CME Post Test

Direction

1) The lack of vision negatively affected which physical mode?
   a. Walking
   b. Jogging
   c. Both walking and jogging
   d. Jogging more than walking

2) What was the main finding of the study by Nakamura on the step time parameters of gait?
   a. There was no effect on walking speed
   b. Shorter step length and reduced duration of stance
   c. Longer step length and reduced duration of stance
   d. Shorter step length and prolonged duration of stance

3) Which disorder is typically observed in blind people?
   a. Skeletal malformation and muscle imbalance
   b. Muscle imbalance
   c. Skeletal malformation
   d. Only the visual sense is affected, but the movement pattern is normal

4) Which of the following is commonly used to calculate the energy cost during exercise?
   a. Physiological cost index (PCI)
   b. CO_2
   c. O_2
   d. Heart rate

5) What is the correct formula to calculate PCI?

   a. $PCI = \frac{\text{Walking HR} - \textit{Resting HR}}{\textit{Walking Speed}}$

   b. $PCI = \frac{\textit{Resting HR} - \text{Walking HR}}{\textit{Walking Speed}}$

   c. $PCI = \frac{\text{Walking HR} + \textit{Resting HR}}{\textit{Walking Speed}}$

   d. $PCI = \frac{\text{Walking HR} - \textit{Resting HR}}{\textit{Number of steps}}$

6) What is the prevalence rate of postural deformities in blind people?
   a. 80%
   b. 60%
   c. 40%
   d. 20%

7) Impairment of the visual receptors influences which of the following?
   a. Spatial orientation
   b. Balance
   c. Motor skills
   d. All of the above

8) Which type of walking track was used to conduct the test procedure?
   a. Circular indoor walking track
   b. Oval-shaped indoor walking track
   c. Circular outdoor walking track
   d. Oval-shaped outdoor walking track

9) How were the participants grouped in the present study?
   a. Blind and sighted group of students
   b. Two groups of sighted students
   c. Two groups of blind students
   d. Young and adult group of blind students

10) Why blind students took a shorter step length?
    a. To reduce the energy consumption of walking and jogging
    b. To increase the speed of walking and jogging
    c. To overcome muscle stiffness
    d. To overcome gait uncertainty

11) What was the outcome of the comparison between the PCI of the blind and sighted students?
    a. Blind students spent less energy
    b. Blind students spent more energy
    c. Blind students spent an equal amount of energy
    d. Blind students spent at least as much or more energy

12) What was the outcome of the comparison between the gait kinematics of the blind and sighted students?
    a. Blind students achieved higher gait kinematics
    b. Blind students achieved higher or equal gait kinematics
    c. Blind students achieved lower or equal gait kinematics
    d. Blind students achieved lower gait kinematics

13) What is the effect of vision impairment?
    a. Reduced task-specific energy consumption
    b. Increased task-specific energy consumption
    c. No effect on task-specific energy consumption
    d. Disability to walk

14) Which of the following can be utilized to study the efficiency of the locomotor system?
    a. PCI
    b. Gait kinematics
    c. Neither PCI nor gait kinematics
    d. Both PCI and gait kinematics

15) Which of the following was affected by the impairment of visual receptors?
    a. Spatial orientation
    b. Balance
    c. Motor skills
    d. All of the above

16) Which physical activity was used to calculate PCI?
    a. Cadence
    b. Step length
    c. Speed of walking
    d. Number of steps per minute

17) Which of the following was observed in the blind student group?
    a. Decreased test duration
    b. Increased test duration
    c. Longer step length
    d. Higher mean walking speed

18) What was the reason for a high walking cadence in the blind student group?
    a. Longer step length
    b. Shorter step length
    c. Equal step length
    d. Higher speed of walking

19) What was the outcome of the comparison between the blind and sighted students in terms of PCI_w and PCI_j?
    a. PCI_w and PCI_j were significantly higher in blind students
    b. PCI_w and PCI_j were significantly lower in blind students
    c. The difference was insignificant
    d. PCI_w was significantly higher, but PCI_j was significantly lower in blind students.

20) What was the main limitation of the study?
    a. The use of an indoor walking track
    b. The use of an outdoor walking track
    c. Limited participation of sighted students
    d. Limited participation of blind students