1) Which of the following is not a possible reason explaining the increased vulnerability of the developing brain to the effects of concussion?
   a) Periods when the brain is more susceptible to injury and recovery is more difficult
   b) Thinner frontal and temporal cranial bones
   c) Greater brain plasticity
   d) Diffuse and more prolonged cerebral swelling

2) Second impact syndrome has a morbidity rate of _______ and a mortality rate of _______.
   a) 50%, 25%
   b) 100%, 50%
   c) 50%, 100%
   d) 75%, 50%

3) Which of the following are concerns with recurrent concussions?
   a) Increased severity of symptoms with subsequent injury
   b) Increased risk for sustaining subsequent concussions
   c) Prolonged recovery
   d) All of the above
   e) B and C only

4) The majority of recurrent concussions occur within the first ten days following the initial injury.
   a) True
   b) False

5) Which of the following examination “tools” can be used to evaluate concussions in high school athletes?
   a) Standardized Assessment of Concussion
   b) Neuropsychological tests
   c) Symptom scales
   d) Balance Error Scoring System
   e) All of the Above

6) According to the NFHS, an athlete can return to play on the same day only if which of the following criteria are met?
   a) Head injury did not result in any LOC
   b) The injured athlete has no history of previous concussion
   c) Any “confusion” or altered mental status clears in < 10 minutes
   d) All of the above
   e) A and B only

7) Younger athletes should be managed with extra caution following a concussion and likely require longer recovery times before returning to play.
   a) True
   b) False

8) During a sideline concussion exam, which of the following should be determined in the history section?
   a) Presence and intensity of symptoms
   b) Loss of consciousness
   c) Presence or absence of amnesia
   d) All of the above

9) The stress test portion of the sideline exam should include the 3 C’s, which are all of the following, except:
a) Cognition
b) Cranial nerves
c) Consciousness
d) Coordination

10) Which of the following progressions should be utilized when returning an athlete to play following a concussion?
   a) No progression, can return to sport when asymptomatic
   b) Asymptomatic at rest → asymptomatic with exertion → restricted sport specific activity → unrestricted sport specific activity
   c) Asymptomatic at rest → asymptomatic with exertion → unrestricted sport specific activity → restricted sport specific activity
   d) Asymptomatic at rest → restricted sport specific activity → unrestricted sport specific activity
   e) None of the above

11) During a sideline examination of a concussed athlete, how often should vital signs be monitored?
   a) Only during the initial examination
   b) Every 5 minutes
   c) Every 10 minutes
   d) Not required with a concussion

12) Which of the following items should be listed on the “Home Instruction Sheet” for concussions?
   a) Contact information for the ATC
   b) When the athlete should return for follow-up evaluation
   c) What it is OK for the athlete to do
   d) What signs of deteriorating status should be monitored
   e) All of the above

13) The use of a scientific and standardized battery of post-concussion tests has been shown to ______ when compared to a clinical exam alone.
   a) Be detrimental
   b) Be less accurate
   c) Have no effect
   d) Be more accurate

14) A reliable test for measuring post-concussive cognitive function must be ________
   a) valid, concise and vague
   b) valid, sensitive and specific
   c) random, sensitive and specific
   d) random, concise and vague

15) When should neuropsychological (NP) testing first be administered?
   a) During the pre-season
   b) Immediately following the injury
   c) Within the 1-3 hours following the injury
   d) 2-3 days after the initial concussion

16) A patient’s post-concussion symptoms may subside at rest, but reappear with:
   a) Eating
   b) Reading
   c) Exertion
   d) Sleeping

17) In order to detect a true impairment, the patient’s cognitive abilities must be compared to:
   a) Normative data
   b) Baseline data
   c) The desire to return to activity/sport
   d) All of the above
18) Which of the following symptomatology scales/checklists have been subjected to the rigors of research in regards to their validity and reliability?
   a) Post-concussion symptom scale
   b) Graded symptom checklist
   c) Dr. Piland’s length of symptoms assessment
   d) All have validity and reliability data established

19) If utilizing initial symptomatology testing during PPEs, one way to decrease the extraneous causes of symptoms of concussion (e.g., headache, nausea, etc.) for the patient who has been physically ill in the last 24-72 hours is to…
   a) Ask what their symptoms were before getting ill
   b) Ask patient to return within 48 hours for symptomatology testing
   c) Skip symptomatology testing
   d) Test after practice

20) Which typical concussion test involves several areas of the brain?
   a) Balance
   b) Memory
   c) Vision
   d) Eye tracking

21) Each battery of tests in the Balance Error Scoring System (BESS) are performed for:
   a) 90 seconds
   b) 60 seconds
   c) 40 seconds
   d) 20 seconds

22) A Balance Error Scoring System (BESS) trial is considered “incomplete” if a patient cannot hold the test position for:
   a) 5 seconds
   b) 10 seconds
   c) 20 seconds
   d) 30 seconds

23) The Balance Error Scoring System (BESS) requires the patient to first stand on a firm surface, then repeat the test on a surface of medium density foam that is approximately the thickness of:
   a) A football thigh pad
   b) A ream of copy paper
   c) A wheelchair cushion
   d) A one inch notebook binder

24) According to the lab video segment, a patient has failed the Balance Error Scoring System (BESS) if he/she has a score over their baseline by more than:
   a) 6 points
   b) 20 points
   c) 20%
   d) 10%

25) When implementing the Balance Error Scoring System (BESS), the Certified Athletic Trainer must observe the patient perform two batteries of tests, each involving:
   a) 4 different stances
   b) 2 different stances
   c) 3 different stances
   d) 1 stance

26) The Standard Assessment of Concussion (SAC) is designed for use as a stand-alone tool for examining concussion and return to play.
   a) True
   b) False
27) During the Standard Assessment of Concussion (SAC), external maneuvers such as sit-ups and push-ups should:
   a) Be completed prior to the immediate memory check
   b) Be completed prior to the delayed recall check
   c) Never be considered during SAC testing
   d) Be scored with 1 point each when completed successfully

28) Immediate and delayed recall scores on the Standard Assessment of Concussion (SAC) are based on the patient’s ability to repeat:
   a) 3 words in 2 immediate trials and then again 5 minutes later
   b) 5 words in 3 immediate trials and then again 20 minutes later
   c) 3 words in 2 immediate trials and then again 20 minutes later
   d) 5 words in 3 immediate trials and then again 5 minutes later

29) In addition to neurological screening, the Standard Assessment of Concussion (SAC) provides for examination of orientation, immediate memory, delayed recall and:
   a) exertional status
   b) concentration
   c) cognitive ability
   d) balance

30) Which of the following is not an important reason for medical documentation?
   a) Memory aid
   b) Professional standards
   c) Legal protection
   d) None of the above