

Chapter 03: Examination Techniques and Equipment Test Bank—Medical

MULTIPLE CHOICE

1. Guidelines for Standard Precautions indicate that mask and eye protection or a face mask should be worn while performing
 - a. suture removal.
 - b. trachea care and suctioning.
 - c. wet-to-dry dressing changes.
 - d. patient bathing.
 - e. tube feedings.

ANS: B

Masks and eye protection or a face mask are indicated during procedures that are likely to generate splashes or sprays of body fluids, which include endotracheal secretions.

REF: p. 31

TOP: Discipline: Pathophysiology

MSC: Organ System: General

2. Standard Precautions apply to all patients
 - a. with bloodborne infections.
 - b. with infected, draining wounds.
 - c. in intensive care units.
 - d. receiving care in hospitals.
 - e. believed to have an infectious disease.

ANS: D

Although all of these statements are true, the best answer is patients receiving care in hospitals. Standard Precautions were developed with the intent of application to the care of all hospitalized patients; however, the standard has merit and should be applied to all cases of patient care regardless of the environment where care is delivered.

REF: p. 30

TOP: Discipline: Pathophysiology

MSC: Organ System: General

3. According to the guidelines for Standard Precautions
 - a. hand washing is not needed between tasks and procedures on the same patient.
 - b. the caregiver's hands should be washed only after touching blood products with ungloved hands and after caring for infectious patients.
 - c. the caregiver's hands should be washed only after working with patients who are thought to be infectious.
 - d. the caregiver's hands should be washed after touching any body fluids and contaminated items regardless of whether gloves are worn.
 - e. the caregiver's hands should be washed only after touching body fluids with

ungloved hands and between patient contact.

ANS: D

Hand washing should be done after removal of gloves, between patient contact, and after touching body fluids regardless of whether gloves are used. It may be necessary to wash hands between tasks and procedures on the same patient to prevent cross contamination of body parts.

REF: p. 31

TOP: Discipline: Pathophysiology

MSC: Organ System: General

4. Which patient is at the highest risk for the development of latex allergy?
- A new patient who has no chronic illness and has never been hospitalized
 - A patient who has had multiple procedures or surgeries
 - A patient who is allergic to eggs
 - A patient who is allergic to contrast dye
 - A patient who is a vegetarian

ANS: B

A patient who has had multiple procedures or surgeries has a higher exposure rate to rubber gloves and to equipment and supplies that contain latex and therefore is at a higher risk for developing an allergic response.

REF: p. 30

TOP: Discipline: Pathophysiology

MSC: Organ System: General

5. One recommendation to prevent latex allergy is to
- wear latex gloves frequently to reduce sensitivity.
 - forcefully snap off examination gloves to remove excess powder from the gloves.
 - wash hands with mild soap after removing gloves and then dry the hands thoroughly.
 - use well-powdered gloves with an increased protein content.
 - use oil-based creams or lotions before donning gloves.

ANS: C

The recommendations are to use nonlatex gloves for situations not likely to involve infectious materials, not to use oil-based creams or lotions, to wash hands with mild soap and dry thoroughly after removing gloves, and to use powder-free latex gloves with a reduced protein content. Forcefully snapping off latex gloves disperses latex molecules in the air, which can lead to the most severe reactions.

REF: p. 32

TOP: Discipline: Pathophysiology

MSC: Organ System: General

6. Which patient position is useful for auscultating heart tones?
- Lithotomy
 - Dorsal recumbent
 - Left lateral recumbent
 - Right Sims
 - Prone

ANS: C

The left lateral recumbent position places the left ventricle closer to the chest wall and is recommended for hearing low-pitched sounds such as the third and fourth heart sounds.

REF: p. 32 TOP: Discipline: Pathophysiology MSC: Organ System: General

7. Which technique is used during the history taking and the physical examination process?
- Auscultation
 - Instrumentation
 - Palpation
 - Percussion
 - Inspection

ANS: E

Inspection is the technique used while gathering and validating data during the history taking and the actual hands-on physical examination.

REF: p. 32 TOP: Discipline: Pathophysiology MSC: Organ System: General

8. Which examination technique should be used first?
- Deep palpation
 - Inspection
 - Percussion
 - Auscultation
 - Light palpation

ANS: B

Inspection, the process of systematic observation, is the first technique used in an examination.

REF: p. 32 TOP: Discipline: Pathophysiology MSC: Organ System: General

9. The use of secondary, tangential lighting is most helpful in the detection of
- variations in skin color.
 - enlarged tonsils.
 - foreign objects in the nose or ear.
 - variations in contour of the body surface.
 - variations in texture and mobility.

ANS: D

Tangential lighting is used to cast shadows so as to best observe contours and variations in body surfaces. All the other choices are best observed with direct lighting that does not cast shadows.

REF: p. 33 TOP: Discipline: Pathophysiology MSC: Organ System: General

10. A nonambulatory 80-year-old male patient tells the female nurse that he feels like he is having drainage from his rectum. Which initial nursing action is appropriate?
- Drape the patient and observe the rectal area.
 - Tell the patient that his physician will be notified of his problem.
 - Tell the patient that you will ask the male nurse on the next shift to check on the problem.

- d. Give the patient an ice pack to apply to the area.
- e. Give the patient a specimen cup to collect the drainage.

ANS: A

Necessary exposure for direct observation, while adjusting for modesty, is warranted. The complaint warrants validation before referring or delegating.

REF: p. 33 TOP: Discipline: Pathophysiology MSC: Organ System: General

11. You are conducting a head to toe examination as part of a patient's preventive health assessment. The room has adequate lighting, and you have access to both sides of the examining table. What position should you assume while conducting this examination?
- a. Behind the patient
 - b. To the left side of the patient
 - c. Seated in a chair in front of the patient
 - d. To the right side of the patient
 - e. Standing in front of the patient

ANS: D

Although conventionally taught to approach an examination from the patient's right side, it is not always practical. Therefore, it is important that the examiner develop the skills necessary to approach either side of the patient.

REF: p. 33 TOP: Discipline: Pathophysiology MSC: Organ System: General

12. Which part of the examiner's hand is best for palpating vibration?
- a. Dorsal surface
 - b. The thumb
 - c. Fingertips
 - d. Ulnar surface and base of the fingers
 - e. Finger pads

ANS: D

The ulnar surface of the hand and the base of the fingers can best feel vibratory sensations such as thrills and fremitus.

REF: p. 33 TOP: Discipline: Pathophysiology MSC: Organ System: General

13. The dorsal surface of the hand is most often used for the assessment of
- a. crepitus.
 - b. thrills.
 - c. texture.
 - d. vibration.
 - e. temperature.

ANS: E

The dorsal surface, or back of the hand, can best feel for warmth.

REF: p. 33 TOP: Discipline: Pathophysiology MSC: Organ System: General

14. When conducting the abdominal examination, after you inspect, you proceed next to
- percussion.
 - deep palpation.
 - the rectal examination.
 - auscultation.
 - light palpation.

ANS: D

Auscultation precedes palpation or percussion of the abdomen because these techniques can stimulate peristalsis, which may alter the correct assessment of abdominal sounds. The rectal examination is performed at a point after a full abdominal examination is completed.

REF: p. 35

TOP: Discipline: Pathophysiology

MSC: Organ System: General

15. The degree of percussion tone is determined by the density of the medium through which the sound waves travel. Which statement is true regarding the relationship between density of the medium and percussion tone?
- The more dense the medium, the louder the percussion tone.
 - The less dense the medium, the louder the percussion tone.
 - The more hollow the area percussed, the quieter the percussion tone.
 - Percussion over bony areas produces the loudest percussion tones.
 - Percussion tones are produced by the structure immediately beneath the skin.

ANS: B

Percussion sounds vary according to the tissue being percussed. Whereas less dense tissue (e.g., over a normal lung) produces a loud tone, more dense tissue (e.g., a muscle) produces a softer tone. Percussion tones arise from vibrations 4 to 6 cm deep in the body tissue.

REF: p. 34

TOP: Discipline: Pathophysiology

MSC: Organ System: General

16. Expected normal percussion tones include
- dullness over the lungs.
 - hyperresonance over the lungs.
 - tympany over an empty stomach.
 - flatness over an empty stomach.
 - resonance over the liver.

ANS: C

Whereas a normal lung produces resonance percussion tones, an empty stomach is expected to produce tympany. Dull percussion tones are heard over the liver.

REF: p. 34

TOP: Discipline: Pathophysiology

MSC: Organ System: General

17. When percussing, a dull tone is expected to be heard over
- most of the abdomen.
 - emphysemic lungs.
 - the liver.
 - healthy lung tissue.

e. an empty stomach.

ANS: C

Dull tones are expected over more dense areas such as the liver.

REF: p. 34

TOP: Discipline: Pathophysiology

MSC: Organ System: General

18. When using mediate or indirect percussion, which technique is appropriate?
- Place the palmar surface of the nondominant hand on the body surface with the fingers held together.
 - Place the palmar surface of the nondominant hand on the body surface with the fingers slightly spread apart.
 - Mediate or indirect percussion involves striking the finger or hand directly against the body.
 - Place the ulnar surface of the nondominant hand on the body surface with the fingers slightly spread apart.
 - Place the ulnar surface of the nondominant hand on the body surface with the fingers together.

ANS: B

The palmar surface of the nondominant (stationary) hand should rest against the body surface, with the fingers spread slightly. To improve eliciting correct tones, a helpful tip is to hyperextend the middle finger of the stationary hand and place the distal interphalangeal joint of the middle finger firmly against the body surface. This lifting of the fingertip avoids dampening the vibratory sounds.

REF: p. 34

TOP: Discipline: Pathophysiology

MSC: Organ System: General

19. During percussion, the downward snap of the striking fingers should originate from the
- wrist.
 - forearm.
 - shoulder.
 - interphalangeal joint.
 - elbow.

ANS: A

The dominant hand's middle finger strikes the stationary finger with a wrist motion and is lifted quickly off the striking surface.

REF: p. 34

TOP: Discipline: Pathophysiology

MSC: Organ System: General

20. Which technique is commonly used to elicit tenderness arising from the liver, gallbladder, or kidneys?
- Finger percussion
 - Only indirect percussion techniques are ever used to elicit tenderness.
 - Fist percussion
 - Thumb percussion
 - Palmer percussion

ANS: C

Fist percussion is a direct percussion technique used to elicit tenderness over organs such as the liver, gallbladder, or kidneys.

REF: p. 34

TOP: Discipline: Pathophysiology

MSC: Organ System: General

21. During auscultation, you can limit your perceptual field best by
- asking patients to describe their symptoms.
 - listening through the patient's clothing.
 - closing your eyes.
 - performing palpation before percussion.
 - turning out the lights in the examination room.

ANS: C

By closing your eyes, your sense of hearing becomes more acute, increasing your ability to isolate sounds.

REF: p. 35

TOP: Discipline: Pathophysiology

MSC: Organ System: General

22. You are auscultating a patient's chest. The sounds are not clear, and you are having difficulty distinguishing between respirations and heartbeats. What technique can you use to facilitate your assessment?
- Anticipate the next sounds.
 - Isolate each cycle segment.
 - Listen to all sounds together.
 - Move the stethoscope clockwise.
 - Ask the patient to whisper his or her name.

ANS: B

If you are hearing everything at once, it is more difficult to distinguish different sounds. Try isolating each segment and listen to that segment intently; then move on to another segment. For example, listen only to breath sounds, then only to inspiratory breath sounds, and then only to expiratory breath sounds.

REF: p. 35

TOP: Discipline: Pathophysiology

MSC: Organ System: General

23. When examining the abdomen, which technique should be used first?
- Inspection
 - Light palpation
 - Percussion
 - Auscultation
 - Direct palpation

ANS: A

Inspection is always used as the first technique in all physical examinations, including the abdomen.

REF: p. 32

TOP: Discipline: Pathophysiology

MSC: Organ System: General

24. Auscultation should be carried out last except when examining
- the neck area.
 - the abdomen.
 - the lungs.
 - the heart.
 - none of the above; auscultation is always carried out last in a proper physical examination.

ANS: B

Auscultation is the last examination technique used for all areas except the abdomen. In this case, it is performed after inspection.

REF: p. 35 TOP: Discipline: Pathophysiology MSC: Organ System: General

25. Which of the following statements is true regarding tympanic membrane temperature?
- It is taken by placing an infrared probe anterior to the ear.
 - The probe is placed in the external auditory canal to occlude it.
 - Temperatures taken with a tympanic thermometer never vary from those taken by the oral or rectal route.
 - It is an accurate measurement of body temperature because the tympanic membrane shares its blood supply with the hypothalamus.
 - It is taken by placing an infrared probe posterior to the ear.

ANS: D

The tympanic membrane shares its blood supply with the hypothalamus and is therefore an accurate measurement of body temperature. Tympanic thermometer probes are gently placed at the external opening of the ear canal, but not in the canal, and they should not occlude the canal.

REF: p. 39 TOP: Discipline: Pathophysiology MSC: Organ System: General

26. A scale used to assess a patient's weight should be calibrated
- when the patient tells you the weight is not correct.
 - by a qualified technician at regularly scheduled intervals.
 - each time it is used.
 - when necessary, with the patient standing on the scale.
 - only by the manufacturer.

ANS: C

Obtaining weight begins with a manual calibration of the scale before the patient stands on the scale. Electronic scales are automatically calibrated before each reading.

REF: p. 37 TOP: Discipline: Pathophysiology MSC: Organ System: General

27. The height-measuring attachment of the standing platform scale should be pulled out
- before the patient steps on the scale.
 - before the scale is balanced.
 - after the patient steps on the scale.
 - while the weight is being determined.
 - only after the weight has been assessed.

ANS: A

To ensure patient safety, the arm of the height measuring attachment should be pulled up before the patient steps on the scale.

REF: p. 37

TOP: Discipline: Pathophysiology

MSC: Organ System: General

28. An infant should be placed in which position to have his or her height or length measured?
- Vertical, with the examiner's hands under the infant's axilla
 - Supine on a measuring board
 - While being held by a parent
 - In the lateral position with the toes against a measuring board
 - Prone on a measuring board

ANS: B

An infant should be placed supine on a measuring board to measure height or length.

REF: p. 37

TOP: Discipline: Pathophysiology

MSC: Organ System: General

29. The stethoscope's diaphragm is most useful in the assessment of _____ sounds.
- high-pitched
 - dull
 - low-pitched
 - rhythmic
 - tympanic

ANS: A

The diaphragm is best for hearing high-pitched sounds, such as breath sounds, bowel sounds, and normal heart tones.

REF: p. 39

TOP: Discipline: Pathophysiology

MSC: Organ System: General

30. Which of the following occurs when firm pressure is used to apply the stethoscope's bell endpiece to the skin?
- It transmits low-pitched sounds.
 - It functionally converts to a diaphragm endpiece.
 - Assessment findings are more accurate.
 - Most sounds are occluded.
 - Abnormally low sounds are better transmitted.

ANS: B

Applying firm pressure to the bell endpiece causes the skin to act as a diaphragm, obliterating the low-pitched sounds.

REF: p. 39

TOP: Discipline: Pathophysiology

MSC: Organ System: General

31. A rubber or plastic ring should be around the bell endpiece of a stethoscope to
- prevent the transmission of static electricity.
 - avoid cold metal from touching the patient.
 - prevent the sharp edge of the stethoscope from damaging the patient's skin.

- d. allow firm pressure to be applied without discomfort.
- e. ensure secure contact with the body surface.

ANS: E

The ring around the bell portion of the stethoscope functions to secure contact with body surfaces when placed lightly on the skin.

REF: p. 40 TOP: Discipline: Pathophysiology MSC: Organ System: General

32. Which technique should be used to stabilize the stethoscope during auscultation?
- a. The tubing should be held lightly near the endpiece.
 - b. The tubing should be held firmly near the endpiece.
 - c. The endpiece should be held between the second and third fingers.
 - d. The endpiece should be covered with the examiner's flattened hand.
 - e. The endpiece should be held with all the examiner's fingers.

ANS: C

To stabilize the stethoscope at the desired location, the endpiece should be held in place with the second and third fingers.

REF: p. 40 TOP: Discipline: Pathophysiology MSC: Organ System: General

33. Weak pulses, fetal heart activity, and vessel patency are all best assessed with which type of stethoscope?
- a. Diaphragm end of an acoustic stethoscope
 - b. Electronic
 - c. Ultrasonic
 - d. Magnetic
 - e. Bell end of an acoustic stethoscope

ANS: C

Only the ultrasonic stethoscope, the Doppler, can detect blood flow rather than amplify sounds, which is needed in assessing weak pulses, fetal heart activity, and vessel patency.

REF: p. 41 TOP: Discipline: Pathophysiology MSC: Organ System: General