

INI CET 2024 Answer Key PDF

- Q1. (a) Right hemothorax. Explanation:** In a supine trauma patient, a hemothorax typically presents as a diffuse, hazy opacification of the affected side due to blood layering posteriorly.
- Q2. (c) Posterior rib. Explanation:** Posterior ribs are more horizontal and distinct on a frontal chest X-ray compared to anterior ribs, which run more vertically and appear less prominent.
- Q3. (c) Tension pneumocephalus. Explanation:** The Mt. Fuji sign is a characteristic radiological finding in tension pneumocephalus where air in the subdural space causes compression and separation of the frontal lobes.
- Q4. (c) Chronic osteomyelitis. Explanation:** The image shows features like thickened cortex and areas of bone destruction with sequestration, which are hallmark signs of chronic bone infection.
- Q5. (a) Water has HU 0. Explanation:** On the Hounsfield scale (HU), water is used as the baseline reference point and is assigned a value of 0.
- Q6. (c) Ultrasound contrast. Explanation:** Microbubble-based ultrasound contrast agents are not nephrotoxic, making them safer for patients with chronic kidney disease compared to iodinated or gadolinium-based agents.
- Q7. (a) Patella fracture. Explanation:** The X-ray shows a clear lucent fracture line traversing the patella.
- Q8. (c) ARSA. Explanation:** Aberrant Right Subclavian Artery (ARSA) is a vascular anomaly where the right subclavian artery arises from the aortic arch distal to the left subclavian artery and passes behind the esophagus.
- Q9. (a) Otto veraguth folds. Explanation:** Allergic salute, allergic shiners, and Dennie-Morgan lines are classic physical signs of allergic rhinitis; Veraguth folds are associated with depression.
- Q10. (d) Antrochoanal Polyp. Explanation:** While JNA is common in young males with epistaxis, the provided answer identifies the antrochoanal polyp, which is a common cause of unilateral nasal obstruction in children.
- Q11. (a) Achalasia. Explanation:** The Barium swallow image shows the "bird-beak" sign, which is diagnostic for achalasia cardia, where the esophagus is dilated with a tapered lower end.
- Q12. (b) Adenoidectomy with grommet insertion. Explanation:** Grommets are surgical ventilation tubes for conductive hearing loss caused by fluid in the middle ear; they do not treat sensorineural hearing loss.
- Q13. (a) Diagnostic. Explanation:** Estrogen and Progesterone receptors (ER, PR) are used as molecular markers to classify breast cancer and help guide treatment decisions.
- Q14. (a) To assess respiratory distress syndrome (RDS). Explanation:** The Downes score is a clinical scoring system used in neonatology to evaluate the severity of respiratory distress in newborns.
- Q15. (a) Torture. Explanation:** Per the provided document, the answer is torture (though medically/historically, the Declaration of Tokyo concerns torture while Oslo concerns abortion).
- Q16. (a) Hepatitis B (hepatitis B virus infection). Explanation:** PSC, Caroli disease, and liver flukes are established risk factors for cholangiocarcinoma; Hepatitis B is primarily a risk factor for hepatocellular carcinoma.

Q17. (a) Cognitive delays. Explanation: Diagnosis of autism focuses on social communication deficits and repetitive behaviors; while cognitive delays can co-occur, they are not a required diagnostic criterion.

Q18. (a) 5% dextrose and normal saline. Explanation: Isotonic crystalloid solutions are the preferred choice for fluid resuscitation in pediatric emergency scenarios.

Q19. (a) Focal. Explanation: Focal vitiligo refers to a stable, localized form of the condition that does not follow a segmental pattern and remains confined to a small area.

Q20. (c) Ultrasound (US). Explanation: Ultrasound is the preferred imaging modality for patients with renal failure as it avoids the risks of contrast-induced nephropathy associated with CT or MRI.

Q21. (a) Adenoidectomy with grommet insertion. Explanation: Grommet insertion treats middle ear effusion (conductive loss) and provides no benefit for bilateral sensorineural hearing loss.

Q22. (b) Methyl ergotamine. Explanation: Methylergometrine is contraindicated in patients with hypertension because it can cause a significant and dangerous rise in blood pressure.

Q23. (d) IV labetalol, magnesium sulphate. Explanation: In a late-term pregnancy with severe preeclampsia symptoms (hypertension and proteinuria), immediate management involves controlling blood pressure and preventing seizures with Magnesium Sulphate.

Q24. (a) The baby has O positive blood group and antibodies negative. Explanation: In a first pregnancy with an Rh-negative mother and Rh-positive baby, the initial antibody test (Direct Coombs) is typically negative if the mother hasn't yet been sensitized.

Q25. (a) Zinc. Explanation: Zinc is a vital mineral for male reproductive health, contributing to sperm production, motility, and overall fertility.

Q26. (a) Dexamethasone 6 mg every 12 hours, 4 times. Explanation: This is the standard corticosteroid regimen used to accelerate fetal lung maturity in cases of threatened preterm delivery.

Q27. (d) Anomaly Scan. Explanation: A mid-trimester anomaly scan (at 18-20 weeks) is the primary method for screening structural abnormalities such as neural tube defects and soft markers for Down syndrome.

Q28. (b) Ruptured ectopic pregnancy. Explanation: Abdominal pain and vaginal bleeding in a woman of childbearing age are classic presenting symptoms of an ectopic pregnancy rupture.

Q29. (c) Femoral hernia. Explanation: Although inguinal hernias are more common overall, femoral hernias occur far more frequently in women than in men due to the anatomy of the female pelvis.