

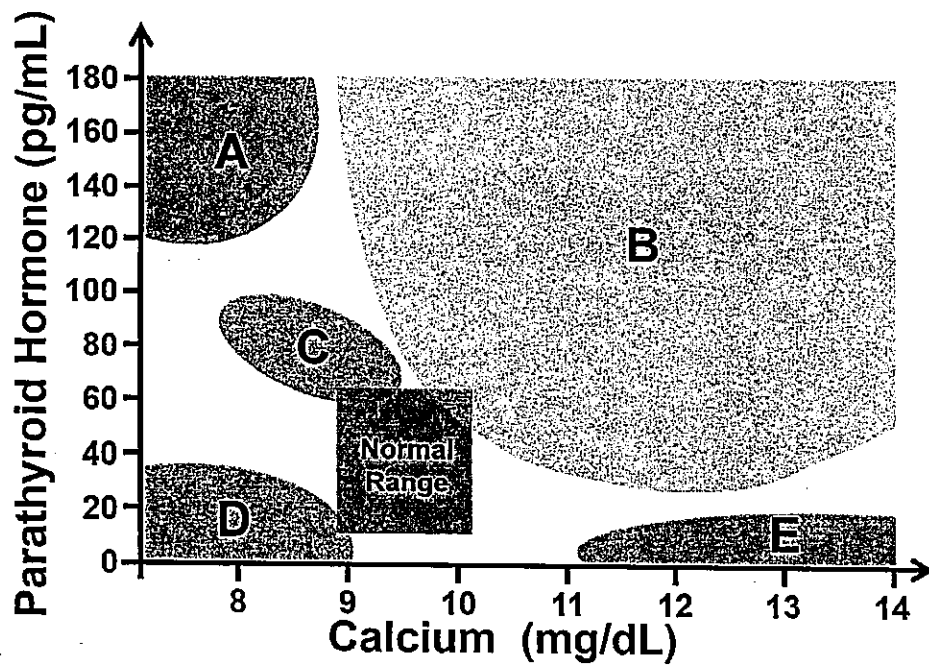
1. 使用自動微量吸管 (micro-pipette) 進行臨床生化檢驗操作，依據製造商的指示，應如何正確操作，同時需要注意那些細節，才能夠得到最精確的取樣？(7分)
2. A. 有學者提出以血中 HbA_{1c} 數值做糖尿病人照顧管理比血糖檢驗數值好，請評論這個觀點(3分)
B. 如果在急診部收到昏迷的糖尿病人，請討論選擇上述那一種檢驗最有意義。(3分)
3. A. 腎臟有那些生理功能？(4分)
B. 腎功能檢驗項目，檢驗原理，臨床診斷應用。(8分)
4. 常見媒體廣告將 GOT/GPT 指數等同於肝功能，請說明 GOT/GPT 數值對於肝健康的意義，以及代表肝功能的合理性。(5分)
5. 簡述目前對於腎上腺皮質素失常的三種篩檢方法。這三種方法分別在測試有關腎上腺皮質素功能調節的哪些面向？(9分)
6. 做血液氣體分析的檢體需用何種抗凝劑？理由為何？若放置一段時間後才測量，會導致哪些結果的偏離？(6分)
7. 簡述銅對於鐵質代謝的影響(6分)
8. 請回答下列有關兒茶酚胺(Catecholamines)的問題
 - A. 兒茶酚胺是由哪個胺基酸改變而來？(1分)
 - B. 兒茶酚胺主要由哪些器官/組織分泌？(2分)
 - C. 兒茶酚胺的最主要生理功能為何？(2分)
 - D. 如何檢測兒茶酚胺分泌失調？(2分)
9. 臨床上辨別各式變異型血紅素(如 COHb 等)的檢測方法及原理(3分)
10. 在膽紅素的檢測中，direct bilirubin 和 indirect bilirubin 分別的生理意義。(4分)

簡答題:

11. In the mention of diagnostic methods in clinical chemistry, what is "method validation"? Please summary the basic elements needed to mention in method validation. (5分)
12. Plasma proteins can briefly classify into positive acute phase reaction protein and negative acute phase reaction protein. Please explain and provide an example what is positive acute phase reaction protein and negative acute phase reaction protein. (5分)

見背面

13. Please describe the biogenesis of glycosylated hemoglobin HbA1c and the methodology of its measurement. Based on your understanding, what is the significance and the clinical application of HbA1c? And what are possible interferences of HbA1c measurement in clinical practice? (5 分)
14. In the mention of clinical application, please describe the criteria of "good" tumor marker. (5 分)
15. What is ROC (Receiver Operating Characteristic) curve and its application? Once ROC curve is drawn, how to interpret the result for the application? (5 分)
16. The relative concentration of parathyroid hormone (PTH) and calcium can be representatives for different physiological condition. Please link the corresponding physiological condition to proper area. (5 分)



- (1) Hypercalcemia-associate malignancy (HAM)
- (2) Hypoparathyroidism
- (3) Vitamin D deficiency
- (4) Primary hyperparathyroidism
- (5) Kidney failure

A: _____
B: _____
C: _____
D: _____
E: _____

17. What is the pharmacogenetics? What are roles of liver phase I and phase II enzymes in clinical pharmacogenetics? Please give one example for each enzyme. (5 分)

試題隨卷繳回