



DCN-M201919

Seat No. _____

Second Year B. P. T. Examination

July - 2022

Kinesiology

Time : 3 Hours]

[Total Marks : 80

SECTION-1

- 1** Answer in detail any one. **10**
- (a) Name the different phases of gait cycle. Explain the kinematics of swing phase in detail.
 - (b) Describe the factors responsible for the postural stability of spinal column.
- 2** Write short notes on any three. **15**
- (a) Anterior and posterior pelvic tilt
 - (b) Locking mechanism of knee joint
 - (c) Glenohumeral rhythm
 - (d) Kyphosis
- 3** Answer in brief any 5. **15**
- (a) Mention the arthrokinematics of glenohumeral joint during External rotation
 - (b) Give an example of movement that requires eccentric contraction of muscles.
 - (c) Give four examples of synarthrosis type of joint
 - (d) Name the ligaments around elbow joint.
 - (e) Give two examples of class 3 lever in human body.
 - (f) Name the components and function of extensor hood in fingers.

SECTION - 2

- 4 Write in detail : (any one) 10
- (a) Discuss the muscle work in sit-to-stand activity.
 - (b) What is active and passive insufficiency? Explain with proper examples.
- 5 Write short notes on any three. 15
- (a) Movement of ribcage during breathing.
 - (b) Active and passive stabilisers of shoulder joint
 - (c) What is the effect of quadriceps weakness on the biomechanics of knee joint?
 - (d) What is femoral retroversion? How does it affect the lower limb alignment?
- 6 Answer in brief any five. 15
- (a) Name the ligaments around elbow joint.
 - (b) Name the carpal bones.
 - (c) What is equinus gait?
 - (d) Explain the correct lifting technique for a person with low back pain when he wants to lift weight off the floor.
 - (e) What is tenodesis?
 - (f) Give at least two examples of pulley in human body.
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