



قائمة الاسئلة

الميكانيكا الحيوية والكينزيولوجي (2) - المستوى الثاني - قسم أشعة - كلية الطب والعلوم الصحية - برامج العلوم الطبية التطبيقية - الفترة الثانية - درج

د/ مشتاق علي محمد صالح العززي

- 1) What is the plane of flexion and extension ?
  - 1)  Sagittal
  - 2)  Transverse
  - 3)  Coronal / frontal
  - 4)  None of the above
- 2) What is the plane of abduction and adduction ?
  - 1)  Transverse
  - 2)  Coronal/frontal
  - 3)  Sagittal
  - 4)  All of the above
- 3) What are freely movable joints called?
  - 1)  Cartilaginous joints
  - 2)  Fibrous joint
  - 3)  synovial joints
  - 4)  None of the above
- 4) Which of the following is an example of an internal force?
  - 1)  gravitational force
  - 2)  pressure
  - 3)  Ligament force
  - 4)  resistance
- 5) Which of the following is an example of an external force?
  - 1)  Muscle force
  - 2)  Ligament force
  - 3)  friction force
  - 4)  joint reaction force
- 6) Deltoid muscles forces are example of :
  - 1)  linear force system
  - 2)  parallel force system
  - 3)  concurrent force system
  - 4)  None of the above
- 7) The resistance to change in the body's acceleration
  - 1)  Balance
  - 2)  Equilibrium
  - 3)  stability
  - 4)  Gravity
- 8) Where is the center of gravity located in the human body?
  - 1)  head
  - 2)  chest
  - 3)  feet
  - 4)  pelvis
- 9) Which condition is associated with trendelenburg gait?
  - 1)  Gluteus medius weakness
  - 2)  Quadriceps weakness
  - 3)  Gastrocnemus tightness
  - 4)  Lumbar disc herniation





- 10) Which gait pattern is commonly seen in individuals with foot drop?
- 1) - festinating gait
  - 2)  Steppage gait
  - 3) - Crouch gait
  - 4) - Scissoring gait
- 11) The primary function of ligament is to :
- 1) - connect muscle to bone
  - 2) - store calcium
  - 3)  Connect bone to bone
  - 4) - Provide cushioning
- 12) Which type of joint is found between the bones of skull?
- 1) - Synovial joint
  - 2)  Fibrous joint
  - 3) - Cartilaginous joint
  - 4) - Ball and socket joint
- 13) Which muscle group is primarily responsible for hip extension?
- 1)  Hamstring
  - 2) - Quadriceps
  - 3) - Adductors
  - 4) - Abductors
- 14) The point at which all of the body's mass is equally balanced
- 1) - line of gravity
  - 2) - base of support
  - 3)  center of gravity
  - 4) - All of the above
- 15) Which structure connects muscle to bone ?
- 1) - Ligament
  - 2)  Tendons
  - 3) - Joints
  - 4) - Cartilage
- 16) An increase in the anterior lumbar curve
- 1) - Scoliosis
  - 2)  Lordosis
  - 3) - Kyphosis
  - 4) - All of the above
- 17) An increase in the posterior thoracic curve
- 1)  Kyphosis
  - 2) - Lordosis
  - 3) - Scoliosis
  - 4) - None of the above
- 18) lateral curvature of the spine
- 1) - Kyphosis
  - 2) - Lordosis
  - 3)  Scoliosis
  - 4) - None of the above
- 19) Sometimes called "adult" scoliosis because it is associated with aging (develops as the person gets older)
- 1) - Idiopathic scoliosis
  - 2) - Neuromuscular (myopathic) scoliosis
  - 3)  Degenerative scoliosis





- 4) - Congenital scoliosis
- 20) Due to the wedge-shaped vertebral bodies in the thoracic region of the spine
- 1)  Sheuermann's kyphosis
  - 2) - Degenerative kyphosis
  - 3) - Congenital kyphosis
  - 4) - Postural kyph
- 21) Postural sway in standing is controlled by:
- 1) - The erector spinae muscles
  - 2) - The abdominal muscles
  - 3) - The psoas major
  - 4)  All of the above
- 22) The manner of walking
- 1)  Gait
  - 2) - Locomotion
  - 3) - motion
  - 4) - movement
- 23) This phase constitutes 60% of the gait cycle
- 1) - swing phase
  - 2)  stance phase
  - 3) - initial swing phase
  - 4) - None of the above
- 24) Which phase of the gait cycle involves the foot making initial contact with the ground?
- 1)  stance phase
  - 2) - swing phase
  - 3) - terminal stance
  - 4) - None of the above
- 25) Which joint experiences maximum dorsiflexion during the initial contact in the stance phase?
- 1) - Hip joint
  - 2) - Knee joint
  - 3) - Shoulder joint
  - 4)  Ankle joint
- 26) During the swing phase, what is happening to the foot?
- 1)  Lifts off the ground
  - 2) - Bears weight
  - 3) - Maintains contact with ground
  - 4) - All of the above
- 27) Which joint is primarily responsible for flexion during the swing phase?
- 1) - Knee joint
  - 2) - Ankle joint
  - 3) - Shoulder joint
  - 4)  Hip joint
- 28) What is the typical number of main phases in a complete gait cycle ?
- 1) - 1
  - 2)  2
  - 3) - 3
  - 4) - 4
- 29) The force that acts on the body as a result of interaction with the ground
- 1)  Ground reaction force vector
  - 2) - Gravitational force





- 3) - Friction force  
4) - All of the above
- 30) what is the primary muscle responsible for controlling knee flexion during mid stance?
- 1) - Hamstrings  
2) - Gastrocnemus  
3) + Quadriceps  
4) - None of the above
- 31) During mid stance, what is the primary function of the knee joint ?
- 1) - Flexion  
2) + Extension  
3) - Rotation  
4) - Abduction
- 32) What is the initial phase of the gait cycle ?
- 1) + Stance  
2) - swing  
3) - loading response  
4) - mid stance
- 33) The study of movement
- 1) - physiology  
2) - Anatomy  
3) + Kinesiology  
4) - None of the above
- 34) Articulations between two or more bones
- 1) - Tendons  
2) + Joints  
3) - Cartilage  
4) - All of the above
- 35) The ability to control equilibrium
- 1) - Equilibrium  
2) - Stability  
3) + Balance  
4) - Force

