Practice Questions Ch 10:

1. ADH promotes water retention by stimulating
   A. NaCl reabsorption in proximal convoluted tubule.   E. Water reabsorption in collecting duct.
   B. NaCl reabsorption in ascending loop of Henle.     F. Water reabsorption in descending loop of Henle.
   C. NaCl reabsorption in collecting duct.            G. Water reabsorption in proximal convoluted tubule.
   D. NaCl reabsorption in the distal convoluted tubule. H. Water reabsorption in distal convoluted tubule.

2. Aldosterone first stimulates
   A. NaCl reabsorption in proximal convoluted tubule.   E. Water reabsorption in collecting duct.
   B. NaCl reabsorption in ascending loop of Henle.     F. Water reabsorption in descending loop of Henle.
   C. NaCl reabsorption in collecting duct.            G. Water reabsorption in proximal convoluted tubule.
   D. NaCl reabsorption in the distal convoluted tubule. H. Water reabsorption in distal convoluted tubule.

3. About 65% of the filtrate within the nephron is automatically reabsorbed in the
   A. proximal convoluted tubule.                      D. ascending loop of Henle.
   B. distal convoluted tubule.                        E. descending loop of Henle.
   C. collecting duct.

4. Diuretic drugs that act in the loop of Henle work primarily by
   A. inhibiting NaCl transport.                       C. inhibiting K+ transport.
   B. inhibiting water transport.                     D. inhibiting Ca+2 transport.

5. Glucosuria
   A. occurs normally.                                C. occurs when the glucose receptors become saturated.
   B. indicates the presence of kidney disease.       D. occurs because of increased blood glucagon.

6. Parasympathetic regulation causes
   A. constriction of the proximal urethral sphincter. E. answers A & C
   B. relaxation of the proximal urethral sphincter.  F. answers B & C
   C. constriction of the detrusor muscle.            G. answers B & D
   D. relaxation of the detrusor muscle.              H. answers A & D

7. Sympathetic regulation causes
   A. constriction of the proximal urethral sphincter. E. answers A & C
   B. relaxation of the proximal urethral sphincter.  F. answers B & C
   C. constriction of the detrusor muscle.            G. answers B & D
   D. relaxation of the detrusor muscle.              H. answers A & D

8. The distal urethral sphincter is under autonomic control.
   A. TRUE                                            B. FALSE

9. Binding of __________________ on smooth muscle of the proximal urethral sphincter will cause contraction.
   A. ACh to β1-adrenergic receptors                    D. epinephrine to muscarinic cholinergic receptors
   B. ACh to β1-adrenergic receptors                    E. epinephrine to α-adrenergic receptors
   C. ACh to muscarinic cholinergic receptors           F. epinephrine to β2-adrenergic receptors

10. Binding of __________________ on smooth muscle of the bladder detrusor muscle will cause contraction.
    A. ACh to α-adrenergic receptors                     D. epinephrine to muscarinic cholinergic receptors
    B. ACh to β1-adrenergic receptors                    E. epinephrine to α-adrenergic receptors
    C. ACh to muscarinic cholinergic receptors           F. epinephrine to β2-adrenergic receptors
11. Binding of ____________________ on smooth muscle of the proximal urethral sphincter will cause relaxation.
   A. ACh to $\alpha$-adrenergic receptors         D. epinephrine to muscarinic cholinergic receptors
   B. ACh to $\beta$1-adrenergic receptors        E. epinephrine to $\alpha$-adrenergic receptors
   C. ACh to muscarinic cholinergic receptors    F. epinephrine to $\beta$2-adrenergic receptors

12. Binding of ____________________ on smooth muscle of the bladder detrusor muscle will cause relaxation.
   A. ACh to $\alpha$-adrenergic receptors         D. epinephrine to muscarinic cholinergic receptors
   B. ACh to $\beta$1-adrenergic receptors        E. epinephrine to $\alpha$-adrenergic receptors
   C. ACh to muscarinic cholinergic receptors    F. epinephrine to $\beta$2-adrenergic receptors

13. Inflammation of the bladder is known as
   A. pyelonephritis                           C. urethritis
   B. cystitis                                 D. vaginitis

14. Systolic blood pressure of 180 mmHg would cause
   A. increased glomerular filtration rate.
   B. decreased glomerular filtration rate.
   C. no change in glomerular filtration rate.

15. Increased aldosterone production is known as
   A. Diabetes mellitus.                     D. Conn’s syndrome.
   B. Diabetes insipidus.                    E. Addison’s disease.
   C. Cushing’s disease.
Ch 13. Answers:
1. E
2. D
3. A
4. A
5. C
6. F
7. H
8. B
9. E
10. C
11. C
12. E
13. B
14. A
15. D

How did you do?