國立成功大學九十六學年度碩士班招生考試試題

編號: 508 系所:物理治療學系乙組

科目:應用生物力學與神經物理治療

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)

Please answer FOUR of the following questions.

- 1. What are the possible mechanisms underlying improvement in motor function in subacute (2~6 months) and chronic stage (> 6 months) of stroke?
- 2. The following is a short summary of a stroke patient for whom you just finished the initial evaluation. What procedures are you likely to use to help a stroke patient to regain the ability to roll from supine to the unaffected side?

----- Patient Condition -----

Diagnosis: left middle cerebral artery infarction

Onset duration: 3 weeks

Medically stable.

Vision and hearing: intact

Mentality: mini mental status examination score=29

Modified Ashworth scale of all right side joints: 1

Motor status: Brunnstrom stage of right limbs: 2

Sensory function of right limbs: all impaired

Functional capacity:

Rolling to right side: verbal encouragement

Rolling to left side: maximal assistance

Upright activities: dependent

----- end -----

- 3. What are the similarities and differences in treatment approaches for patients with stroke versus traumatic brain lesions?
- 4. How can human locomotion be controlled, based upon motor control theories and neurophysiology?
- 5. What are the effects and limitations of vestibular rehabilitation?