**Question 1**

Actions of glucocorticoids include all of the following EXCEPT:

Select one:

a. Gluconeogenesis in the liver

b. Inhibition of glucose uptake by muscle and adipose tissue

c. Maintenance of myocardial contractility

d. Decrease in vascular resistance

Answer B. Ganong 23rd Edition pg 332 “decrease in peripheral glucose utilization”

**Question 2**

In the formation of adrenaline:

Select one:

a. Dopa is formed by dopa decarboxylase

b. Serotonin formation is a vital intermediate step

c. COMT produces adrenaline from noradrenaline

d. Phenylalanine is converted to tyrosine

Answer D. Ganong 23rd Edition pg 138 “some tyrosine is formed from phenylalanine”

**Question 3**

Regarding glucocorticoid effects, which is incorrect?

Select one:

a. Increased hepatic glycogenesis

b. Increased protein catabolism

c. Increased peripheral glucose utilisation

d. Increased glucose 6 phosphatase

Answer C. Ganong 23rd Edition pg 332 “decrease in peripheral glucose utilization”

**Question 4**

Stimuli that increase aldosterone secretion and do not affect glucocorticoid secretion include all EXCEPT:

Select one:

a. Haemorrhage

b. Standing

c. Secondary hyperaldosteronism

d. High potassium intake

Answer A. Ganong 23rd Edition pg 357 table 22-6 “glucocorticoid secretion also increased”

**Question 5**

Which is the most potent glucocorticoid?

Select one:

a. Cortisol

b. Aldosterone

c. Deoxycortisone

d. Corticosterone

Answer A. Ganong 23rd Edition pg 344 table 22-2 “1.0”

**Question 6**

Which is true regarding aldosterone?

Select one:

a. It responds to changes in plasma Na+ more strongly than changes in plasma K+

b. It is synthesised in several organs in the body

c. It acts via a cytoplasmic receptor that has equal affinity for cortisol

d. Its main action is to decrease the synthesis of sodium-potassium pumps

Answer C. Ganong 23rd Edition pg 355 “activated by glucocorticoids as well as aldosterone”

**Question 7**

Which of the following does NOT increase aldosterone secretion?

Select one:

a. Lying supine from the standing position

b. ACTH

c. Surgery

d. Constriction of the IVC in the thorax

Answer A. Ganong 23rd Edition pg 357 table 22-6 “standing”

**Question 8**

With regard to adrenal physiology:

Select one:

a. Dopamine is secreted by the adrenal medulla

b. The largest steroid molecules are the oestrogens

c. The only glucocorticoid secreted in significant amounts is cortisol

d. Glucocorticoids exert their action by cGMP activation

Answer A. Ganong 23rd Edition pg 338 “dopamine secreted by the adrenal medulla”

**Question 9**

With regard to cortisol, which is incorrect?

Select one:

a. It is predominantly metabolised in the liver

b. It has a permissive action on vascular reactivity

c. It has greater mineralocorticoid activity than glucocorticoid activity

d. Cortisol is bound to corticosteroid-binding globulin

Answer C. Ganong 23rd Edition pg 344 table 22-2 “equal”

**Question 10**

Which of the following enzymes are missing in the zona glomerulosa?

Select one:

a. 17 α hydroxylase

b. 21 β hydroxylase

c. 3 β hydroxysteroid

d. 11 β hydroxylase

Answer A. Ganong 23rd Edition pg 344 figure 22-8 “lacks 17alpha activity”