

DIABETES AND RENAL DISEASE QUESTIONS

1 . Diabetes is the leading cause of kidney failure, accounting for what percentage of new cases?

- A) 15%
- B) 22%
- C) 44%**
- D) 65%

2 . By 2025, what percentage of Americans are expected to have a diagnosis of diabetes or impaired glucose tolerance?

- A) 2% to 6%
- B) 15% to 20%**
- C) 25% to 30%
- D) 40% to 50%

3 . All of the following are diagnostic criteria for type 2 diabetes, EXCEPT:

- A) An HbA1c level of 6.5%
- B) Two fasting blood glucose levels of 130 mg/dL
- C) A two-hour glucose challenge result of 140 mg/dL**
- D) A random blood glucose of 210 mg/dL with symptoms of hyperglycemia

4 . The approximate mass cutoff of substances for filtration in the kidneys is

- A) 70 kDa.**
- B) 90 kDa.
- C) 0.001 mL.
- D) 0.000004 mL.

5 . What portion of the nephron is formed by the descending and ascending limbs of the renal tubule?

- A) Macula densa
- B) Loop of Henle**
- C) Bowman's capsule
- D) Proximal convoluted tubule

6 . The kidneys maintain the circulating blood volume by fluid balancing and by altering peripheral vascular resistance via the

- A) immune system.
- B) musculoskeletal system.
- C) sympathetic nervous system.
- D) angiotensin-aldosterone system.**

7 . Sympathetic innervation by the renal nerves influences

- A) renin release.**
- B) sodium release.
- C) nitric oxide retention.
- D) bradykinin inhibition.

8 . The most common origin of acute renal failure is

- A) hypotension.
- B) poor glycemic control.
- C) impaired renal blood flow.**
- D) age and history of alcohol abuse.

9 . Which of the following is NOT one of the three etiologic categories of acute renal failure?

- A) Prerenal
- B) Perirenal**
- C) Postrenal
- D) Intrarenal

10 . What condition is defined as a constellation of symptoms caused as a result of declining renal function and the accumulation of toxins within the plasma?

- A) Uremia**
- B) Diabetes
- C) Renal frost
- D) Sympathetic syndrome

11 . Excretory failure results in fluid shifts and includes decreased intracellular

A) water.

B) sodium.

C) potassium.

D) phosphorus.

12 . What is a well-known marker of poor renal outcomes in individuals with type 2 diabetes?

A) Albuminuria

B) Hypotension

C) Glucotoxicity

D) Hyperinsulinemia

13 . Which of the following is a classic feature of diabetic damage to the kidney?

A) Hypotension

B) Glucotoxicity

C) Hyperglycemia

D) Kimmelstiel Wilson nodules

14 . Changes in circulating levels of angiotensin II, catecholamines, and prostaglandins, or altered responsiveness to these vasoactive hormones, may result in

A) equilibrium.

B) hypoglycemia.

C) hyperfiltration.

D) changes in mentation.

15 . Diabetic nephropathy is defined clinically by the presence of more than

A) 10–20 mg urinary protein per day.

B) 100–200 mg urinary protein per day.

C) 300–500 mg urinary protein per day.

D) 4–6 mg urinary protein per day.

16 . In the presence of diabetic nephropathy, the recommended target blood pressure is less than or equal to

- A) **120/70 mm Hg.**
- B) 130/70 mm Hg.
- C) 140/80 mm Hg.
- D) 160/90 mm Hg.

17 . Which hormone stimulates the bone marrow to produce red blood cells?

- A) Androgenic
- B) Antidiuretic
- C) **Erythropoietin**
- D) Adrenocortical

18 . Contraindications to hemodialysis include all of the following, EXCEPT:

- A) Inability to anticoagulate
- B) Hemodynamic instability
- C) **Relapse or drug resistance**
- D) Lack of access to circulation

19 . Kidney transplant can be performed using a kidney from all of the following, EXCEPT:

- A) A living relative
- B) A living unrelated donor
- C) **A tissue-matched primate**
- D) A suitable cadaveric donor

20 . In type 2 diabetes, screening of kidney function should begin

- A) **at diagnosis.**
- B) within 1 year of diagnosis.
- C) within 5 years of diagnosis.
- D) within 10 years of diagnosis.