondee words are correctly identified by a subject is known as
   A) Speech Discrimination Score       B) Speech Perception Threshold
   C) Speech Reception Threshold        D) Speech Identification Level.

69. Free field audiometry is useful in a child
   A) after 3 months       B) after 6 months
   C) after 2 months       D) after 4 months.

70. Dynamic range of the auditory nerve fibres is from
   A) $-20$ to $+140$ dB SPL B) $0$ to $90$ dB
   C) $25$ to $40$ dB        D) $10$ to $20$ dB.

71. The average permissible ambient noise for air conduction test is
   A) $20 - 25$ dB            B) $25 - 30$ dB
   C) $30 - 40$ dB            D) $40 - 45$ dB.

72. Acoustic reflex decay test is usually done at
   A) $250 - 500$ Hz          B) $500 - 1000$ Hz
   C) $1000 - 2000$ Hz        D) $1000 - 1500$ Hz.

73. Half-life of acoustic reflex refers to
   A) only half of the stapedius muscle fibres are active
   B) decrease in AR magnitude of 50% or more in 10 sec
   C) decrease in AR magnitude of 100% in 10 sec
   D) none of these.

74. Tone decay test method that also measures subjective change in pitch of pure tone is
   A) Carhart's method        B) Rosenberg's method
   C) Green's modified method D) Oslen and Noffsinger method.
75. Which of the following eye movements does not involve vestibular system?
   A) Caloric nystagmus  B) Rotational nystagmus
   C) Optokinetic nystagmus  D) Hallpike’s manoeuvre.

76. Recruitment is characteristic of
   A) retrocochlear lesion  B) cochlear lesion
   C) conductive lesion  D) mixed lesion.

77. The following are behavioural tests *except*
   A) SiSI  B) ABLB
   C) BEKESY Audiometry  D) BERA.

78. In fracture of both stapedial crura acoustic reflex is
   A) present  B) absent
   C) doubtful  D) ambiguous.

79. What is the sensitivity of ABR in detecting retrocochlear pathology?
   A) 50 %  B) above 90 %
   C) 70 %  D) 0 %.

80. Which potential is a pre-requisite for the ABR's N1?
   A) CM  B) SP
   C) AP  D) EP.

81. What is the main feature that differentiates TEOAE from DPOAE?
   A) Frequency dispersion
   B) In utilising non-linearities of the cochlea
   C) Both of these
   D) Intensity discrimination.

82. At 5 months baby
   A) can locate the sounds 30 dB in frontal horizontal plane
   B) can repeat his or her name
   C) both (A) & (B) are correct
   D) both (A) & (B) are wrong.
83. The most blatant acoustic defect that should never occur in sound treated room is

A) reflected sound          B) ambient noise
C) maximum reflections     D) echo.

84. The acceptable noise levels in dB SPL in audiometric test rooms when testing expected to reach '0' dB HL (ANSI 1991) for bone conduction of 8000 Hz frequency is

A) 34.5 dB  
B) 9 dB
C) 43.5 dB  
D) 20.5 dB.

85. The acceptable noise levels in dB SPL in Audiolometric test rooms when testing expected to reach '0' dB HL (ANSI 1991) for air conduction 1000 Hz frequency is

A) 19.5 dB  
B) 14.5 dB
C) 26.5 dB  
D) 14 dB.

86. Insulation of full tone tiles in sound treatment room thickness is

A) 100 mm  
B) 200 mm
C) 300 mm  
D) 400 mm.

87. The minimum capacity of AC needed for each partition of sound treatment room is

A) 1 ton  
B) 2 ton
C) 3 ton  
D) 5 ton.

88. The international standard(s) available now to measure acceptable test room standards is/are

A) ANSI 1991  
B) ISO 1983
C) ANSI 1991 and ISO 1983  
D) SPL.

89. The most popular system for calibration is

A) sound source calibrator  
B) piston phone
C) electronic items  
D) digital items.
90. The permissible variance in intensity per step in Bekesy audiometer is
   A) 1 dB
   B) 0.3 of indicated difference
   C) 2 dB
   D) less than 0.3 or 1dB whichever is less.

91. The audiometer commonly and frequently needing calibration is
   A) PTA
   B) Impedance
   C) BERA
   D) OAE.

92. What is calibration?
   A) Audiometric pure tones at specified level and frequency
   B) Signal direction to transducer
   C) Signal free from distortion
   D) Pure tone specific frequency free from distortion in transducer.

93. The easiest, final and most pure tone calibration is done by checking
   A) threshold of clinician
   B) threshold of normal person
   C) threshold of a patient
   D) threshold in average 5 patients.

94. All are true about binaural amplification except
   A) improved word identification
   B) improved localisation of sound source
   C) limitation is head shadow effect
   D) increased perception of high frequency consonants.

95. All and true about cross hearing aid except
   A) it is useful in unilateral hearing, other ear inaudible
   B) bicorn is useful in patient with inaudible hearing on one side and with some hearing loss in the better ear
   C) advantage is the elimination of head shadow effect
   D) useful in bilateral profound hearing loss.

96. The full form of ASSR is
   A) Audible Steady Signal Response
   B) Auditory Stimulation Signal Response
   C) Auditory Steady State Response
   D) Auditory Signal Stimulation Response.
97. What is the external device of a Cochlear Implant called as?
   A) Explant               B) Speech processor
   C) Relay device          D) Transmitter.

98. According to the Persons with disabilities rules the authority to give a disability certificate is
   A) Specialist from the concerned speciality
   B) Medical Superintendent of the hospital
   C) Medical Board
   D) PHE Medical Officer.

99. The minimum degree of disability required to be eligible for any concession of benefit is
   A) 30 %               B) 40 %
   C) 50 %               D) 60 %.

100. Ecoch-G measures
    A) summating potential
    B) resting potential
    C) action potential & summating potential
    D) action potential.

101. When a hearing impaired child has begun to use connected words meaningfully, parents and teachers are advised to use .......... strategy frequently to improve child's language skills.
    A) Expansion          B) Binary choices
    C) Imitation          D) Modelling.

102. For teaching articulation of /t/ sound to a hearing impaired child, following information can be provided except
    A) Internal feedback information (tactile) of point of tongue touching alveolar ridge
    B) Kinesthetic movement of tongue slightly upward to alveolar ridge
    C) Tactile information of vocal fold movements by keeping hands over neck
    D) Sensory information (tactile) of exploded air on skin of the hand.
103. Which of the following amplifiers is referred as "Push-Pull amplifier"?
   A) Class B           B) Class D
   C) Class A           D) Class H.

104. Which of the following statements is not appropriate regarding BAHA, when compared to bone conduction conventional hearing aids?
   A) Most of the vibratory motion of transducer is absorbed by skin and subcutaneous soft tissues.
   B) Satisfactory level of stimulation for patients with BC thresholds (500Hz, 1kHz, 2kHz & 3kHz) up to 45dB HL for head worn hearing aids
   C) Greater physical comfort
   D) Less visible.

105. The benefit(s) of Bilateral Cochlear Implantation include(s)
   A) improved performance in noise
   B) improved ability to localize sounds and voices
   C) better perception of music and classroom learnings
   D) all of these.

106. The external components of Cochlear Implant includes the following except
   A) microphone       B) speech processor
   C) transmitter coil  D) electrode array.

107. A hearing aid in one ear and Cochlear Implant in the other ear is called
   A) Hybrid Cochlear Implant          B) Bimodal Cochlear Implant
   C) Bilateral Cochlear Implant       D) Binaural Cochlear Implant.

108. In Cochlear Implants, the extra cochlear electrodes are placed
   A) on the plate of the receiving coil
   B) under the temporalis muscle
   C) surgically placed inside the cochlea
   D) both (A) & (B).
109. The code(s) used over telephone conversations, to improve speech perception include(s)
A) Speech codes  B) Touch – Tone Telephone code
C) International Morse code  D) all of these.

110. A non-linear hearing aid user reports squealing or whistling sounds in hearing aid only at
   I. Reading room
   II. Bedroom
   III. Market places
   IV. Railway station.
   of these
A) (I) & (II)
B) (III) & (IV)
C) (III) alone
D) (I), (II), (III) & (IV).

111. Which of the following is not a part of CHARGE ?
A) Heart defect  B) Atresia

112. All are true of the following except
In the past decades the choice of goals for intervention focussed on
A) correct production of individual consonants / vowels
B) elimination of error patterns
C) additions to the feature geometry by establishing new consonants
D) alterations of underlying knowledge and representation.

113. Dissociation between perceptual and conceptual priming tasks in children with dyslexia may be due to
A) limited attention span
B) slow information processing
C) difficulty in shifting attention quickly from one stimuli to other
D) none of these.
114. The following are features of Autism except
   A) Impairment in social interaction
   B) Lack of inhibition
   C) Insistence on sameness
   D) Impairment in verbal and non-verbal behaviour.

115. Dynamic MRI in swallowing assessment appreciates the following except
   A) approximation of velum towards the posterior pharyngeal wall
   B) the lid action of the epiglottis
   C) contraction and relaxation of cricopharyngeus
   D) motion of the posterior pharyngeal wall due to overlapping mandible.

116. Basic principles of family centered practice are all except
   A) may not develop collaborative relationship with the family
   B) the family, not an individual is the unit of intervention
   C) foster the family's sense of competence and independence
   D) respect the parents' right and responsibility to decide what's best for their child.

117. Auditory dys-synchrony may affect the functioning of all except
   A) outer hair cells
   B) inner hair cells
   C) synaptic junctions between inner hair cells and auditory nerve
   D) auditory nerve itself.

118. Children with slow expressive vocabulary development who also show delays in comprehension, phonology, rate of communicating and play skills. This is called
   A) Specific language impairment
   B) Delayed language due to cerebral palsy
   C) Pervasive development disorder
   D) Autism.
119. Metalinguistic awareness refers to all *except*

A) the ability of language user to reflect on
B) manipulate the structural features of spoken language
C) phonological, syntactic & pragmatic awareness
D) poor speech segmentation task.

120. The less mature language user has difficulty in selecting the appropriate code because she has

A) limited repertoire of language forms
B) poor social networks
C) language experience
D) multi-lingualism.

121. Child is referred for special education because

A) of abnormal behaviour
B) of suspected low IQ
C) parent / teacher is concerned about the child's performance
D) of peer pressure.

122. iDEA stands for

A) Individual's right to education
B) individual's direct access to education
C) Individuals with disability education act
D) Individuals with disability survival act.

123. The practice of speech language pathologist involved in a Hospital set-up includes all *except*

A) providing assessment, diagnosis & intervention
B) consultation and counselling
C) vocational rehabilitation
D) training and supporting family members.
124. All the following statements are true except

"Relational speech timing" can be used as a measure to understand the temporal dysregulations in the speech of cerebral palsy since
A) cerebro-cerebellar connections have a bearing
B) longer and varied voice onset timings
C) phonetic substitution errors of initial wordstops
D) good rate control and duration aspects.

125. The reason for the following statement includes all except

"The ratio of stuttering is approximately 3 to 5 males to every one female who stutters"
A) There is an inherited genetic predisposition to stutter that favours males
B) Environmental expectations of males differ
C) Females talk less
D) Males have been shown to exhibit more language and articulation problems.

126. Inter-lingual homophone retrieval abilities in normal bilinguals show all of the following except

A) the native language is more dominant for retrieval of meanings
B) teenagers perform similarly for both the languages
C) less proficient learners exhibit bilingualism
D) bilingual’s storage is shared but not organised.

127. The techniques commonly used to achieve relaxation are all of the following except

A) eliminating auditory feedback    B) meditation or deep breathing
C) bio-feedback                      D) suggestion.
128. All of the following are devices used for quantifying the amount of voice use in professional voice users except
   A) Portable voice accumulator          B) Speech timer
   C) Voice dosimeter                    D) Sphygmanometer.

129. One whole month of the year is devoted to spread public awareness of speech disorders. Which month is that?
   A) January                             B) March
   C) May                                 D) December.

130. Which is true about PLEP?
   I. It is a foundation of individualised education program
   II. It identifies the child’s strengths and weaknesses
   III. It stresses the performance of the child in academic and functional areas
   IV. It is used as a diagnostic tool for diagnosing aphasia
   A) I alone is correct
   B) All are correct
   C) I, II and III are correct
   D) IV alone is correct.

131. An augmentative alternate communication system should optimally address which of the following factors?
   I. Basic communication of want and needs
   II. Establishment and maintenance of interpersonal relationships
   III. To optimally train the individual to take care of himself
   IV. Should assist also in the diagnosis of the disorder.
   A) All of them are right
   B) I and II are right
   C) I and IV are right
   D) III alone is right.
132. Sound spectroscopy records which of the following parameters of spoken voice?

I. Temporal relationship
II. Frequency
III. Amplitude
IV. Intonation

A) I and II are correct
B) All are correct
C) I alone is correct
D) I, II and III are correct.

133. In speechmaster program the basic fundamental core aspect is

A) Real time phoneme recognition component
B) Delayed letter recognition component
C) Delayed word recognition component
D) Real time vowel recognition component.

134. CL/PSA is used to

A) identify hearing disorders
B) study language and phonological variations
C) identify students with special needs
D) identify students suffering from autism.

135. COMPASS assessment tool is

A) used to determine the competency levels of speech pathology students
B) used to assess the speech improvement in speech affected students undergoing therapy
C) used to diagnose articulation disorders in children
D) used to diagnose children with learning disability.
136. AAC systems are
   I. Usually unimodal
   II. Usually multimodal
   III. Used to supplement a person's ability to communicate
   IV. External devices which could be high tech or low tech.
   A) I and III are correct
   B) II alone is correct
   C) I, III and IV are correct
   D) II, III and IV are correct.

137. Kaleidoscope software is used to
   I. practise voice volume
   II. practise voice intensity
   III. practise voice amplitude
   IV. measure voice handicap index.
   A) IV alone is correct
   B) I, II and III are correct
   C) All are correct
   D) I alone is correct.

138. Development of complex computer algorithms for parsing spelling words into target orthographic structures and then aligning a student's spelling with the correct form has
   I. helped in identifying types of misspellings of each student
   II. helped in providing comprehensive description of a student's spelling ability
   III. helped in administering individualized follow-ups.
   A) I alone is correct
   B) All three are correct
   C) I and III are correct
   D) II alone is correct.
139. Electroglottography

I. gives information on the closure of vocal folds

II. it measures the electrical resistance by placing two electrodes around the neck

III. the output need not be filtered

IV. the output generated should be filtered using computer software.

A) I alone is correct
B) II alone is correct
C) I, II and IV are correct
D) III alone is correct.

140. Cognitive referencing is used to

A) identify those children who are not eligible for special education
B) identify children with autism
C) identify dyslexia
D) identify children with stuttering.

141. The most important aspect in assistive technology which is of importance is

A) Automaticity      B) Applicability
C) Upgradability     D) Resistance to obsolesce.

142. Normal Acoustic Reflex is elicited when a sound having pressure level of

A) 10 – 20 dB         B) 20 – 30 dB
C) 60 – 75 dB         D) 85 – 90 dB.
143. Match List I with List II correctly and select your answer using the codes given below:

<table>
<thead>
<tr>
<th>List I</th>
<th>List II</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Dysarthria</td>
<td>1. Wernicke's</td>
</tr>
<tr>
<td>b) Verbal Aphasia</td>
<td>2. Broca's</td>
</tr>
<tr>
<td>c) Anterior Aphasia</td>
<td>3. Disturbances in muscular control of speech</td>
</tr>
<tr>
<td>d) Posterior Aphasia</td>
<td>4. Disruption of speech motor planning.</td>
</tr>
</tbody>
</table>

**Codes:**

<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

144. In stages of syntactic development, holophrastic stage is

A) two-word utterances
B) modulation of basic sentences
C) acquiring most sentence structures
D) beginning of single word utterances

145. Who was the first among speech pathologists to present the steps of the scientific method for use by clinician?

A) McDonald
B) Petkins
C) Lindsay & Norman
D) Palmer.

146. "The goat got into the boat"

"The boat got into the goat"

This amusing speech reversal is called

A) Mesmerism
B) Mannerism
C) Spoonerism
D) Palilalia.

147. Engineering term for anti-resonances is

A) Impedance
B) Mel
C) Zeros
D) Pitch.
148. Phon is

A) a unit of equal loudness B) measure of subglottic pressure
C) frequency of cord movements D) measure of palatal movements.

149. The following are facilitatory techniques to direct modifications of overt
behavioural characteristics of the voice disorder except

A) Chewing B) Yawn-sigh
C) Pushing exercises D) Warm-up exercises.

150. Vocal ligament consists of

A) intermediate & deep layer of lamina propria
B) superficial & deep layer of lamina propria
C) epithelium & lamina propria
D) superficial & intermediate layer of lamina propria.

151. The following are the neck type battery operated artificial larynx except

A) Western electric electronic larynx
B) Aurex Neovox electronic larynx
C) Siemens Senox electronic larynx
D) Cooper – Rand electronic larynx.

152. Laryngeal pathologies would elevate S/Z ratio greater than

A) 0.5 B) 1
C) 1.4 D) 0.05.

153. Inability to recognise faces of other people or one's own face in a mirror is called

A) Prosopagnosia B) Hemi-anopsia
C) Confabulation D) Somesthesia.
154. Normal range for the human ear to detect vibration of sound is
   A) 0 – 1000 Hz  B) 20,000 – 30,000 Hz
   C) 25,000 – 35,000 Hz  D) 20 – 20,000 Hz.

155. The ability to think about and reflect on the nature of language and how it functions is
   A) Metathesis  B) Metalinguistics
   C) Metrical Phonology  D) Phonotactics.

156. At normal atmospheric conditions, sound travels through air at about
   A) 344 metres / second  B) 444 metres / second
   C) 500 metres / second  D) 600 metres / second.

157. A condition that develops due to prolonged use of neuroleptic drug is called
   A) Wilson's disease  B) Tardive Dyskinesia
   C) Amyotrophic Lateral Sclerosis  D) Sydenham's Chorea.

158. Slowness of movements, difficulty in stopping movement once initiated is called
   A) Tremor  B) Tics
   C) Cluttering  D) Bradykinesia.

159. An instrument that records respiratory movements as changes in chest and abdomen circumference is
   A) Plethysmograph  B) Spirometer
   C) Electroglottograph  D) Pneumograph.

160. All are guiding principles in intervention at the L4L stage except
   A) Curriculum based instruction  B) Go meter
   C) Preventive intervention  D) Receptive vocabulary.

161. Normal speech requires correct articulation, voice quality and
   A) expression  B) fluency
   C) skill  D) language.
162. Most effective treatments for stammering are all except
   A) Play therapy           B) Parent counselling
   C) Speech & language therapy D) Phonosurgery.

163. Rote speech is seen in
   A) Apraxia               B) Dysarthria
   C) Dysphonia             D) Dyslexia.

164. All are motor speech disorders except
   A) Apraxia               B) Dysarthria
   C) Fluency disorder      D) Dysphonia.

165. Speech may be interfered with all of the following except
   A) Tongue tie            B) Deafness
   C) Cleft palate          D) Cleft lip.

166. Most useful treatment for vocal abuse is
   A) Voice rest            B) Modified use of voice
   C) Medications           D) Reduce stress factor.

167. Phonosurgery is commonly done in
   A) Vocal polyps          B) Glottic carcinoma
   C) Vocal cord palsy      D) Laryngeal web.

168. Aims of organic disorders of speech are all except
   A) Muscle strengthening   B) Reduce the force of closure
   C) Vocal cord co-ordination D) Psychiatric counselling.

169. Rate of new occurrences of a condition in a population in a specified period of time is
   A) Prevalence            B) Incidence
   C) Primary prevention    D) Coincidence.
170. Autistic deficit in social and pragmatic skills in the presence of a history of normal cognitive and language development is
   A) Alport's syndrome  B) Asperger's syndrome
   C) Arnold-Chiari syndrome  D) Pierre Robin syndrome.

171. Speech and language defects that can occur in cleft palate include all except
   A) hyponasality
   B) nasal emission in pressure consonant
   C) weak pressure consonants
   D) dysphonia.

172. Which is true regarding the delayed speech & language development in a patient with cleft lip and cleft palate?
   A) First words are earlier
   B) Sentences are longer & more complex
   C) Articulatory development is slower
   D) Language comprehension and usage is faster.

173. People presenting with dental abnormality with cleft palate may be all except
   A) low arched palate
   B) malopposed teeth
   C) malocclusion
   D) defect of dental & maxillary mandibular relationship

174. Disorder of phonation in patients with cleft palate is often associated with
   A) hyperplasia and Hyperemia of vocal folds
   B) interarytenoid manipulation
   C) pale glottis
   D) turban epiglottis.

175. Vagus nerve lesion at the level of pharyngeal nerve branch leads to
   A) adductor palsy with palatopharyngeal palsy
   B) adductor palsy without palatopharyngeal palsy
   C) abductor palsy with palatopharyngeal palsy
   D) abductor palsy without palatopharyngeal palsy.
176. Most common reading disorder of childhood frequently associated with inadequate or inappropriate instruction or emotional disorders is
   A) Developmental dyslexia
   B) Pervasive developmental disorders
   C) Attention deficit hyperactive disorders
   D) Acquired childhood aphasia.

177. A progressive neurological syndrome associated with depigmentation of substantia nigra is
   A) Cogan syndrome
   B) Wilson's disease
   C) Parkinson's disease
   D) Müller-Fischer syndrome.

178. Scanning speech is a characteristic feature of
   A) Spastic dysarthria
   B) Ataxic dysarthria
   C) Hypokinetic dysarthria
   D) Hyperkinetic dysarthria.

179. PROMPT is a procedure for treating Apraxia of speech in children and adults for correct production of sound emphasises on
   A) Auditory cues
   B) Visual cues
   C) Proprioception cues
   D) Tactile kinesthetic cues.

180. Mask-like face is observed in patients with
   A) Dementia
   B) Wilson's disease
   C) Parkinsonism
   D) Chorea.

181. Phonological process that would disappear by the age of 3 years is
   A) Reduplication
   B) Epenthesis
   C) Cluster reduction
   D) Gliding.

182. Hypernasality can be observed in the following disorders except
   A) Cleft palate
   B) Submucous cleft palate
   C) Paralysis of velum
   D) Enlarged adenoid.
183. Bite block can be used to improve
   A) jaw control & strength    B) tongue strength
   C) lateral movements of jaw    D) glottal closure.

184. The formant frequency in the production of vowels which is influenced by the shape of the back of the tongue is
   A) $F_1$    B) $F_2$
   C) $F_3$    D) $F_4$.

185. A voiceless phoneme will be perceived as voice if voice onset time is less than
   A) 10 millisecond    B) 20 millisecond
   C) 30 millisecond    D) 40 millisecond.

186. People with cleft palate can have the following types of resonance except
   A) Hypernasal    B) Hyponasal
   C) Cul de sac resonance    D) Hyper-hypernasal.

187. The correct order of development in speech is
   A) Cooing, Non-differentiated crying, Babbling, First words
   B) Non-differentiated crying, Cooing, Babbling, First words
   C) Babbling, Non-differentiated crying, Cooing, First words
   D) Non-differentiated crying, Babbling, Cooing, First words.

188. Which of the following is the objective test?
   A) Audiogram    B) Impedance
   C) Hearing aid    D) None of these.

189. To adapt polar which kind of microphone can be used?
   A) Directional Microphone    B) Omni-directional Microphone
   C) Non-directional Microphone    D) None of these.

190. What can describe the characteristics of the hearing aid?
   A) Audiogram    B) Venting
   C) Matrix    D) Output.

191. The audible poorly calibrated electronic click occurs at
   A) 30 dB    B) 60 dB
   C) 90 dB    D) 120 dB.
192. The central auditory pathway includes all except
   A) dorsal and ventral cochlear nuclei  B) geniculate ganglion
   C) lateral leminiscus  D) auditory radiation.

193. The following are the communication aid systems except
   A) Additional speaker  B) Additional Battery system
   C) FM transmission  D) Video telephones.

194. Metz Recruitment Test is better opted to
   A) differentiate between a conductive hearing loss and sensorineural hearing loss
   B) differentiate between various types of conductive loss
   C) detect a cochlear lesion
   D) differentiate between a cochlear and retrocochlear lesion.

195. BERA is useful in comatose patients to detect
   A) the type of coma whether metabolic or structural damage
   B) nature of lesion causing coma
   C) predict the prognosis of the patient
   D) hearing loss in the patient.

196. The following are pathologies with increased compliance except
   A) ossicular chain discontinuity
   B) otosclerosis
   C) very large tympanic membrane
   D) post-stapedectomy ear.

197. Which of the following conditions shows negative middle ear pressure?
   A) Blocked Eustachian tube
   B) Stapedial otosclerosis
   C) Fixed Malleus syndrome
   D) Cerumen in the external auditory canal.
198. Subjective test(s) available for functional hearing loss is/are
   A) Stenger test  B) Doerfler-Stewart test
   C) all of these  D) Teal's test.

199. All are true about fragile 'X' syndrome except
   A) occur only in females
   B) communication and social deficits
   C) hyperactivity, stereotypic behaviour
   D) difficulties in processing sequential information.

200. Language disorder syndrome is characterised by the following except
   A) language comprehension, expression and use
   B) word finding difficulties
   C) apraxia of speech
   D) auditory processing and speech discrimination problem.