

X



reviewer3@nptel.iitm.ac.in ▼

Courses » Mechanics of Human Movement

Announcements **Course** Ask a Question Progress Mentor FAQ

# Unit 4 - Week 2

## Course outline

How to access the portal

Pre-requisite

Week 1

Week 2

- Skeletal Muscles: Functions
- Skeletal Muscles: Structure Part- I
- Skeletal Muscles: Structure Part- II
- Mechanics and Modeling of Muscles
- Week 2 - Lecture Notes
- Quiz : Assignment 2
- WEEK 2 - FEEDBACK - Mechanics of Human Movement

Week 3

## Assignment 2

The due date for submitting this assignment has passed.  
As per our records you have not submitted this **Due on 2018-08-15, 23:59 IST.** assignment.

1) The ability of a muscle to respond to a stimulation is called **1 point**

- Extensibility
- Excitability
- Contractability
- Responsibility

**No, the answer is incorrect.**  
**Score: 0**

**Accepted Answers:**  
*Excitability*

2) Pennate muscles are stronger than parallel muscles. Why? **1 point**

- Oblique orientation of fibres
- Presence of more myofibrils
- Fibre length is less than muscle length
- All of the above

**No, the answer is incorrect.**  
**Score: 0**

**Accepted Answers:**  
*Presence of more myofibrils*

3) The finger flexors can make a tight fist when the wrist is in neutral position but not when the wrist is flexed. This is because of **1 point**

- Geometric constraints

© 2014 NPTEL - Privacy & Terms - Honor Code - FAQs -



A project of



In association with



Funded by

Week 8	ce De
Week 9	
Week 10	
Week 11	
Week 12	
VIDEO DOWNLOAD	

*Active insufficiency*

4) What kind of a muscle is biceps brachii? 1 point

Unipennate

Parallel fusiform

Bipennate

None of the above

**No, the answer is incorrect.**  
**Score: 0**

**Accepted Answers:**  
*Parallel fusiform*

5) Physiological cross sectional area is defined as 1 point

The sum total of all the cross-sectional areas of the fibres in planes perpendicular to the fibre orientation

The sum total of all the cross-sectional areas of the fibres in a plane perpendicular to the tendon orientation

The sum total of all the cross-sectional areas of the fibres in a plane oblique to the fibre orientation

Independent of the cross-sectional areas of the fibres

**No, the answer is incorrect.**  
**Score: 0**

**Accepted Answers:**  
*The sum total of all the cross-sectional areas of the fibres in planes perpendicular to the fibre orientation*

6) A combination of actin and myosin makes 1 point

Myofibril

Fascicles

Sarcomere

Filament

**No, the answer is incorrect.**  
**Score: 0**

**Accepted Answers:**  
*Sarcomere*

7) Tendons possess the following: 1 point

Viscoelasticity

Non-linear material properties

Flexibility

Plasticity

**No, the answer is incorrect.**  
**Score: 0**

**Accepted Answers:**  
*Viscoelasticity*  
*Non-linear material properties*  
*Flexibility*

8) Which of the following muscle(s) is/are not a part of quadriceps 1 point

muscle group?

- Rectus Femoris
- Biceps Femoris
- Soleus
- Vastus Medialis

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Biceps Femoris*

*Soleus*

9) The ability of a muscle to lengthen beyond the resting length is known as \_\_\_\_\_ **1 point**

- Elasticity
- Extensibility
- Spasticity
- Contracture

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Extensibility*

10) The biarticular muscle group which can perform both hip extension and knee flexion is \_\_\_\_ **1 point**

- Hamstrings
- Quadriceps
- Pectineus
- Adductor Longus

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Hamstrings*

11) The amount of force developed is directly proportional to the number of cross bridges formed **1 point**

- True
- False

No, the answer is incorrect.

Score: 0

Accepted Answers:

*True*

12) Force production takes place at \_\_\_\_\_ part of the muscle structure **1 point**

- Myofibril
- Sarcolemma
- T Tubule

Epimysium

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Myofibril*

13) In Hill type muscle model, tendons are modelled as \_\_\_\_\_

1 point

- Contractile component
- Series elastic element
- Parallel elastic element
- None of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Series elastic element*

14) Short contraction of muscle is known as \_\_\_\_\_

1 point

- Contracture
- Twitch
- Contraction
- Tetany

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Twitch*

15) The muscle attachment point that typically moves with the contraction and is farther from the midline is known as \_\_\_\_\_

1 point

- Insertion
- Origin
- Action
- Reaction

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Insertion*

Previous Page

End

