

編號： 235 系所：醫學工程研究所丙組

科目：生物力學

本試題是否可以使用計算機：可使用，不可使用（請命題老師勾選）

1. How would you define Biomechanics? Illustrate two applications of biomechanics in medicine and briefly describe them. (25%)
2. Gait analysis is an important application of biomechanics. Describe the normal walking gait cycle as detail as possible. (25%)
3. What is the major difference between the “normal force” and the “shear force”? In biomechanics, sometimes we need to compute the “stress” instead of the “force”, why? (25%)
4. The articular cartilage is an important tissue within synovial joints. What is the role of this tissue within the joint and how does it play this role? (You need to describe the biomechanical functions of the articular cartilage and explain how these functions are achieved?) (25%)