題號:161 國立臺灣大學96學年度碩士班招生考試試題

科目:肌動及生物力學

題號: 16]

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本試卷共計六題問答題

- 1. Please describe the type of human joints and give examples (15%).
- Please use examples to compare the osteokinematic motion with the arthrokinematic motion (15%).
- 3. Please sketch an individual with half squatting and describe the motions of the involved joints and the type of muscle contraction of involved muscles (20%)
- 4. Please explain following terminology (20%).
 - a. Normal and shear stresses
 - b. Normal and shear strains
 - c. Elastic and plastic deformations
 - d. Anisotropic material behavior
 - e. Wolff's law
- 5. The two fundamental responses of a viscoelastic material are creep and stress relaxation.

 Please describe the relationships between displacement and time, stress and time, load and time, and deformation and time for above two phenomenons (15%).
- 6. Most computer operators complain about their pain in the right shoulder, wrist and low back region. From the physical therapy point of view, what dimensions or parameters you will consider for the design of computer desk and chair (15%)?

試題隨卷繳回