

Section 1

Q1

Question:

Your 51-year-old female patient has been diagnosed with a “new murmur” during a near syncopal episode workup. In evaluating this patient, **during which phase of the cardiac cycle would you anticipate auscultation of an S1 heart sound?**

Correct Answer: Systole

Rationale: S1 (“lub”) marks the closure of the mitral and tricuspid valves, signaling the onset of systole.

Q2

Question:

The initial workup for a patient with a new chief complaint of palpitations should include which of the following tests **first?**

Correct Answer: Basic metabolic profile

Rationale: In a new complaint of palpitations, basic labs (including electrolytes) and an ECG are standard initial steps before more specialized testing.

Q3

Question:

Which of the following locations is most commonly described as the best location to identify the aortic valve in a healthy adult?

Correct Answer: 2nd intercostal space, right sternal border

Rationale: The aortic area is auscultated at the 2nd intercostal space along the right sternal border.

Q4

Question:

Jason, a 63-year-old male who had a cardiac drug-eluting stent placed and had an elevated troponin of 1.6, asks how long he will need to be on aspirin plus clopidogrel (Plavix). **How long should Jason be on dual antiplatelet therapy after his stent?**

Correct Answer: 12 months minimum

Rationale: Current guidelines advise at least 12 months of dual antiplatelet

therapy (DAPT) after drug-eluting stent placement in the setting of elevated troponin or acute coronary syndrome.

Q5

Question:

What illness or diagnosis would localized egophony on auscultation over the left lower lobe most likely imply?

Correct Answer: Consolidation (pneumonia)

Rationale: Egophony is most commonly associated with lung consolidation, as in pneumonia.

Q6

Question:

While assessing a 15-year-old patient for a new onset of cough, how does performing **percussion** of the thorax assist the provider during the physical examination?

Correct Answer: To identify if underlying tissues are air-filled, fluid-filled, or consolidated

Rationale: Percussion differentiates resonance (air), dullness (fluid or consolidation), and helps guide further assessment.

Q7

Question:

Which of the following patients would you expect to show a **less-than-expected forced vital capacity (FVC)** on pulmonary function testing?

Correct Answer: Severe interstitial lung disease

Rationale: Restrictive lung diseases (like interstitial lung disease) reduce FVC.

Q8

Question:

In obstructive lung disease, a decreased level in which of the following **spirometry parameters** is most suggestive of diagnosis?

Correct Answer: Forced Expiratory Volume in 1 second (FEV₁)

Rationale: Obstructive disease is characterized by a notably reduced FEV₁ and a decreased FEV₁/FVC ratio.

Q9

Question:

Your newly established patient developed a progressively enlarged thyroid gland (goiter) along with symptoms of anxiety, palpitations, and tremor over the last year. **Which diagnosis is most likely based on these findings?**

Correct Answer: Graves' Disease

Rationale: Goiter plus hyperthyroid symptoms (tremor, palpitations) typically indicates Graves' disease.

Q10

Question:

A 32-year-old female with a diagnosis of hyperthyroidism might exhibit which of the following **typical signs** on exam?

Correct Answer: Exophthalmos

Rationale: Exophthalmos (proptosis) is a hallmark physical finding associated with Graves' hyperthyroidism.

Q11

Question:

Your patient has Cushing's disease. Which of the following **would you NOT expect** to find during examination?

Correct Answer: Low body temperature

Rationale: Common findings in Cushing's include moon facies, abdominal striae, and central obesity; a persistently low body temperature is not typical.

Q12

Question:

In a patient with Diabetes Mellitus Type 2, the evaluation for end-organ dysfunction should include which of the following?

Correct Answer: All of these are appropriate

Rationale: Annual renal function tests, urinalysis, and a dilated (or comprehensive) eye exam are all crucial in diabetes follow-up.

Q13

Question:

A patient with **severe cirrhosis** awaiting possible liver transplant should be evaluated with which scoring system to assess **liver function and prognosis?**

Correct Answer: Model for End-Stage Liver Disease (MELD) Score

Rationale: The MELD score is specifically used to prioritize and assess transplant need in cirrhosis.

Q14

Question:

You suspect mononucleosis in a 12-year-old with left upper quadrant pain and likely splenomegaly. **Which examination step should be avoided** over that area?

Correct Answer: Deep palpitation

Rationale: An enlarged spleen is at risk of rupture, so avoid deep palpation if mononucleosis is suspected.

Q15

Question:

A 21-year-old female may have a perforated gastric ulcer with peritonitis. **Which type of bacteria** is most likely the causative agent?

Correct Answer: Gram negative rods

Rationale: Perforated ulcers and resultant peritonitis often involve gram-negative enteric organisms (e.g., E. coli).

Q16

Question:

A 22-year-old male power lifter complains his scrotum is very enlarged and fluid-like. **Which diagnosis is most likely?**

Correct Answer: Hydrocele

Rationale: A fluid-filled scrotal enlargement that can transilluminate is most consistent with a hydrocele.

Q17

Question:

A 22-year-old female has sinus pressure and congestion. **Which maneuver** may help reproduce sinus-related pain and support the diagnosis?

Correct Answer: Leaning forward

Rationale: Sinus pressure typically worsens when bending or leaning forward.

Q18

Question:

A 49-year-old male presents with weight loss, night sweats, anhedonia, and CXR showing profoundly enlarged hilar adenopathy. **Which diagnosis** should be in your differential?

Correct Answer: Lymphoma

Rationale: "B symptoms" (night sweats, weight loss) plus hilar lymphadenopathy strongly suggests lymphoma.

Q19

Question:

Which of the following diseases is associated with **vitreous detachment**?

Correct Answer: Ehlers-Danlos

Rationale: Ehlers-Danlos syndrome, a connective tissue disorder, can be linked to vitreous abnormalities.

Q20

Question:

A patient presents with a **unilateral visual deficit** described as loss of visual fields on the **right side** in both eyes. This is known as what?

Correct Answer: Homonymous hemianopia

Rationale: Loss of the right visual field in both eyes is a right homonymous hemianopia (post-chiasmal lesion).

Q21

Question:

An adolescent female with microcytic, hypochromic anemia and elevated RDW most likely has iron deficiency. **Which labs** will you order **first**?

Correct Answer: TIBC and ferritin

Rationale: Iron studies (especially serum ferritin, TIBC) confirm iron deficiency (the most common cause of microcytosis with high RDW).

Q22

Question:

A microcytic anemia with **normal RDW** is most likely which type of anemia?

Correct Answer: Thalassemia trait

Rationale: Thalassemia typically shows microcytosis with normal RBC distribution width, as opposed to iron deficiency (which raises RDW).

Q23

Question:

A 43-year-old male with macrocytic anemia should be evaluated for which lab level to help narrow the etiology?

Correct Answer: Vitamin B12

Rationale: Macrocytosis suggests checking B12 or folate to differentiate causes.

Q24

Question:

A 66-year-old female with end-stage renal disease on dialysis has labs showing high creatinine/BUN. **On CBC**, you'd typically see which result?

Correct Answer: Normal MCH, hemoglobin 9.6

Rationale: ESRD often causes a normocytic, normochromic anemia (low hemoglobin, but normal indices).

Q25

Question:

During a routine physical, a 12-year-old with a history of Reye syndrome is noted. **Which agent** is most often implicated in causing Reye syndrome?

Correct Answer: Aspirin use

Rationale: Reye syndrome in children has been associated with aspirin administration during viral illnesses.

Q26

Question:

Your patient is diagnosed with **hepatitis A**. Which immunoglobulin is the **first to be elevated** in the serum?

Correct Answer: IgM

Rationale: IgM anti-HAV rises early in acute hepatitis A infections.

Q27

Question:

A patient had **new onset hepatitis B** about one year ago. Which marker is most likely elevated now?

Correct Answer: Hepatitis Core antibody

Rationale: After about a year, the IgG core antibody (anti-HBc) typically remains positive in ongoing or past HBV infection.

Q28

Question:

A 24-year-old female suspected of **systemic lupus erythematosus (SLE)**. Which **useful lab** aids diagnosis?

Correct Answer: Antinuclear antibody

Rationale: ANA testing is the primary screening test for SLE.

Q29

Question:

Which glands are commonly **obstructed** and may require incision and drainage for abscess?

Correct Answer: Apocrine

Rationale: Apocrine sweat gland obstruction (e.g., in hidradenitis suppurativa) often leads to abscess formation.

Q30

Question:

When screening a suspicious mole for melanoma, which **feature** is especially concerning?

Correct Answer: Irregular border

Rationale: An irregular or poorly demarcated border is a classic red flag for melanoma.

Q31

Question:

Which dermatologic lesion is **precancerous** and due to **UV-B** exposure?

Correct Answer: Actinic keratosis

Rationale: Actinic (solar) keratoses are considered premalignant lesions from sun (UV-B) damage.

Q32

Question:

Based on ABCDE for melanoma, which **represents a suspicious finding?**

Correct Answer: Diameter of 0.8 cm

Rationale: Lesions >6 mm (0.6 cm) in diameter are concerning ("D" in ABCDE). At 0.8 cm, it's suspicious.

Q33

Question:

A patient actively experiencing **delirium tremens** after abrupt alcohol cessation is likely suffering from deficit of **which neurotransmitter?**

Correct Answer: GABA

Rationale: Alcohol enhances GABA; withdrawal states lead to relative GABA deficiency, causing hyperadrenergic symptoms.

Q34

Question:

To differentiate **anxiety** from **hyperthyroidism**, which test is most useful?

Correct Answer: TSH and free T4

Rationale: Thyroid function tests help rule out hyperthyroidism, which can mimic anxiety symptoms.

Q35

Question:

Your **schizophrenic** patient says, "What is that awful smell?" This is an example of **which type of hallucination?**

Correct Answer: Olfactory

Rationale: Perceiving nonexistent odors is an olfactory hallucination.

Q36

Question:

A 16-year-old who attempted self-harm must be evaluated for which **most common co-diagnosis?**

Correct Answer: Depression

Rationale: Depression is the most frequent psychiatric condition co-existing with self-harm/suicidality.

Q37

Question:

A 23-year-old male has severe pain raising his arm overhead. **Which diagnosis** is most likely?

Correct Answer: Damage to the rotator cuff

Rationale: Pain on overhead abduction or arm raise commonly indicates rotator cuff pathology.

Q38

Question:

A 16-year-old female has unilateral jaw pain and difficulty fully opening her mouth. **Which diagnosis** is most likely?

Correct Answer: Temporomandibular joint (TMJ) pain, treat with a bite guard

Rationale: TMJ issues cause jaw pain, limited mouth opening, and often benefit from bite guards.

Q39

Question:

Limited lumbar spine movement with inflammation over the sacroiliac joints. **Which diagnosis** fits best?

Correct Answer: Ankylosing spondylitis

Rationale: Sacroiliitis plus decreased lumbar mobility is classic for ankylosing spondylitis.

Q40

Question:

You perform a sensory exam of the face and notice abnormal sensation to sharp/dull over the left cheek. **Which cranial nerve** is most likely involved?

Correct Answer: Trigeminal nerve

Rationale: The trigeminal nerve (CN V) provides facial sensory innervation.

Q41

Question:

During a neurologic exam (cranial nerves), which is the **most effective** for assessing **cranial nerve II**?

Correct Answer: Snellen chart for visual acuity

Rationale: CN II (optic nerve) is assessed with visual acuity (Snellen) and visual fields.

Q42

Question:

Having the patient close their eyes and identify a familiar object in their hand is known as **which test**?

Correct Answer: Stereognosis

Rationale: Stereognosis tests the ability to perceive and identify objects by touch alone.

Q43

Question:

A patient with a damaged **glossopharyngeal nerve** might exhibit which clinical finding?

Correct Answer: Impaired gag reflex

Rationale: CN IX provides sensory input for the gag reflex.

Q44

Question:

A patient successfully treated for strep infection now has **hematuria** with RBC casts. **Which diagnosis** is confirmed?

Correct Answer: Glomerulonephritis

Rationale: RBC casts post-strep are classic for acute post-streptococcal glomerulonephritis.

Q45

Question:

In addition to dysuria and frequency, **which urinalysis finding** confirms pyelonephritis?

Correct Answer: WBC casts on urinalysis

Rationale: WBC casts indicate upper urinary tract infection (pyelonephritis).

Q46

Question:

In assessing suspected pyelonephritis, which **physical exam test** may elicit a confirmatory response?

Correct Answer: Renal punch test

Rationale: Costovertebral angle tenderness (“renal punch”) is classic for pyelonephritis.

Q47

Question:

In a **diabetic hypertensive** patient, which **first** test is used to evaluate early renal dysfunction?

Correct Answer: Urinalysis with micro/macro albumin

Rationale: Microalbuminuria is an early sign of diabetic/hypertensive nephropathy.

Q48

Question:

A 19-year-old female with groin pain and a recent promiscuous partner. She shuffles when walking, STI positive. **Which agent** most likely caused this?

Correct Answer: Gonorrhea and Chlamydia

Rationale: Co-infection with gonorrhea and chlamydia is common and often presents with PID (“shuffle gait”).

Q49

Question:

A 15-year-old with dysfunctional uterine bleeding (DUB). **Which lab** should be ordered **first**?

Correct Answer: Serum human chorionic gonadotropin (HCG)

Rationale: Always rule out pregnancy first in abnormal uterine bleeding.

Q50

Question:

A 25-year-old with malodorous vaginal discharge suspicious for **bacterial vaginosis**. **Which test** is **not** used to diagnose BV?

Correct Answer: Gonorrhea and Chlamydia DNA probe

Rationale: BV is diagnosed with clue cells, elevated pH, and whiff test; GC/Chlamydia probes are separate tests.

Q51

Question:

A patient with CHF (EF 30%) has SOB only with jogging/exercise, not at rest or ADLs. **Which NYHA class** is this?

Correct Answer: Class II

Rationale: NYHA II = slight limitation on ordinary activity (e.g., jogging), no symptoms at rest or mild exertion.

Q52

Question:

A patient presents with new-onset **irregularly irregular** rapid HR around 100 bpm for several days. **What is the first priority** intervention?

Correct Answer: Maintain rate control and anticoagulation prior to rhythm conversion

Rationale: In atrial fibrillation >48 hours or unknown duration, guidelines recommend rate control and anticoagulation before cardioversion.

Q53

Question:

A 63-year-old male with exertional chest pressure that resolves with rest (not increasing in frequency) is diagnosed with **what** and gets **what plan**?

Correct Answer: Stable angina; initiate a long-acting oral nitrate

Rationale: Predictable exertional chest pain relieved by rest is stable angina, commonly treated with prophylactic nitrates.

Q54

Question:

A 72-year-old female with prior CABG and valve replacement now has fever, night sweats, and a **new murmur**. **Which complication** must you evaluate?

Correct Answer: Bacterial endocarditis

Rationale: A new murmur with systemic symptoms (fever, sweats) in a patient with prosthetic valves strongly suggests endocarditis.

Q55

Question:

In a 9-year-old, you hear crackles in the lower lobe that clear after coughing. **What do you suspect?**

Correct Answer: Atelectasis

Rationale: Crackles that resolve after coughing in a child often indicate atelectasis.

Q56

Question:

A tall, thin 15-year-old male abruptly developed SOB after a minor fall. **Which diagnosis do you anticipate?**

Correct Answer: Spontaneous pneumothorax

Rationale: Sudden onset SOB in a tall, thin adolescent is classically a spontaneous pneumothorax.

Q57

Question:

A patient recently post-operative for appendectomy has **dull percussion** over the lung base. **Which diagnosis is likely?**

Correct Answer: Atelectasis

Rationale: Post-op patients are prone to atelectasis, which yields dullness on percussion.

Q58

Question:

Which of the following patients is **most likely** to complain of hemoptysis?

Correct Answer: Lung cancer

Rationale: Hemoptysis is highly suspicious for a malignancy such as lung cancer in the correct clinical context.

Q59

Question:

A patient's labs show **TSH 5.9** (slightly high) and **free T4 0.3** (low). **Which symptom** would you expect with these values?

Correct Answer: Cold intolerance

Rationale: Elevated TSH and low T4 indicates hypothyroidism; cold intolerance is a classic symptom.

Q60

Question:

A 40-year-old African American female patient presents with **exophthalmos** on exam. **Which condition** is described?

Correct Answer: Hyperthyroidism

Rationale: Exophthalmos (proptosis) is a hallmark of hyperthyroid states (Graves').

Q61

Question:

For suspected **Hashimoto's thyroiditis**, which test specifically evaluates the underlying pathology of hypothyroidism?

Correct Answer: Check anti-thyroid peroxidase levels

Rationale: Elevated anti-TPO antibodies support the diagnosis of autoimmune (Hashimoto's) thyroiditis.

Q62

Question:

A 51-year-old Caucasian male hasn't seen a provider in 20 years. He presents with **nonpitting periorbital edema, coarse hair, lateral eyebrow thinning**. **Which finding** causes this?

Correct Answer: Severe hypothyroidism

Rationale: Myxedema (severe hypothyroidism) can present with these hallmark facial changes.

Q63

Question:

Patients with **flu-like symptoms, splenomegaly, and posterior cervical chain adenopathy** should be screened with which test?

Correct Answer: Monospot

Rationale: Infectious mononucleosis is typically tested with a Monospot (heterophile) test.

Q64

Question:

A patient diagnosed with **acanthosis nigricans** would typically have which exam finding?

Correct Answer: Central obesity

Rationale: Acanthosis nigricans often occurs in obesity and insulin resistance (velvety skin changes).

Q65

Question:

A 39-year-old female with **RUQ pain** worsened by deep breathing and a **positive Murphy sign**. Which condition is consistent with this?

Correct Answer: Cholecystitis

Rationale: A positive Murphy sign is classic for acute inflammation of the gallbladder (cholecystitis).

Q66

Question:

In educating a patient about GERD management, which factor is not typically an aggravating cause?

Correct Answer: Increased gastric emptying (“dumping”)

Rationale: Faster emptying usually reduces esophageal reflux exposure. Bending over, citrus, alcohol, etc. can worsen GERD.

Q67

Question:

A 48-year-old with **floaters, flashes of light, and a “curtain” coming down** over the visual field. Which condition is likely?

Correct Answer: Retinal detachment

Rationale: These classic signs—floaters, light flashes, curtain—point to a retinal detachment.

Q68

Question:

A patient with **acute closed-angle glaucoma** will show which finding on exam?

Correct Answer: Increase in intraocular pressure

Rationale: Acute angle-closure glaucoma causes a rapid and dangerous rise in intraocular pressure.