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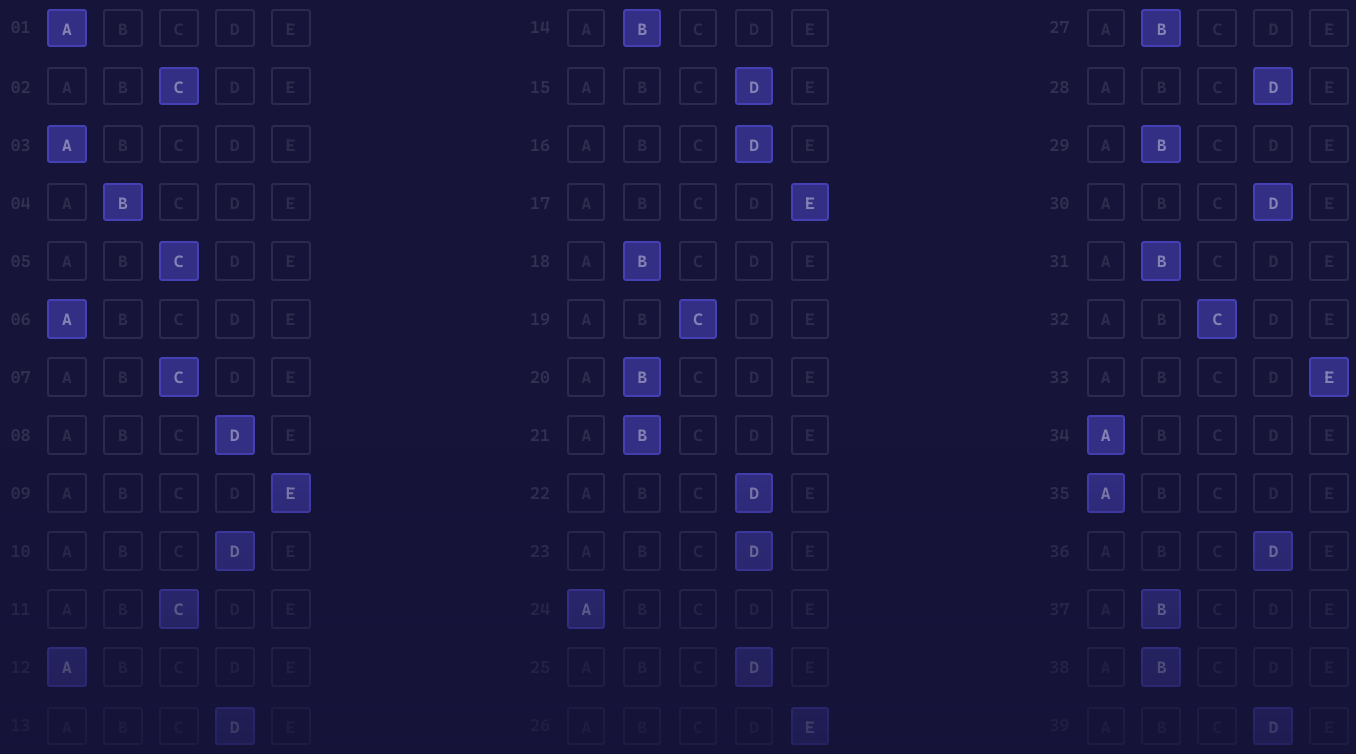

PRACTICE QUESTIONS

Saudi Commission For Health Specialties (SCFHS)

RDTCH

Renal Dialysis Technician Exam

EDITION	QUESTIONS	FORMAT
Demo	9	Limited Edition PDF

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Before you begin

What this is

9 practice questions for Saudi Commission For Health Specialties (SCFHS) `RDTCH`, each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

If something looks wrong

Send us three things and we will check it:

- the exam code, `RDTCH`
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

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QUESTION 1 SINGLE CHOICE

Which structure in the nephron is primarily responsible for the filtration of blood at the glomerulus?

A Loop of Henle

B Proximal convoluted tubule

C Glomerular (Bowman's) capsule

D Distal convoluted tubule

ANSWER C

WHY Filtration of blood occurs at the glomerulus, where plasma is filtered into Bowman's (glomerular) capsule to form the glomerular filtrate. The tubules (proximal, loop of Henle, distal) are responsible for reabsorption and secretion, not the initial filtration.

QUESTION 2 SINGLE CHOICE

Which of the following is the most common clinical indication for initiating hemodialysis in a patient with end-stage renal disease?

A Mild elevation of serum creatinine

B Symptomatic uremia (e.g., pericarditis, encephalopathy, refractory fluid overload)

C Routine scheduling regardless of symptoms

D Isolated microalbuminuria

ANSWER B

WHY Hemodialysis is initiated when the patient develops signs and symptoms of uremia such as pericarditis, encephalopathy, or fluid overload unresponsive to medical therapy, together with biochemical markers (eGFR, severe electrolyte/acid-base disturbance). Mild creatinine elevation, isolated microalbuminuria, or routine scheduling alone are not indications.

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QUESTION 3 SINGLE CHOICE

Which vascular access type is considered the preferred option for long-term hemodialysis because of its lower infection and thrombosis rates?

A Tunneled central venous catheter

B Non-tunneled femoral catheter

C **Arteriovenous (AV) fistula**

D Peritoneal dialysis catheter

ANSWER C

WHY The AV fistula (typically radiocephalic or brachiocephalic) is the preferred long-term vascular access for hemodialysis due to its lower rates of infection and thrombosis compared with grafts and catheters. Central venous catheters carry the highest risk of infection.

QUESTION 4 SINGLE CHOICE

In the hemodialysis circuit, the dialyzer (artificial kidney) functions primarily by allowing solutes and water to move between the blood and dialysate compartments across a semipermeable membrane through which process?

A Active transport requiring ATP

B **Diffusion and ultrafiltration**

C Osmosis across a lipid bilayer

D Exocytosis

ANSWER B

WHY Hemodialysis removes solutes by diffusion down a concentration gradient across the semipermeable membrane of the dialyzer and removes water by ultrafiltration driven by a transmembrane pressure gradient. Active transport and exocytosis are not the operative mechanisms.

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QUESTION 5 SINGLE CHOICE

A patient suddenly becomes hypotensive, diaphoretic, and complains of nausea and yawning during the first 30 minutes of hemodialysis. What is the most likely complication?

A Dialyzer reaction (anaphylaxis)

B Air embolism

C Intradialytic hypotension

D Hypernatremia

ANSWER C

WHY The classic presentation of sudden hypotension, yawning, nausea, diaphoresis, and sometimes cramps early in the session is intradialytic hypotension, often caused by excessive ultrafiltration relative to intravascular volume. Anaphylaxis would feature urticaria, wheezing, or angioedema, and air embolism would feature chest pain, dyspnea, and neurological signs.

QUESTION 6 SINGLE CHOICE

Which peritoneal dialysis modality uses an automated cycler machine to perform multiple exchanges overnight while the patient sleeps?

A Continuous ambulatory peritoneal dialysis (CAPD)

B Automated peritoneal dialysis (APD)

C Intermittent hemodialysis

D Sustained low-efficiency daily dialysis (SLEDD)

ANSWER B

WHY Automated peritoneal dialysis (APD), also called continuous cycling peritoneal dialysis (CCPD), uses an automated cycler to perform exchanges overnight, leaving a long dwell during the day. CAPD requires the patient to perform manual exchanges throughout the day.

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QUESTION 7 SINGLE CHOICE

Peritonitis is a major complication of peritoneal dialysis. Which finding in the drained dialysate is the most reliable early indicator of peritonitis?

A **Cloudy effluent**

B Straw-colored effluent

C Clear yellow effluent

D Effluent with a faint pink tinge

ANSWER **A**

WHY Cloudy (turbid) effluent, due to an elevated white cell count (≥100 cells/mm^3 with ≥50% neutrophils), is the hallmark early sign of peritonitis in PD patients and should prompt immediate investigation. Clear/straw-colored effluent is normal.

QUESTION 8 SINGLE CHOICE

Which water quality standard must the water used to prepare dialysate meet to be safe for hemodialysis patients?

A Potable (drinking) water standards

B **Standard for ultrapure dialysis water with strict limits on bacteria, endotoxins, and chemical contaminants (e.g., AAMI/ISO 23500)**

C Sterile water for injection

D Distilled water with no further specifications

ANSWER **B**

WHY Dialysis water must meet ultrapure water standards such as AAMI/ISO 23500 (formerly AAMI RD52), which impose much stricter limits on microbial and chemical contaminants than potable water, because large volumes of water cross the dialyzer membrane into the patient's blood.

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QUESTION 9 MULTIPLE CHOICE

A dialysis patient develops heparin-induced thrombocytopenia (HIT) on systemic heparin. Which alternative anticoagulation strategies may be used for hemodialysis in this patient? (Choose two.)

A **Argatroban (a direct thrombin inhibitor)**

B Saline flush–only anticoagulation (no anticoagulant in the circuit)

C Increased loading dose of unfractionated heparin

D **Regional citrate anticoagulation (with calcium replacement)**

ANSWER **A · D**

WHY Patients with HIT must avoid heparin and heparin products. Acceptable alternatives for dialysis anticoagulation include direct thrombin inhibitors such as argatroban or bivalirudin, and regional citrate anticoagulation with systemic calcium infusion. Continuing or increasing heparin is contraindicated because it can worsen thrombosis.

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