**Question 1**

Angiotensin II causes

Select one:

a. Constriction of afferent arterioles only

b. Constriction of efferent arterioles only

c. Greater constriction of efferent than afferent arterioles

d. Greater constriction of afferent than efferent arterioles

Answer C. Ganong 23rd Edition pg 672 “arteriolar constriction”

**Question 2**

Atrial natriuretic peptide:

Select one:

a. Stimulates the section of vasopressin

b. Has generally opposite actions to angiotensin II

c. Is a typical dual chain helix structure

d. Stimulates erythropoietin production

Answer B. Ganong 23rd Edition pg 675 “counteract the effects of angiotensin II”

**Question 3**

Concerning vasopressin

Select one:

a. Surgical stress inhibits secretion of vasopressin

b. Diabetes insipidus is characterised by polydipsia and polyuria

c. Preprooxyphysia is the precursor of vasopressin

d. Secretion of vasopressin is stimulated by alcohol

Answer B. Ganong 23rd Edition pg 668 “polyuria and polydipsia”

**Question 4**

Regarding erythropoietin, which statement is INCORRECT?

Select one:

a. It causes pro-erythroblasts to mature more rapidly into erythrocytes

b. The spleen and salivary glands secrete but don’t synthesise it

c. The adult liver is able to synthesise enough for normal erythropoiesis in the absence of both kidneys

d. It inhibits apoptosis in erythroid stem cells

Answer C. Ganong 23rd Edition pg 677 “when renal mass is reduced, the liver cannot compensate”

**Question 5**

Regarding extracellular volume maintenance:

Select one:

a. Vasopressin causes sodium retention by the kidney

b. Control of sodium balance is the major mechanism maintaining ECF volume

c. A rise in ECF volume stimulates vasopressin secretion

d. Angiotensin II inhibits aldosterone secretion

Answer B. Ganong 23rd Edition pg 669 “the amount of sodium… is the most important determinant”

**Question 6**

Vasopressin works by:

Select one:

a. Decreasing the permeability of the collecting ducts

b. Inserting Aquaporin 1 channels into the proximal tubule

c. Inserting Aquaporin 2 channels into the collecting ducts

d. Increasing the effective osmotic pressure of the body fluids

Answer C. Ganong 23rd Edition pg 666 “in the collecting ducts is aquaporin-2”

**Question 7**

What is the major stimulus for the secretion of ADH?

Select one:

a. Alcohol

b. hyperosmolarity

c. Increased ECF volume

d. Lying supine

Answer B. Ganong 23rd Edition pg 666 “when the osmotic pressure of plasma is increased above normal”

**Question 8**

Which of the following is true of the renin angiotensin system?

Select one:

a. Renin causes release of aldosterone

b. Increased Na reabsorption at the macula densa causes increased renin secretion

c. Prostaglandins increase the secretion of renin

d. Angiotensinogen is converted to Angiotensin I in the lungs

Answer C. Ganong 23rd Edition pg 674 table 39-2 “stimulatory”

**Question 9**

Which pattern of laboratory findings in the table below is most consistent with a diagnosis of diabetes insipidus:

Select one:

a. 24 Hr Urine Volume 1.6 Ketones 0 Glucose 0 Protein 4+

b. 24 Hr Urine Volume 6.2 Ketones 2+ Glucose 4+ Protein 0

c. 24 Hr Urine Volume 6.4 Ketones 0 Glucose 0 Protein 0

d. 24 Hr Urine Volume 4.0 Ketones + Glucose 0 Protein 0

Answer C. Ganong 23rd Edition pg 668 “large amounts of dilute urine”

**Question 10**

With regard to the effect of hormones on renal tubules, which is correct?

Select one:

a. Aldosterone increases K reabsorption from the distal tubule

b. Angiotensin II increases H+ secretion from the proximal tubules

c. Atrial natriuretic peptide decreases Na reabsorption from the proximal tubules

d. ADH increases water reabsorption in the proximal tubule

Answer B. Ganong 23rd Edition pg 354 “producing a K+ diuresis and an increase in urine acidity”