**Question 1**

Calcitonin secretion is stimulated by the following EXCEPT:

Select one:

a. Gastrin

b. Oestrogen

c. Somatostatin

* d. Cholecystokinin

Answer C. Ganong 23rd Edition pg 370 “Calcitonin secretion is stimulated by gastrin”

**Question 2**

Calcitriol (1,25 dihydroxycholecalciferol):

Select one:

a. Levels rise in response to an increase in serum PO4 levels

b. Inhibits calcium absorption from the gut

c. Inhibits osteoclast function

d. Is formed in the proximal renal tubules from a less active precursor

Answer D. Ganong 23rd Edition pg 365 “cells of the proximal tubule”

**Question 3**

Regarding calcitriol (1,25 dihydroxycholecalciferol):

Select one:

a. Its formation is increased with elevated plasma calcium levels

b. It exerts its action via stimulation of adenylcyclase

c. It decreases calcium reabsorption from the kidneys

d. It causes increased formation of calbindin-D proteins

Answer D. Ganong 23rd Edition pg 365 “stimulates…family of calbindin-D proteins”

**Question 4**

Regarding calcium metabolism:

Select one:

a. Oestrogen inhibits osteoclasts

b. Corticosteroids stimulate osteoblasts

c. The adult human body contains 15 % of its body mass as calcium

d. Calcium is passively absorbed from the intestinal brush border

Answer A. Ganong 23rd Edition pg 371 “oestrogen inhibits osteoclasts”

**Question 5**

The signs and effects of hyperparathyroidism include:

Select one:

a. Hypocalcaemia

b. Erythema

c. Demineralization of bones

d. Chvostek’s and Trousseau’s signs

Answer C. Ganong 23rd Edition pg 368 “increase bone resorption”

**Question 6**

Which is correct regarding calcitonin?

Select one:

a. It decreases renal tubular calcium and phosphate reabsorption

b. It stimulates osteoclastic bone resorption

c. It is secreted by cells in the adrenal gland

d. It is secreted when plasma calcium concentration exceeds 5.5mg / 100ml

Answer A. Ganong 23rd Edition pg 370 “increases calcium excretion in the urine”

**Question 7**

Which is correct regarding the role of Vitamin D in calcium metabolism?

Select one:

a. It causes an increase in the synthesis of calcium – binding protein

b. It decreases intestinal calcium and phosphate absorption

c. It decreases renal tubular calcium and phosphate reabsorption

d. It decreases bone formation

Answer A. Ganong 23rd Edition

**Question 8**

Which is true regarding parathyroid hormone?

Select one:

a. It increases plasma phosphate

b. It is cleared by the macrophages of the spleen

c. It is secreted by chief cells of the parathyroid glands

d. Its secretion is regulated by the level of bound calcium in plasma

Answer C. Ganong 23rd Edition pg 367 “The chief cells secrete PTH”

**Question 9**

Which of the following does NOT increase plasma calcium?

Select one:

a. Parathyroid hormone

b. Calcitonin

c. Thyroxine

d. Vitamin D

Answer B. Ganong 23rd Edition pg 370 “lowers circulating calcium”

**Question 10**

Which of the following increases intestinal calcium absorption?

Select one:

a. Hypercalcemia

b. Glucocorticoids

c. Parathyroid hormone

d. Fat in the diet

Answer C. Ganong 23rd Edition pg 368 “PTH increases reabsorption of calcium”