

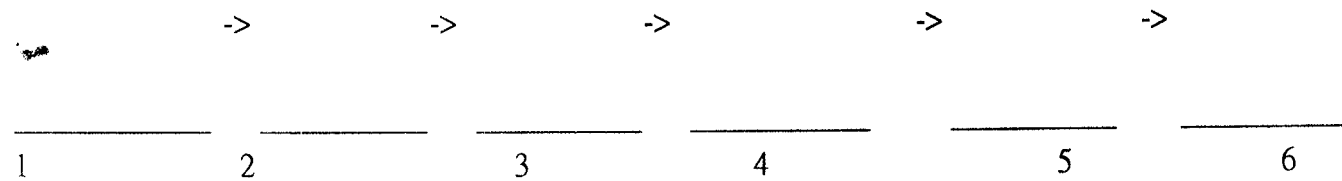
|             |                           |
|-------------|---------------------------|
| 系所別：自然醫學研究所 | 科目編號：A2-25-24             |
| 科目：藥理學      | 試題紙第 <u>1</u> 頁共 <u>2</u> |

2005 Entrance Exmination:

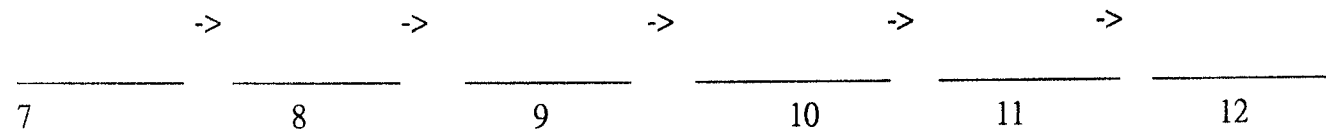
Please fill in all the blanks from 1 to 30 items 請填空 1-30 題

Please draw chemical structures 畫出化學結構 and name the structures 寫下結構名稱 of the complete Biosynthesis of Catecholamines (腦神經荷爾蒙) starting from Phenylalanine: (1~12 每格 3 分)

Structures 結構：



Names 名稱：



What Disease associate with 腦上荷爾蒙與精神傳遞素之相關疾病名稱 (13~16 每格 5.5 分)

- 13 AcetylCholine \_\_\_\_\_
- 14 Dopamine \_\_\_\_\_
- 15 Norepinephrine \_\_\_\_\_
- 16 Serotonin \_\_\_\_\_

17-30 請填上在腦神經上，肌肉交接處，肌肉上面和肌肉裡面的化學傳遞：

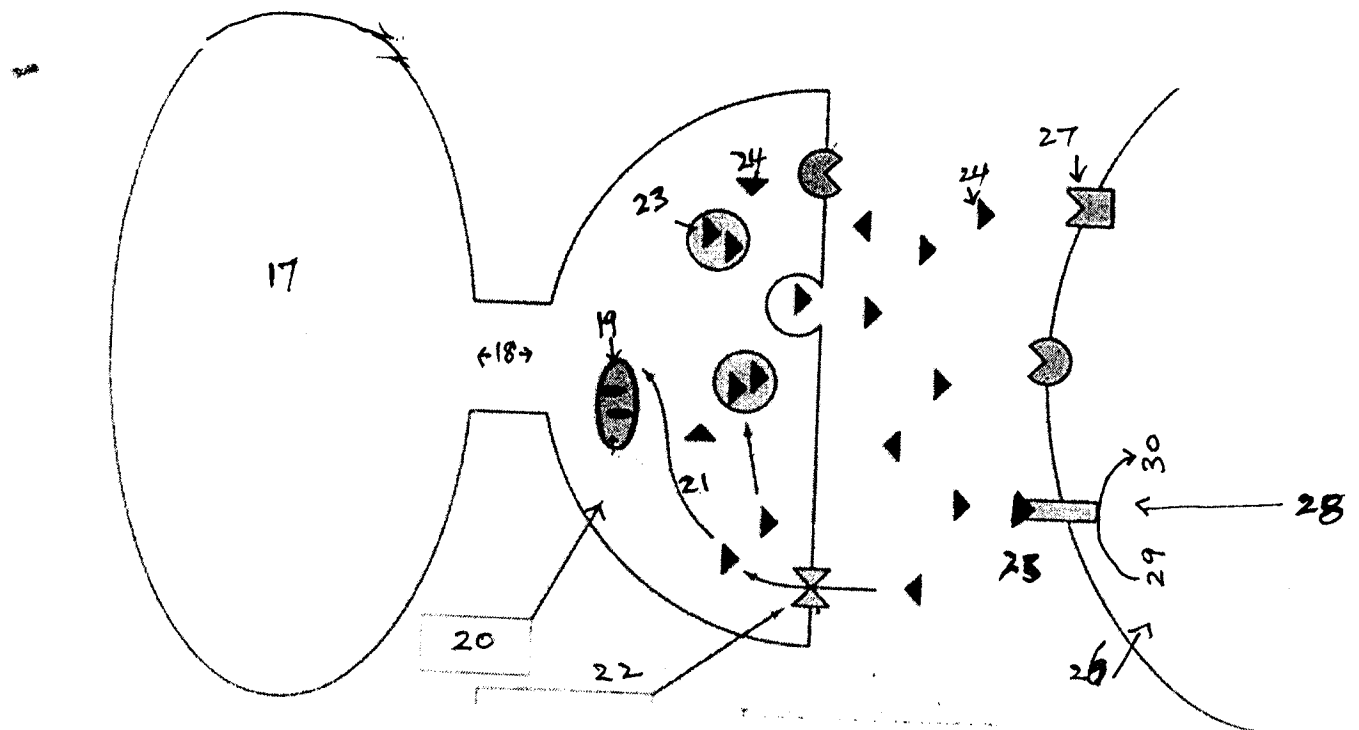
(17~30 每格 3 分)

腦神經上的結構分子 (17-23)

肌肉交接處神經傳遞素 (24)

肌肉上面結構分子 (25-27)

肌肉裡面的生物化學系統分子結構 (28-30)



- 17 \_\_\_\_\_
- 18 \_\_\_\_\_
- 19 \_\_\_\_\_
- 20 \_\_\_\_\_
- 21 \_\_\_\_\_
- 22 \_\_\_\_\_
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- 24 \_\_\_\_\_
- 25 \_\_\_\_\_
- 26 \_\_\_\_\_
- 27 \_\_\_\_\_
- 28 \_\_\_\_\_
- 29 \_\_\_\_\_
- 30 \_\_\_\_\_