

NBCE
Mock Board Questions
Neuromusculoskeletal Diagnosis

1. Hyperacusis when associated with a facial nerve lesion occurs as a result of weakening of which muscle / structure?
 - A. tensor tympani
 - B. stapedius
 - C. tensor veli palatine
 - D. stylohyoideus

2. Nystagmus is identified by which of the following?
 - A. side of slow pursuit (slow component)
 - B. side of quick return (fast component)
 - C. side of ocular fatigue
 - D. side of neglect

3. Hemispheric lesions will cause a lower facial weakness on which side of body weakness?
 - A. ipsilateral
 - B. contralateral
 - C. facial weakness independent of body weakness
 - D. facial muscles will not be weak, but rather spastic

4. Herpes Zoster has a predilection for which cranial nerve?
 - A. 11
 - B. 3
 - C. 5
 - D. 12

5. Which of the following lesion sites is most likely to produce vertical nystagmus?
 - A. cerebellum
 - B. labyrinthine failure
 - C. brainstem
 - D. vestibular nerve

6. Caloric irrigation of the left ear with warm water will cause which response?
 - A. nystagmus to the right
 - B. nystagmus to the left
 - C. gait to the right
 - D. gait to the left

7. The paramedian pontine reticular formation (PPRF) is responsible for which of the following?
 - A. salivary function
 - B. heart rate regulation
 - C. control of the SCM and trapezius muscles
 - D. conjugate eye movement

8. Which of the following is most likely to NOT cause a sudden change in blood pressure resulting in syncope?
- A. Getting out of a hot tub
 - B. Going to the bathroom late at night
 - C. Mowing the lawn
 - D. Changing the oil in your car
9. A deficit in the visual field, specifically the left inferior quadrant would be indicative of a possible lesion where?
- A. right inferior parietal lobe
 - B. left superior parietal lobe
 - C. right occipital lobe
 - D. right temporal lobe
10. Regulation of bowel and bladder function is a feature of which lobe of the brain?
- A. Occipital
 - B. Parietal
 - C. Temporal
 - D. Frontal
11. Gerstman's syndrome of confusion between right and left sides of the body, finger agnosia, dyscalculia, and dysgraphia is a disorder of which region of the brain?
- A. Occipital lobe
 - B. Parietal lobe, non-dominant
 - C. Parietal lobe, dominant
 - D. Temporal lobe
12. The return of primitive reflexes, such as grasp and sucking is a feature of dysfunction of which region of the brain?
- A. Occipital
 - B. Parietal
 - C. Temporal
 - D. Frontal
13. Which of the following questions is least appropriate for a mini-mental state examination?
- A. Divide 100 by 8
 - B. Count down from 100 by 7
 - C. What is the capital of Hungary?
 - D. Do you know where you are?
14. What form of dysphasia consists of fluent speech, but with impaired content, comprehension, and repetition.
- A. Expressive
 - B. Receptive
 - C. Nominal
 - D. Conductive

15. In performing a caloric test, cold water is injected into the left ear. Which of the following is an accurate description of what should happen?
- A. Horizontal nystagmus with the slow phase to the left
 - B. Vertical nystagmus with an upbeat
 - C. Horizontal nystagmus with the slow phase to the right
 - D. Dizziness and nausea
16. A patient has difficulty finding the correct words and often produces incorrect words. The speech is non-fluent and hesitant. Repetition is better than spontaneous speech. This person most likely has a deficit in which of the following areas?
- A. Frontal lobe, posterior and inferior gyri
 - B. Temporal lobe, superior gyri
 - C. Parietal lobe, anterior cortical strip
 - D. Occipital lobe
17. Your 25 year old patient describes a severe headache in the frontotemporal area of her head that is throbbing and is somewhat relieved when she lies down. Her mother used to complain about these same symptoms. You suspect that she may be suffering from:
- A. migraine headaches
 - B. tension headaches
 - C. cluster headaches
 - D. hypertension
18. Your patient has Parkinson's disease which is sometimes referred to as 'shaking palsy'. Overall, this condition presents with a triad of signs. Two are rigidity and tremor. What is the third?
- A. double vision
 - B. incoordination
 - C. slurred speech
 - D. flexion posture
19. What is the characteristic that distinguishes classic vs. common migraine headache?
- A. severity
 - B. frequency
 - C. duration
 - D. prodrome
20. Your patient has a long history of chronic obstructive pulmonary disease. Which of the following are you most likely to observe?
- A. atrophied neck and trapezius muscles
 - B. anteroposterior = lateral chest diameter
 - C. increased tactile fremitus
 - D. unequal chest expansion

21. Allodynia refers to:
- A. pain from an ordinarily nonpainful stimulus
 - B. pain in multiple regions of the body
 - C. the presence of multiple pain qualities at the same site, such as tingling, burning, throbbing, etc.
 - D. an absence of pain sensation
22. Cozen's orthopedic test is indicative of?
- A. Medial Meniscus Tear
 - B. Lateral Epicondylitis
 - C. DeQuervin's Syndrome
 - D. Carpal Tunnel Syndrome
23. 14 year old patient presents with right infrapatellar pain, pain is increased upon exertion your most likely diagnosis is?
- A. Chondromalacia patella
 - B. Subpatellar Bursitis
 - C. Osgood Schlatter's
 - D. Baker's Cyst
24. During gait analysis, your patient manifests a gluteus maximus lurch. Which neurologic level is impaired?
- A. L3
 - B. L4
 - C. L5
 - D. S1
25. A one sided throbbing headache that is preceded by a short period of photosensitivity is likely to fit which of the following choices? To answer this question correctly, think carefully about the description of the headache and then apply critical analysis of the choices.
- A. Vascular and involves the posterior cranial circulation (vertebrobasilar)
 - B. Vascular and involves the anterior cranial circulation (carotid)
 - C. Mechanical and involves the upper cervical spine
 - D. Mechanical and involves the lower cervical spine
26. Which of the following is a clinical differential diagnosis to be considered in cases of vertigo?
- A. cervical spine dysfunction
 - B. anemia
 - C. hypotension
 - D. all of the above

27. A patient has difficulty finding the correct words and often produces incorrect words. The speech is non-fluent and hesitant. Repetition is better than spontaneous speech. This person most likely has a deficit in which of the following areas?
- A. Frontal lobe, posterior and inferior gyri
 - B. Temporal lobe, superior gyri
 - C. Parietal lobe, anterior cortical strip
 - D. Occipital lobe
28. Which of the following cranial nerves is most likely to convey painful afferents associated with a headache?
- A. Trigeminal
 - B. Facial
 - C. Glossopharyngeal
 - D. Vagus
29. Patients who suffer from labyrinthine failure are most likely to veer toward which side when walking?
- A. toward the affected side
 - B. away from the affected side
 - C. they typically do not veer to either side
 - D. they will veer back and forth
30. With a lesion affecting the labyrinth and subsequently the vestibular nerve, a person may tend to veer when walking to which side?
- A. the side of the lesion
 - B. the side opposite the lesion
 - C. either side depending on gravity
 - D. neither side
31. With a lesion affecting the labyrinth and subsequently the vestibular nerve, a person may tend to veer when walking to which side?
- A. the side of the lesion
 - B. the side opposite the lesion
 - C. either side depending on gravity
 - D. neither side
32. Which questions during history taking are considered “most risky” since they limit the information the patient thinks you want to know?
- A. Open ended questions
 - B. Direct questions
 - C. Leading questions
 - D. Explorational questions

33. The type of history taking that involves the touching on the main points without going into a detail is referred to as?
- A. Complete history
 - B. Inventory history
 - C. Problem history
 - D. Interim history
34. The type of history taking that is done when the patient's problem is acute, possibly life threatening is called?
- A. Complete history
 - B. Inventory history
 - C. Problem history
 - D. Interim history
35. C.A.G.E. & T.A.C.E questionnaires are used in patient's with a history of which condition?
- A. Alcohol abuse
 - B. Physical abuse
 - C. Sexual abuse
 - D. Drug abuse
36. The term "Iatrotropic Stimulus" means?
- A. Where the patient hurts
 - B. What the patient feels is the cause of their problem
 - C. What the patient's pain threshold is
 - D. What made the patient seek health care
37. A patient that has a lesion located in the basal ganglia (Substantia nigra), would present with which one of the following gaits?
- A. Steppage gait
 - B. Waddling gait
 - C. Festination gait
 - D. Stamping gait
38. The most commonly fractured carpal bone is:
- A. Scaphoid
 - B. Lunate
 - C. Pisiform
 - D. Capitate
39. The myotome test for the S1 segment is:
- A. Eversion of the ankle
 - B. Inversion of the ankle
 - C. 1st digit extension
 - D. 1st digit flexion

40. Meralgia Parasthetica involves compression of this nerve:
- A. Median
 - B. Sciatic
 - C. Lateral Femoral Cutaneous
 - D. Medial Antebrachial Cutaneous
41. The orthopedic test that involves pressing on the patient's mastoid processes in order to rule out a malingerer is called:
- A. Magnuson's test
 - B. Hoover's test
 - C. Mankopf's test
 - D. Libmans's test
42. The L5 dermatome involves:
- A. Dorsum of the foot
 - B. 1st digit of the foot
 - C. Lateral ankle including the 5th digit
 - D. Medial knee and the medial amalleolus
43. The reflex used to test the L4/L5 disc level is:
- A. Lateral hamstring reflex
 - B. Medial hamstring reflex
 - C. Achilles reflex
 - D. Patella reflex
44. The condition in which the 2nd toe is longer than the 1st toe is called:
- A. Bunion
 - B. Morton's neuroma
 - C. Morton's foot
 - D. Hallux rigidus
45. The body type that describes a person with a *sturdy* build is:
- A. Endomorph
 - B. Ectomorph
 - C. Plesomorph
 - D. Mesomorph
46. The best muscle to evaluate for C5 nerve root innervation is:
- A. Deltoid
 - B. Triceps
 - C. Brachioradialis
 - D. Extensor Digiti Minimi

47. Loss of extensor power to the hip will indicate a problem with the following muscle:
- A. Gluteus Minimus
 - B. Gluteus Medius
 - C. Gluteus Maximus
 - D. Gluteus Extensus
48. Which of the following tests is classically used to diagnosis lateral epicondylitis?
- A. Codman's test
 - B. Yergason's test
 - C. Cozen's test
 - D. Spurling's test
49. The deep tendon reflex involving the lateral hamstring, assesses which neurological level?
- A. L3
 - B. L4
 - C. L5
 - D. S1
50. On the Wexler scale of grading deep tendon reflexes, which number represents a normal response.
- A. 1
 - B. 2
 - C. 3
 - D. 4
51. The best laboratory test to confirm the presence of ankylosing spondylitis is?
- A. S.M.A.C.
 - B. C-reactive Protein
 - C. HLA-B27
 - D. A.S.O. titers
52. Which of the following othopedic tests is the best test to provoke deep anterior sacroiliac pain?
- A. Ganselen's test
 - B. Hibbs test
 - C. Yeoman's test
 - D. Fabere-Patrick's test
53. The orthopedic test Soto-Hall, is considered classically significant to which vertebral level?
- A. C7
 - B. T1
 - C. T7
 - D. T12

54. The Supraspinatus Test classically differentiates between which two muscles?
- A. Supraspinatus and Teres Minor
 - B. Supraspinatus and Bicep's
 - C. Supraspinatus and Pectoralis Major
 - D. Supraspinatus and Deltoid
55. Which of the following orthopedic tests must be done first before doing any Thoracic Outlet Tests?
- A. Allen's test
 - B. Adson's test
 - C. Wright's test
 - D. Modified Adson's test
56. Chronic stenosing tenosynovitis can be diagnosed using which orthopedic test?
- A. Finsterer's test
 - B. Finkelstein's test
 - C. Froment's Cone test
 - D. Phalen's test
57. The term rubor means:
- A. Pain
 - B. Swelling
 - C. Redness
 - D. Coldness
58. Dawbarn's test is a classic for?
- A. Subacromial bursitis
 - B. Subdeltoid bursitis
 - C. Cervical disc syndrome
 - D. Cervical rib syndrome
59. The Bracelet Test is considered a classic test for which of the following conditions?
- A. Osteoarthrosis
 - B. Rheumatoid Arthritis
 - C. Psoriatic Arthritis
 - D. Gouty Arthritis
60. Osteochondrosis of the capitulum is known as:
- A. Panner's disease
 - B. Kohler's disease
 - C. Sever's disease
 - D. Keinboch's disease

61. Degenerative bone pain that is worse in the morning but improves as the day goes on is classic for?
- A. Osteoarthrosis
 - B. Rheumatoid Arthritis
 - C. Psoriatic Arthritis
 - D. Gouty Arthritis
62. Heberden nodes are classically with which form of arthritis?
- A. Osteoarthrosis
 - B. Rheumatoid Arthritis
 - C. Psoriatic Arthritis
 - D. Gouty Arthritis
63. Injury to a nerve that results in a total severance of that nerve is called?
- A. Neuropraxia
 - B. Axonotmesis
 - C. Neurotmesis
 - D. Axonopraxia
64. Which nerve can be trapped at the Arcade of Froese?
- A. Radial
 - B. Median
 - C. Ulnar
 - D. Musculocutaneous
65. The vitamin that has actually reversed multiple sclerosis lesions in animals is which of the following?
- A. Vitamin A
 - B. Vitamin B12
 - C. Vitamin C
 - D. Vitamin D
66. The orthopedic test for TFL spasm is which of the following?
- A. Maisonneuve's test
 - B. Ober's test
 - C. Milgram's test
 - D. Allis test
67. Thoracic outlet syndrome (TOS) is often due to compression of the neurovascular bundle between the 1st rib or a cervical rib and which of the following muscles?
- A. Scalene
 - B. SCM
 - C. Upper trapezeus
 - D. Rhomboid

68. Absence of the patellar tendon reflex is most likely to be a problem in which of the following nerves?
- A. L2
 - B. L3
 - C. L4
 - D. L5
69. A patient presents with diffuse skin thickening and areas of hyperpigmentation and hypopigmentation. Radiographs reveal pulmonary fibrosis. The skin on her face seems so tight that it has pulled her mouth into an asymmetrical “snarl” appearance. She is probably suffering from which of the following?
- A. Multiple Sclerosis
 - B. Myesthenia Gravis
 - C. Polyarteritis Nodosa
 - D. Scleroderma
70. Patient lately has have difficulty in walking and he feels that he is falling to his right side. Patient has a loss of fine and vibratory sensation in his right foot. You would like to perform
- A. Romberg’s test
 - B. Hallpike maneuver
 - C. Pupillary light reflex
 - D. Jaw jerk reflex
71. Patient complaints of having hard time to sit up from lying down on the bed. He has no problem with his low back and his abdominal muscles seem to be intact and strong. You would like to examine
- A. Gag reflex
 - B. Gait analysis
 - C. Sensory of the upper extremities
 - D. Babinski’s sign
72. Patient is weak in finger (4th & 5th) flexion and finger abduction and adduction. There are signs of parasthesia on the medial aspects of the hand, the forearm, and the arm. Which of the following muscle test would you expect to be also weak?
- A. Shoulder abduction
 - B. Elbow extension
 - C. Wrist flexion
 - D. Thumb extension
73. Patient presents with muscle spasm and cogwheel rigidity in his right lower extremity. What other finding would you expect to find on the affected side?
- A. Hyper DTR
 - B. Weak extensors
 - C. Fasciculation of the muscles
 - D. Muscular flaccidity

74. A 56 year old patient complaints of dizziness when gets up from the bed or turning to his sides at night. His eyes show nystagmus to his right. You would like to perform
- A. Romberg's test
 - B. Hallpike maneuver
 - C. Pupillary light reflex
 - D. Deep tendon reflexes of the extremities
75. Patient presents with paralysis of his left side of the body and lower left side of the face. You would like to perform
- A. Romberg's test
 - B. Hallpike maneuver
 - C. Babinski's test
 - D. Turning test
76. Deep tendon reflexes stimulate which type of stretch receptors?
- A. Muscle spindle
 - B. Extrafusal muscle fibers
 - C. Gamma motor neurons
 - D. Golgi tendon
77. Patient says he chokes when he swallows his food. His speech is hard to understand and the gag reflex is absent in the patient. You would like to exam?
- A. Convergence-accommodation reflex
 - B. Hearing
 - C. Eyes
 - D. Uvula
78. Patient feels very weak shortly after starting exercise. He complains of being tired all the time. He is alert and responsive mentally. Sensory examinations are unremarkable. You would like to run
- A. Blood test
 - B. Nerve conduction velocity
 - C. MRI
 - D. ECG
79. Pin wheel is a neurological tool to examine
- A. Pain
 - B. Vibratory sense
 - C. Fine touch
 - D. Temperature
80. Which of the following motor pathway crosses at the lower medulla of the brain stem?
- A. Dorsal spinocerebellar tract
 - B. Dorsal column-medial lemniscus pathway
 - C. Spinothalamic tract
 - D. Corticospinal tract

81. Patient presents with a weak (4/5) elbow flexion, shoulder abduction, and shoulder retraction. Elbow extension, wrist and finger movements are unremarkable. There is no sign of sensory loss. This is a/an
- A. Musculocutaneous nerve lesion
 - B. Axillary nerve lesion
 - C. Dorsal root lesion
 - D. Ventral root lesion
82. Patient's left side of the body is paralyzed. Eyes are deviated away from paralytic side (looking to the right). This is a lesion in the
- A. Right frontal lobe
 - B. Right side of the pontine
 - C. Left side of the spinal cord
 - D. Peripheral nerves
83. Patient presents with a right hand wrist drop. Physical examination reveals that elbow, wrist, and finger extensors in the right upper extremity to be weak (3/5). Sensory on the dorsal radial aspect of the hand is not intact. This is a
- A. Klumpke's palsy
 - B. Erb-Duchenne paralysis
 - C. Radial nerve lesion
 - D. Median nerve lesion
84. Patient presents with a sensory loss on the lateral aspect of the right foot and a difficulty with toe walking on the affected foot. You may expect to find a subluxation at which vertebral level?
- A. L2-L3
 - B. L3-L4
 - C. L4-L5
 - D. L5-S1
85. Patient complaints of weakness in the right hand. Tinel's test on the medial epicondyle produces tingling in the ulnar aspect of the right hand. This is a
- A. Klumpke's palsy
 - B. Erb-Duchenne paralysis
 - C. Radial nerve lesion
 - D. Median nerve lesion
86. Which muscle often causes the patient to squirm and change positions while seated and results in pain in the low back, buttocks and posterior thigh.
- A. Gluteus maximus
 - B. TFL
 - C. Iliopsoas
 - D. Piriformis

87. Which condition is often treated with “nerve gliding” exercises.
- A. Thoracic outlet syndrome
 - B. Carpal tunnel syndrome
 - C. Lateral epicondylitis
 - D. Plantar fasciitis
88. The most common knee complaint is:
- A. Patellofemoral syndrome
 - B. Iliotibial tract syndrome
 - C. Osgood Slater disease
 - D. Tibial tuberosity tendonitis
89. Which of the following is a test for iliotibial tract syndrome?
- A. Sulcus test
 - B. Patellar grinding test
 - C. McMurray’s test
 - D. Nobel compression test
90. Focal tenderness of the wrist extensors at the elbow is indicative of:
- A. Lateral epicondylitis
 - B. Medial epicondylitis
 - C. Medial nerve entrapment
 - D. Entrapment posterior interosseous nerve
91. Walking with the thigh in flexion, abduction and external rotation is characteristic of?
- A. Psoas gait
 - B. Parkinson’s disease
 - C. The swing phase
 - D. The stance phase
92. The normal clothing of this 26 year old female patient is covering the entire body with the exception of the eyes. She had spent most of her ten years of marriage indoors because of religious beliefs. Her chief complaint was painful proximal muscle weakness especially the pelvic girdle, and bone pain. There was no history of trauma and she was not on any medication. On examination, she had bone tenderness on palpation, and positive Chvostek’s sign. The X-ray showed decreased bone density. She had raised alkaline phosphatase, decreased 25-hydroxycalciferol.
Give the diagnosis.
- A. Osteoporosis
 - B. Rheumatoid arthritis
 - C. Osteomalacia
 - D. Familial muscular dystrophy

93. A sudden onset of pain and swelling of a joint with no history of trauma suggests:
- A. Crystalline arthritis
 - B. Rheumatoid arthritis
 - C. Infectious arthritis
 - D. Two of the above
94. "Loss of consciousness associated with a loss of postural tone and spontaneous recovery" defines;
- A. Cerebrovascular accident
 - B. Syncope
 - C. Orthostatic hypotension
 - D. Arnold Chiari syndrome
95. Which of the following may cause peripheral neuropathy?
- A. Ischemia
 - B. Prolonged exposure to cold temperature
 - C. Sniffing glue
 - D. All of the above
96. "Restriction of joint play with hard end-feel at the end of range of motion, absent nerve root sign and sclerotogenous referred pain to shoulder/upper arm, pain reproduced with early cervical extension" Give the diagnosis
- A. Myofascial Pain Syndrome
 - B. Vertebrogenic Cephalgia
 - C. Cervical Facet Syndrome
 - D. Cervical Disk degeneration
97. Anterior head carriage and hypertrophy of the sternocleidomastoid muscle, constant ache with paresthesia along the medial arm and forearm, diminished pulse with Adson's test. Give the diagnosis.
- A. Vertebral subluxation
 - B. Facet tropism
 - C. Disc herniation
 - D. Thoracic outlet syndrome
98. Which of the following is unlikely to present with neurological dysfunction/
- A. Meningomyelocele
 - B. Meningocele
 - C. Spina bifida occulta
 - D. Spina bifida cystica
99. Pain in the buttock, radiating down the posterior thigh suggest:
- A. Sciatica
 - B. Piriformis syndrome
 - C. Sacroiliac joint dysfunction
 - D. None of the above

100. Which of the following gaits occurs in the lesion of Common Peroneal Nerve lesion?
- A. Stamping gait
 - B. Steppage gait
 - C. Myopathic gait
 - D. Circumduction gait
101. A patient of yours gets seizures once a day. He says that right before the episode of a seizure he has a feeling of hearing and smelling something. Where would you suspect his seizure is starting from?
- A. The frontal lobe
 - B. The parietal lobe
 - C. The occipital lobe
 - D. The temporal lobe
102. A patient of yours suffers from pain in the ulnar aspect of the right hand. hypothenar muscles are weak. Other neurological examinations are unremarkable. You would expect of a lesion of the
- A. Radial nerve
 - B. Musculocutaneous nerve
 - C. Median nerve
 - D. Ulnar nerve
103. Deficiency of which vitamin results in the subacute combined degeneration of the spinal cord?
- A. Vitamin A
 - B. Vitamin B12
 - C. Vitamin C
 - D. Vitamin E
104. In subacute combined degeneration, you would expect to find all of the following EXCEPT
- A. Spastic paraparesis
 - B. Loss of proprioception
 - C. Loss of pain
 - D. Dementia
105. Removing of which of the following axonal type may reduce pain in the injured area?
- A. Large diameter axons
 - B. Sympathetic axons
 - C. Motor axons
 - D. Ia axons

106. Knee extension, foot inversion and dorsi flexion, and toes (2nd-5th) dorsi flexion are weak. Other muscle examinations are unremarkable. You would suspect a lateral disc protrusion of
- A. L2-L3 disc
 - B. L3-L4 disc
 - C. L4-L5 disc
 - D. L5-S1 disc
107. Which two of the cranial nerves are being tested in the pupillary light reaction examination?
- A. II (optic nerve) and III
 - B. II and III (Oculomotor)
 - C. II and V (trigeminal)
 - D. II and VII (facial)
108. A patient presents with a weak elbow flexion, shoulder abduction, and shoulder retraction. Elbow extension, wrist and fingers movements are unremarkable. There is no sign of sensory loss. Where is the lesion?
- A. Axillary nerve lesion
 - B. Medial nerve lesion
 - C. Dorsal root lesion
 - D. Ventral root lesion
109. Gower's sign is associated with this disease which will affect proximal muscles of lower extremities. Target individuals are young age kids who will develop cardio-respiratory complications in 20's. This is seen in?
- A. Horner's syndrome
 - B. Marcus Gunn pupil (Relative afferent pupillary defect)
 - C. Duchenne muscular dystrophy
 - D. Amyotrophic lateral sclerosis (ALS)
110. Patient complaints of having hard time to sit up from lying down on the bed. He has no problem with his low back and his abdominal muscles seem to be intact and strong. Where might there be a lesion?
- A. Superior brachial
 - B. Ciliary ganglion
 - C. Cerebellar vermis
 - D. Ventral horn

NBCE
MOCK BOARD
QUESTIONS
NEURO-
MUSCULOSKELETAL
DIAGNOSIS
Answer Key

1. B
2. B
3. A
4. C
5. C
6. B
7. D
8. D
9. A
10. D
11. C
12. D
13. C
14. B
15. A
16. A
17. A
18. D
19. D
20. B
21. A
22. B
23. C
24. D
25. A
26. D
27. A
28. A
29. A
30. A
31. A
32. C
33. B
34. C
35. A
36. D
37. C
38. A

39. A
40. C
41. D
42. A
43. B
44. C
45. D
46. A
47. C
48. C
49. D
50. B
51. C
52. C
53. C
54. D
55. A
56. B
57. C
58. A
59. B
60. A
61. A
62. A
63. C
64. A
65. D
66. B
67. A
68. C
69. D
70. A
71. B
72. C
73. A
74. B
75. C
76. A
77. D
78. A
79. A
80. D
81. D
82. A
83. C
84. D

85. A
86. D
87. B
88. A
89. D
90. A
91. A
92. C
93. D
94. B
95. D
96. C
97. D
98. C
99. B
100. B
101. D
102. D
103. B
104. C
105. B
106. B
107. B
108. D
109. C
110. C