編號: 170

國立成功大學 104 學年度碩士班招生考試試題

系所組別:生物醫學工程學系丙組

考試科目:生物力學

考試日期:0211,節次:2

第1頁,共1頁

※考生請注意:本試題不可使用計算機。 請於答案卷(卡)作答,於本試題紙上作答者,不予計分。

- 1) (20%) Describe the biomechanical behavior of articular cartilage.
- 2) (20%) Illustrate viscoelasticity of ligaments and tendons by two standard tests, load-relaxation test and the creep test. Plot the load-time curve and deformation-time curve, respectively, and describe the behavior.
- 3) (20%) What issues provide the stability of the knee? How to understand the role of each individual issue biomechanically?
- 4) (20%) Describe the temporal and spatial sequence of the gait cycle. Give an example to illustrate the application of gait analysis.
- 5) (20%) What does the difference in architecture tell you about the function of the tibialis, posterior and the rectus femoris?