

**G. C. FOSTER COLLEGE OF PHYSICAL EDUCATION  
AND SPORT**

**MAY 2016 EXAMINATION**

**KINESIOLOGY**

**INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTIONS A AND B**

**GROUP: FITNESS/MASSAGE**

**TIME: 2 HOURS**

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**SECTION A - Answer All questions in this section (10 marks)**

1. Bones are composed of tissues that take
  - a. Compact or spongy form
  - b. Red or yellow marrow form
  - c. Cartilaginous form
  - d. Muscle formation
  
2. Bones are formed either by replacement of hyaline cartilage and:
  - a. Direct ossification
  - b. Bone fusion
  - c. Collagen
  - d. Organic material
  
3. One of the three basic types of joints in the human skeletal structure is the:
  - a. Rotational
  - b. Synovial
  - c. Articular
  - d. Epiphyseal
  
4. A joint can be described as:
  - a. Any area where numerous bones meet.
  - b. A junction of two bones
  - c. Any section of the body where bones can move
  - d. An area where there is no form of articulation
  
5. Muscles are named in relation to features including:
  - a. Strength and colour
  - b. Appearance and function
  - c. Size and durability
  - d. Attachment and power
  
6. The most identifiable features of the deltoid and Gluteus Maximus muscles are :
  - a. Shape and size
  - b. Location and colour
  - c. Arrangement and function
  - d. Durability and fibres

7. Two of the four properties that are related to skeletal muscle tissue and its ability to produce force and movement about joint are:
- a. Contractility and elasticity
  - b. Flexion and rotation
  - c. Adduction and abduction
  - d. Speed and agility
8. Contraction takes place the moment when:
- a. Joints cease to rotate or flex in the correct manner
  - b. Tension develops in a muscle as a result of a stimulus
  - c. Blood flow becomes too much in the muscle
  - d. The muscle under performs.
9. The actual study of physical actions of forces can be related to:
- a. Eccentric force
  - b. Dynamics
  - c. Kinetics
  - d. Mechanics
10. The matter of kinesthesia has to do with the whole idea of:
- a. The science of anatomical and biomechanical aspects of movement.
  - b. The study of forces from a kinetic standpoint
  - c. One's conscious awareness of the position and body movement in space
  - d. Being able to execute tasks based on neurological responses.

### SECTION B

-Answer all the questions in this section in the answer booklet.

(40 marks)

11. Give detailed explanation in relation to what takes place with the biceps and triceps muscles during:

a. Arm extension

( 2marks)

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b. Arm flexion

( 2 marks)

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12. Describe the biomechanical functions of:

Long Bones \_\_\_\_\_

\_\_\_\_\_ ( 2 marks)

Short Bones \_\_\_\_\_

\_\_\_\_\_ ( 2 marks)

13. Explain any principles of stability and give an example .

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( 4 marks)

14. Name the largest bone in the body and tell where it is found.

\_\_\_\_\_ (2 marks)

15. . Name two (2) major joints in the body.

\_\_\_\_\_ (4marks)

16. Give three (3) classifications of joints.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (3 marks)

17. Describe the type of movements allowed at the:

Knee joint \_\_\_\_\_ (2 marks)

Elbow joint \_\_\_\_\_ (2 marks)

18. a. Define levers.

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(2 marks)

19. State the different classes of levers and give an example of each.

1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

(6 marks)

20. Give a definition to demonstrate your understanding of joints.

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( 2 marks)

21. Define the following terms:

a. Abduction \_\_\_\_\_  
b. Extension \_\_\_\_\_  
c. Adduction \_\_\_\_\_  
d. Flexion \_\_\_\_\_  
e. Plantarflexion \_\_\_\_\_

(5 marks)

**END OF EXAMINATION**

