

## REL-K Certification Exam

G.Stark 2/11/11

*Please fill out the information below. Print your name and title as you would like to have it listed on your certificate.*

NAME \_\_\_\_\_

TITLE & CERTIFICATION NUMBER \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

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1) What is the sampling rate of the REL-K knee with respect to the load sensors?

- 50 times per second
- 100 times per second
- 500 times per second
- 1000 times per second

2) Where are the two sensors for the REL-K knee located?

- Distal Pylon & Distal Ankle
- Distal Tube clamp & Proximal Pyramid
- Upper Piston Rod Attachment & Main Axis
- Proximal Pyramid & Main Axis

3) What is most significant about the load sensor location with respect to the REL-K design?

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4) How long should the Lithium Ion battery last?

- 8 hours
- 24 hours
- 36 hours
- 48 hours

- 5) What information does the sensor on the main axis provide?  
Angular Position & Angular Velocity  
Angular Acceleration & Angular Load  
Angular Moment & Angular Resistance  
Angular Coriolis & Angular Centrifugal Force
- 6) What information does the piston rod yoke sensor provide?  
Motion of the knee  
Position of the knee  
Rotation of the knee  
Load at the knee
- 7) What type of foot should NOT used with the REL-K Knee?  
SACH Foot  
Dynamic Response Foot  
Single Axis Foot  
Motion Hydraulic Foot  
Element Foot  
Ibex Foot  
Wave Sport Foot
- 8) What are statements about REL-K Battery System are correct (may be more than one).  
It is a Ni-Cad Battery that is rechargeable only in the frame.  
It is a Lithium Ion Battery that is removable  
Battery can only be charged with approved rechargers.  
Uses a mini USB adapter cables
- 9) How much height adjustment is allowed with the distal tube clamp?  
6 mm  
12 mm  
20 mm  
25 mm
- 10) What is the range for the Bluetooth connection  
10 feet  
30 feet  
30 meters  
10 meters
- 11) What is the build height for the REL-K knee?  
370 mm  
270 mm  
470 mm  
570 mm

- 12) How does one know that a Bluetooth connection has been established with the REL-K knee?
- Flashing Red Light
  - Flashing Blue Light
  - Steady Red Light
  - Steady Blue Light
- 13) When adjusting the settings for "Sitting Dampening" what must be done to insure that the information is entered into the knee memory permanently?
- Enter the Reset Button
  - Enter the Set Button
  - Enter the Go Button
  - Enter the Close Button
- 14) What is the first step after creating a new patient profile?
- Add a New Synchronized Session
  - Immediately adjust the Sitting Dampening
  - Detect new Remote Control
  - Go to Options Menu
- 15) In the Standard Mode the Sitting Dampening adjustment regulates (may be more than one):
- Stance Resistance or Yield Rate
  - Extension Resistance
  - Heel Rise
  - Stair Descent Resistance
- 16) The Sitting Dampening should be set to:
- Provide Resistance for controlled sitting
  - Hold the patient at maximum flexion
  - Provide good stair climbing
  - Minimize resistance to a seated position
- 17) The Walking Load setting which is set during slow walking functions to:
- Maximize Resistance during a stumble
  - Discriminate between Standing and Walking
  - Minimize Extension Resistance
  - Set for stair climbing
- 18) To decrease the range of loads where stance remains on the Walk Load setting should be set at:
- At midrange
  - Tending to the higher 180 value
  - Tending to the lower 45 value
  - Turned on to maximum

- 19) Manual Adjustment of the Extension valve increases or decreases the braking effect in the last \_\_\_\_ degrees of extension.
- 25 degrees
  - 30 degrees
  - 10 degrees
  - 45 degrees
- 20) What speed should help in adjusting the Terminal Extension Resistance?
- High speed
  - Low speed
  - Average Speed
  - Running Speed
- 21) The PA filter threshold functions to:
- Regulate the amount of air into the system
  - Regulate the time spent on the foot
  - Regulate the Swing Phase
  - Regulate when the Stance Phase is activated
- 22) The PA filter threshold should be set \_\_\_\_\_ of a majority of the load spikes to insure good operation.
- just above
  - to the lowest
  - to the upper quarter
  - in the middle
- 23) A longer Intervention time means that the:
- Hydraulic brake does not activate
  - Hydraulic brake is activated longer
  - Gait is faster
  - Stride length is too short
- 24) Increasing the Dampening Intensity setting:
- Increases the level knee flexion resistance
  - Increases Heel rise at the onset of swing
  - Decreases Terminal impact
  - Increases Terminal impact
- 25) The Intervention Angle Setting sets the:
- Angle where the Flexion Damping is engaged
  - Angle where the Extension Damping is engaged
  - Angle where Yield rate is engaged.
  - Angle where Swing begins.

26) True or False: The bicycle mode is a freewheeling mode at all times.

False

True

27) Setting the Release Threshold on the bicycle mode:

Releases the yield sooner

Does very little

Maximizes stability

Sets compression force allowed for a pedal stroke.

28) Setting the Safety Threshold on the bicycle mode:

Sets the point at which the leg goes to freewheeling in pedaling

Sets the point at which the leg becomes rigid when not pedaling

Sets the point at which the leg goes to multiflexion

Sets the point at which the leg locks in maximum flexion

29) Adjusting the Release time:

adjusts the time for each pedal cycle

adjusts the time for bicycle braking

adjusts time for self destruct

adjusts time for when Safety Threshold is released.

30) Maximum Freedom mode is beneficial for:

Stair descent

Slope descent

Need for Greater mobility and positioning

Need for Greater stability and loading

31) Maximum Safety Mode can be adjusted to:

Adjust Rigidity

As an auxiliary yield adjustment for walking if battery dies

Adjust Flexion Stop

Adjust Extension Stop

32) How many programmable modes are there and how are available on the remote?

4 programmable, 2 on the remote

4 programmable, 4 on the remote

6 programmable, 2 on the remote

6 programmable, 4 on the remote

33)Currently an alarm with 5 short beeps and vibrations means:

- Internal malfunction
- Battery charge at safe level
- Empty Battery
- Remote Control is linked correctly

34)1 long beep and vibration means

- Knee is ready for walking
- Remote has been activated
- Battery must be charged
- Battery has been inserted properly

35)The suggested alignment for the REL-K Knee is:

- 0 degrees of preflexion at the pyramid attachment
- 5 degrees of preflexion at the pyramid attachment
- 10 degrees of preflexion at the pyramid attachment
- 15 degrees of preflexion at the pyramid attachment