True False

1. It is possible to be cured of renal failure and no longer need dialysis F
2. Hemodialysis requires a machine, while peritoneal dialysis requires a solution T
3. Water is lost through breathing and perspiration T
4. When ADH is released, your urine will have higher water content F
5. Male and female urethras pass only urine F

Multiple Choice

1. Which of the following is NOT a function of the kidneys?
   1. Manufacture urine
   2. Convert Vitamin D to its active form
   3. Dispose of waste
   4. **Produce hormones for digestion**
2. Which describes the location of the kidneys?
   1. Retrorenal
   2. Suprarenal
   3. Intraperitoneal
   4. **Retroperitoneal**
3. The triangular portions of a kidney found in the center are:
   1. Renal cortex
   2. Renal medulla
   3. **Medullary pyramids**
   4. Calyces
4. Which of the following is the correct pathway of blood
   1. Renal artery, efferent arteriole, glomerular capillaries, afferent arteriole, peritubular capillaries
   2. Renal artery, afferent arteriole, peritubular capillaries, glomerular capillaries, peritubular capillaries
   3. **Renal artery, afferent arteriole, glomerular capillaries, efferent arteriole, peritubular capillaries**
   4. Renal artery, afferent arteriole, peritubular capillaries, afferent arteriole, glomerular capillaries
5. Bowman’s capsule is another term to describe:
   1. **Glomerulus**
   2. Loop of Henle
   3. Nephrons
   4. Renal tubule
6. Each kidney contains about
   1. 100,000 nephrons
   2. 500,000 nephrons
   3. **1,000,000 nephrons**
   4. 4,000,000 nephrons
7. The correct sequence of filtrate in the renal tubule is:
   1. **Glomerulus, PCT, loop of Henle, DCT, collecting duct**
   2. PCT, loop of Henle, DCT, glomerulus, collecting duct
   3. Glomerulus, loop of Henle, DCT, collecting duct, PCT
   4. Glomerulus, DCT, loop of Henle, PCT, collecting duct
8. Blood pressure in the glomerulus is:
   1. Extremely low
   2. Moderate
   3. Variable
   4. **Extremely high**
9. What cell assists in filtering molecules into the renal tubule?
   1. Glomerulus
   2. **Podocytes**
   3. Nephron
   4. Calyces
10. Peritubular capillaries arise from:
    1. Afferent arteriole
    2. **Efferent arteriole**
    3. Bowman’s capsule
    4. Loop of Henle
11. Which one of the substances below would NOT be reabsorbed by the blood?
    1. Glucose
    2. Amino acids
    3. **Urea**
    4. Sodium
12. Which of the following is not true of urine?
    1. It is sterile
    2. **It is alkaline**
    3. It is more dense than water
    4. It is has a scent
13. Normal urine has a specific gravity of:
    1. **1.0 to 1.25**
    2. 0.75 to 1.50
    3. 1.25 to 1.50
    4. 1.025 to 1.050
14. Which of the following does NOT describe the bladder?
    1. Smooth muscle
    2. Collapsible
    3. **Membrane-bound**
    4. Hollow
15. What tissue allows the bladder to expand?
    1. Smooth muscle
    2. **Transitional epithelium**
    3. Simple squamous epithelium
    4. Mucous
16. The voluntary sphincter of the urethra is the:
    1. Internal urethral sphincter
    2. Internal ureter sphincter
    3. **External urethral sphincter**
    4. External ureter sphincter
17. In a 24 hour period, the kidneys filter approximately
    1. 10-15 liters of blood
    2. 50-75 liters of blood
    3. 100-125 liters of blood
    4. **150-180 liters of blood**
18. In describing urine and filtrate, it could be said that:
    1. They are the same thing
    2. Filtrate contains the same amount of water as urine
    3. **Filtrate contains almost everything that blood plasma does, but urine does not**
    4. Urine contains no salt, but filtrate has high salt content
19. In an adult, water typically accounts for:
    1. 25% of your body weight
    2. **50% of your body weight**
    3. 75% of your body weight
    4. 99% of your body weight
20. A simple rule concerning salt and electrolyte regulation is:
    1. Sodium follows chloride
    2. Potassium follows sodium
    3. **Water follows salt**
    4. Salt follows water
21. Which of the following is an enzyme?
    1. ADH
    2. Angiotensin II
    3. Aldosterone
    4. **Renin**
22. Which of the following hormones regulates sodium and potassium concentrations to alter blood pressure?
    1. Angiotensin II
    2. ADH
    3. **Aldosterone**
    4. Calcitriol
23. Which hormone is responsible for Vitamin D synthesis?
    1. Angiotensin II
    2. ADH
    3. Aldosterone
    4. **Calcitrol**
24. Urine pH is typically found at:
    1. 3
    2. **6**
    3. 9
    4. 12
25. Urinalysis typically begins with:
    1. **Gross inspection**
    2. Dipstick
    3. Microscopy
    4. Taste-testing
26. Urine turbidity refers to:
    1. **How cloudy the urine is**
    2. How dark the urine is
    3. How much blood is found in the urine
    4. How much sediment is found in the urine
27. Urine color other than yellow is typically caused by:
    1. Increase in glucose
    2. **Eating certain foods (beets, dyes, etc.)**
    3. Dehydration
    4. Infested toilet water
28. A diet high in protein would result in:
    1. **Low pH**
    2. High pH
    3. More glucose in the urine
    4. Less urea content

Matching

1. RBCs in the urine due to trauma or infection C
2. Glucose in the urine due to diabetes mellitus G
3. Proteins in the urine due to exercise F
4. Bladder pressure, pain, and inflammation A
5. Condition that develops rapidly, leading to kidney's inability to filter blood B
6. Inability to hold urine in bladder D
7. A calcified deposit found in urine E
8. Interstitial cystitis
9. Acute renal failure
10. Hematuria
11. Incontinence
12. Kidney stone
13. Proteinuria
14. Glycosuria
15. Chronic renal failure
16. Hemoglobinuria