

1. 試分別敘述 ACTH 和 TSH 兩種激素的生理功能與臨床意義，以及如何調控其分泌。(10 分)
2. 試說明如何活化 vitamin D₃ (cholecalciferol)? 其活化態與副甲腺素如何參與調控體內的血鈣平衡？以及如何利用 o-cresolphthalein complexone (CPC) 來檢測鈣離子濃度。(15 分)
3. 請問有那些檢驗標準可以用來確診糖尿病？照顧昏迷的急症糖尿病患，可以應用那些檢驗確認昏迷原因？照顧慢性糖尿病患，有那些檢驗可以用來評估病人病情控制以及是否有併發症。(9 分)
4. 請問何謂 Estimated Glomerular Filtration Rate, 如何得到這個數據？在檢驗醫學上有什麼應用？(8 分)
5. 請說明有那些血清酵素檢驗可以應用在肝、膽疾病的診斷，並列出檢驗這些酵素的反應式。(8 分)
6. 試簡述 LDL-C (LDL cholesterol) 的測定方法及臨床意義(5 分)。
7. 請列出敗血症的指標及其臨床意義(5 分)。
8. 試說明微量元素鉻的生理功能(3 分)。
9. 簡述 Cushing Syndrome 的病因及診斷方法(5 分)。
10. 請簡述引起代謝性酸中毒的可能原因(7 分)。

以下請簡答

11. Analytical procedures and methods employed in specific clinical chemistry items should be confirmed before routine test. What is the difference between "method verification" and "method validation"? (5 分)
12. What is the ROC (Receiver Operating Characteristic) curve and its application in clinical chemistry testing? (5 分)

見背面

13. The following table indicates the correlation between testing result and clinical diagnosis.

Please estimate: (5 分)

- Sensitivity
- Specificity
- Positive prediction value
- Negative prediction value
- False positive rate

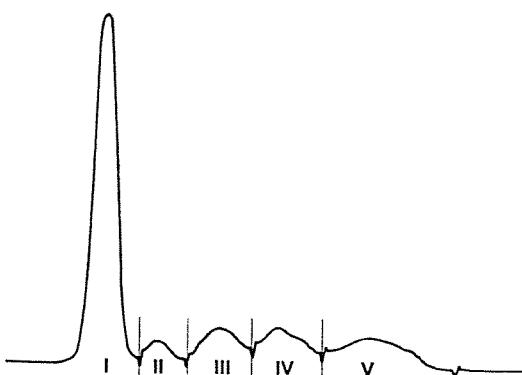
		True (Clinical diagnosis)	
		Disease	Non-disease
Test result	Positive	76	15
	Negative	28	92

14. What are the major purposes of following additives in urine testing? (5 分)

- Toluene
- Hydrochloric acid
- Formalin
- Sodium fluoride
- Chloroform

15. The figure illustrates the pattern of normal serum protein electrophoresis diagram with legend of five major different zones (I to V). Please indicate the following proteins may be present in which zone and briefly describe its major physiological function. (5 分)

- Transferrin
- Immunoglobulin
- Ceruloplasmin
- Albumin
- α_1 -antitrypsin



試題隨卷繳回