INI CET 2022 Answer Key PDF

Q1. (c) 5, 1, 2, 3, 4 .The direct pathway begins with cortical excitation of the striatum, followed by inhibition of globus pallidus internus, disinhibition of the thalamus, and stimulation of the motor cortex via substantia nigra.

Q2. (a) 20cc .The average volume of a normal prostate in adult males is about 20cc. Enlargement above this may suggest benign prostatic hyperplasia or malignancy.

Q3. (c) Lisfranc .The Lisfranc ligament connects the medial cuneiform to the base of the 2nd metatarsal and is important for stabilizing the midfoot.

Q4. (c) Risorius .The Risorius muscle is responsible for retracting the angle of the mouth and is innervated by the facial nerve, which elevates the structure shown.

Q5. (a) Methoxyflurane > Halothane > Isoflurane > Nitrous oxide .Potency of inhalational agents is inversely related to MAC values. Methoxyflurane has the lowest MAC and highest potency, followed by halothane, isoflurane, and nitrous oxide.

Q6. (c) 3, 4, 1, 2 .In the hilum of the lung, the anterior-most structure is the pulmonary vein, followed by pulmonary artery, then bronchus, and finally bronchial vessels.

Q7. (a) 2, 1, 3, 5, 4 .After incorporation of gene into bacteria, the protein is expressed, cells are lysed, analyzed with SDS PAGE, hybridized, and the protein is eluted.

Q8. (c) 3 .The third pharyngeal pouch gives rise to the thymus and inferior parathyroid glands. Defects in its development result in DiGeorge syndrome.

Q9. (d) 5, 1, 2, 3, 4 .From basal to luminal side: myoepithelial cell > spermatogonia > primary spermatocyte > spermatid > spermatozoa.

Q10. (a) Methionine .Maple syrup urine disease is caused by defective metabolism of branched-chain amino acids: leucine, isoleucine, and valine. Methionine is not involved.

Q11. (b) Ischiorectal fossa .Penile urethral rupture leads to blood accumulation in the superficial perineal pouch, scrotum, and penis, but not in the ischiorectal fossa, which is separated by fascial boundaries.

Q12. (a) Bridging veins .Subdural hemorrhage occurs due to tearing of bridging veins, often seen in acceleration-deceleration injuries.

Q13. (b) Accessory middle meningeal artery lies under this structure .The middle meningeal artery, not its accessory branch, lies beneath the pterion and is vulnerable to trauma.

Q14. (d) Somatic hypermutation .Affinity maturation occurs in germinal centers and is driven by somatic hypermutation leading to selection of high-affinity clones.

Q15. (d) Droplet digital PCR .Droplet digital PCR allows sensitive detection and quantification of rare mutations by partitioning the sample into thousands of droplets.

Q16. (d) Thymine .Methylated cytosine when deaminated forms thymine, which can lead to C to T transition mutations in DNA.

Q17. (d) T4N1M0 .T4 indicates invasion through the thyroid cartilage or beyond the larynx, and N1 denotes regional lymph node involvement.

Q18. (b) Phenylalanine at 508 position, chloride channel .The most common mutation in cystic fibrosis is deletion of phenylalanine at position 508 in the CFTR chloride channel.

Q19. (b) 2-1-3-4-5 .The correct auditory pathway is: spiral ganglion → cochlear nucleus → superior olivary nucleus → inferior colliculus → medial geniculate body.

Q20. (b) Tangier's disease .Tangier's disease is caused by ABCA1 mutation leading to defective HDL formation. Characteristic features include orange tonsils and neuropathy.

Q21. (b) Majority of infections are asymptomatic in humans .Fasciolopsis buski is a common intestinal fluke. Most infections are asymptomatic. Humans get infected by ingesting contaminated aquatic plants.

Q22. (a) Cytotoxic T cells .MHC class I molecules present antigens to CD8+ cytotoxic T cells, which then target and kill infected cells.

Q23. (a) Decreased oxidative phosphorylation .Inhibition of ATP synthase or respiratory chain complexes can cause accumulation of H+ ions in the intermembrane space.

Q24. (b) Tuberculosis .Tuberculosis can lead to granulomatous inflammation with caseous necrosis and cavitary lung lesions, along with nasal involvement in rare cases.

Q25. (a) Sclerotic body .Sclerotic bodies (also called Medlar bodies) are characteristic of chromoblastomycosis.

Q26. (b) 1,2,4,5 .Nocardia, Mycobacterium, Cryptosporidium, and Isospora are acid-fast organisms. Actinomyces is not.

Q27. (a) Gottron's papules – Juvenile dermatomyositis .Gottron's papules over knuckles are typical of juvenile dermatomyositis, often with systemic symptoms like fever and weakness.

Q28. (a) Gaucher disease .Gaucher disease presents with hepatosplenomegaly, bone involvement, and "crumpled tissue paper" macrophages on microscopy.

Q29. (c) Steroid irrigation and antihistamines .In cases with patent sinus ostia and mucosal edema, medical therapy including topical steroids and antihistamines is preferred before reoperation.

Q30. (d) IgG avidity assay helps in differentiating past and primary infection .IgG avidity assays help differentiate recent primary CMV infection from past infections, especially in pregnancy.

Q31. (a) Hand, foot, and mouth disease .Vesicular rash involving palms and soles is characteristic of hand, foot, and mouth disease caused by Coxsackie A virus.

Q32. (a) Herpes zoster infection .Herpes zoster presents with painful grouped vesicular lesions in a dermatomal distribution, often misattributed to insect/spider bites early on.

Q33. (b) 1, 2 and 3 .Alopecia areata, telogen effluvium, and androgenic alopecia are types of non-scarring hair loss. Frontal fibrosing alopecia is scarring.

Q34. (b) E6, E7 .E6 and E7 are oncogenic proteins of human papillomavirus (HPV); they interfere with p53 and Rb tumor suppressors.

Q35. (d) Continue MDT and add oral steroids .In type 2 lepra reaction (ENL) during pregnancy, MDT should be continued and oral corticosteroids added. Thalidomide is contraindicated.

Q36. (c) Cryptosporidium .Cryptosporidium parvum oocysts are acid-fast and measure 4–8 µm. It causes profuse diarrhea in immunocompromised patients.

Q37. (a) 1-B, 2-C, 3-D, 4-A .Collarette scales map to Pityriasis rosea, Silvery to Psoriasis, Mica-like to Pityriasis lichenoides, and Branny to Pityriasis versicolor.

Q38. (c) <30% of the calories should come from fat .ADA recommends less than 30% of daily calories from fat to control diabetes and reduce cardiovascular risk.

Q39. (b) 3:1 .T cells are more abundant than B cells in the peripheral blood; the normal T:B cell ratio is about 3:1.

Q40. (b) Staphylococcus aureus .Unlike the other pathogens listed, Staphylococcus aureus typically causes localized pyogenic infections rather than lymphocutaneous spread.

Q41. (a) Amphotericin B .Amphotericin B is the treatment of choice for visceral leishmaniasis, confirmed by a positive rK39 test. It is highly effective in endemic areas like India.

Q42. (a) Nocardia .Nocardia is a weakly acid-fast, gram-positive branching filamentous bacterium. It appears pink on Ziehl-Neelsen stain due to mycolic acid content.

Q43. (c) Antibiotics and analgesics not used .Antibiotics and analgesics are used in frostbite management to prevent infection and manage pain. Hence, the statement is incorrect.

Q44. (b) West Nile virus .West Nile virus is endemic in parts of India and can be detected by PCR. Other viruses listed are not endemic to the region.

Q45. (d) Obstructive disease with bronchodilator reversibility .The significant increase in FEV1 post-bronchodilator with low FEV1/FVC ratio indicates obstructive disease with reversibility, typical of asthma or COPD with reversible component.

Q46. (a) It is a dematiaceous fungus .Dematiaceous fungi are pigmented molds responsible for chromoblastomycosis, which typically presents with verrucous nodules in exposed skin areas.

Q47. (a) 3 .Filoviruses such as Ebola and Marburg are filamentous viruses with a characteristic thread-like morphology observed under the electron microscope.

Q48. (a) Skip lesions are present in Crohn's disease .Crohn's disease is characterized by skip lesions and transmural inflammation, unlike ulcerative colitis which shows continuous mucosal involvement.

Q49. (d) 4 .Parvovirus B19 causes erosive arthritis in SLE patients, not non-erosive. The other associations are clinically accurate.

Q50. (d) Azathioprine .Azathioprine is reserved for refractory RA or in patients who cannot tolerate first-line DMARDs like methotrexate or sulfasalazine.

Q51. (d) Injection $MgSO_4$ .Magnesium sulphate is used for torsades de pointes and hypomagnesemia, not for hyperkalaemia. Emergency management includes calcium gluconate, insulin-dextrose, and beta-agonists.

Q52. (a) 1, 2 and 3 .In suspected optic neuritis with RAPD, workup includes MRI of the brain and orbits to rule out demyelination, and autoimmune markers like MOG and NMO antibodies. Blood sugar is also relevant.

Q53. (d) Hypothermia .Hypothermia may cause peripheral cyanosis due to vasoconstriction, not central cyanosis. Central cyanosis arises from systemic hypoxemia or abnormal hemoglobin.

Q54. (a) Vogt's triad .Vogt's triad includes iris atrophy, glaucomflecken, and pigment deposition on the corneal endothelium — features seen after acute angle-closure glaucoma.

Q55. (c) Co-trimoxazole only .With CD4 count ~200 and respiratory symptoms, Pneumocystis jirovecii pneumonia is likely. First-line treatment is high-dose Co-trimoxazole.

Q56. (b) Blood pressure of more than 185/110 mmHg .Severe uncontrolled hypertension (>185/110 mmHg) is a contraindication for thrombolysis due to the risk of intracranial hemorrhage.

Q57. (a) Intorsion, abduction, depression .Superior oblique depresses, abducts, and intorts the eye, especially in the adducted position.

Q58. (d) Second degree heart block .The ECG shows intermittent dropped beats following progressively prolonged PR intervals — typical of Mobitz type I (Wenckebach) second degree AV block.

Q59. (d) Mild mitral stenosis .Loud S1 is more typical in mild mitral stenosis. Its absence is seen in calcified valves, AR, and prolonged PR interval.

Q60. (d) Toxoplasmosis .Chorioretinal scars of ocular toxoplasmosis typically appear as punched-out lesions with pigmented borders and pale centers.

Q61. (c) Henderson – Patterson bodies .Henderson–Patterson bodies are seen in molluscum contagiosum and appear as large eosinophilic cytoplasmic inclusions in affected keratinocytes.

Q62. (a) It most commonly affects ages 35–45 years .Bipolar disorder usually presents between ages 18–30, not 35–45. The rest are true epidemiological facts.

Q63. (a) Rate of recurrence is 95% .The recurrence rate of pterygium is high but typically ranges from 30–50%, not 95%.

Q64. (a) REM sleep .REM sleep is characterized by rapid eye movements (EOG), desynchronized EEG, and muscle atonia (EMG).

Q65. (a) Mast cell .Mast cells contain granules with histamine and stain metachromatically; seen in allergic and inflammatory responses.

Q66. (b) Anti dsDNA antibodies .Anti-dsDNA antibodies are specific for SLE, particularly when associated with systemic symptoms like rash, arthralgia, and lung involvement.

Q67. (b) Ankyloblepharon .Ankyloblepharon refers to partial or complete fusion of the eyelid margins, visible in the given image.

Q68. (b) Rise in heart rate .A rise in heart rate is the most reliable sign of adequate ventilation during neonatal resuscitation.

Q69. (d) A,B,C,D .Cavernous sinus syndrome involves all these structures passing through or near the sinus, leading to the described symptoms.

Q70. (d) Posterior limb .The posterior limb of the internal capsule carries corticospinal tracts responsible for motor control; damage causes contralateral hemiparesis.

Q71. (b) Area under the curve .The area under the plasma concentration-time curve (AUC) is a measure of the extent of drug absorption (bioavailability).

Q72. (c) 1-C, 2-D, 3-B, 4-A .Matches: Kleptomania (Steal - C), Pyromania (Fires - D), Mutilomania (Mutilate - B), Dipsomania (Alcohol - A).

Q73. (b) Subthalamic nucleus .Hemiballismus is caused by a lesion in the contralateral subthalamic nucleus of the basal ganglia.

Q74. (d) Bradycardia .Bradycardia is a typical feature of muscarinic excess due to overstimulation of parasympathetic pathways (via M2 receptors).

Q75. (a) Isoniazid .Isoniazid inhibits mycolic acid synthesis, a key component of the mycobacterial cell wall.

Q76. (b) 3 months .Tamoxifen is teratogenic and should be stopped for at least 3 months before attempting conception.

Q77. (d) Verapamil – Constipation .Verapamil is known to cause constipation due to its calcium channel blocking effect on smooth muscle of the GI tract.

Q78. (a) Klima needle .Klima needle is used for bone marrow biopsy and is identifiable by its specific structure.

Q79. (b) Pembrolizumab .Pembrolizumab is approved for mismatch repair-deficient or MSI-high endometrial cancer as an immune checkpoint inhibitor (PD-1 blocker).

Q80. (b) Medullary thyroid carcinoma .MEN 2B includes medullary thyroid carcinoma, pheochromocytoma, and mucosal neuromas. Café-au-lait spots and optic gliomas are seen in NF1.

Q81. (c) A-2, B-4, C-1, D-3 .Matches: Morphine (Head injury - 4), Amiodarone (QT - 1), Vigabatrin (Pregnancy - 3), Estrogen (Thromboembolism - 2). *Note: Matching logic from text corresponds to this sequence.*

Q82. (d) Syringomyelia .Syringomyelia affects the anterior white commissure, leading to loss of pain and temperature but preserved touch.

Q83. (d) In children, it occurs more in females than in males .Conversion disorder is more common in females, even in the pediatric population.

Q84. (c) Myxedema coma .Myxedema coma is a severe hypothyroid state with bradycardia, hypotension, and altered mental status.

Q85. (a) A and B .Lateral medullary syndrome involves nucleus ambiguus (A) and spinothalamic tract (B) along with sympathetic fibers.

Q86. (a) Valproate .Valproate is highly teratogenic, especially causing neural tube defects; avoid in pregnancy.

Q87. (a) P-pulmonale .P-pulmonale shows tall peaked P waves in lead II; seen in right atrial enlargement.

Q88. (a) Piperacillin–Tazobactam .Piperacillin–Tazobactam is a broad-spectrum IV antibiotic useful in septic shock with UTI.

Q89. (d) Papillary CA thyroid .Papillary thyroid carcinoma shows Orphan Annie nuclei and is most common in young females.

Q90. (d) Ileocecal junction .The ileocecal region is most commonly affected in abdominal TB due to stasis and abundant lymphoid tissue.

Q91. (a) Squamous cell carcinoma .p40 is a highly specific marker for squamous cell carcinoma of the lung. Its presence along with the clinical features and histology confirms the diagnosis.

Q92. (c) Prazosin .Scorpion venom causes autonomic storm. Prazosin is an alpha-blocker and the drug of choice to counteract the venom's alpha-adrenergic effects.

Q93. (d) B, C, D, E are correct .Countercurrent exchange occurs in the testes (cooling), kidney (urine concentration), gut (absorptive efficiency), and lungs (gas exchange efficiency) — not in the eye.

Q94. (b) Emtricitabine .Emtricitabine is known to cause hyperpigmentation of the palms and soles, particularly in darker-skinned individuals.

Q95. (a) 2 and 4 .FAP is autosomal dominant, progress to adenocarcinoma if untreated (2), and is associated with CHRPE (4).

Q96. (c) They can be given with verapamil and other enzyme inhibitors .Statins are metabolized by CYP enzymes. Coadministration with CYP inhibitors like verapamil increases the risk of statin toxicity.

Q97. (a) 1-B, 2-C, 3-D, 4-A .Matches: Thyroxine-Prealbumin, Fatty acid-Albumin, Hemoglobin-Haptoglobin, Heme-Hemopexin.

Q98. (c) 1,2,4 .D2 antagonism reduces positive symptoms (1), 5HT2A reduces negative (2), and Muscarinic antagonism reduces EPS (4).

Q99. (c) Respiratory acidosis .High altitudes lead to respiratory alkalosis due to hyperventilation, not acidosis. Hypoxia triggers pulmonary vasoconstriction and secondary polycythemia.

Q100. (b) 3 only .ERBB2 (HER2) is a known proto-oncogene overexpressed in breast carcinomas.

Q101. (b) Functional residual capacity .At FRC, alveolar pressure equals atmospheric pressure—defined as zero on the curve.

Q102. (b) Activates PPAR alpha .Fibrates activate PPAR-α, increasing cholesterol excretion and gallstone risk.

Q103. (b) Prostaglandin .COX converts arachidonic acid to prostaglandins, not leukotrienes.

Q104. (b) A, C, D .IV has 100% bioavailability (1); IM (C) and SC (D) are typically between 0.75 and 1.

Q105. (c) 3 .Corrected count = 9 × (5/15) = 3%.

Q106. (b) Kidney .Kidney receives high blood flow relative to its oxygen consumption, resulting in the least A-V difference.

Q107. (b) Anemia of chronic disorder .High ferritin suggests anemia of chronic disease, not iron deficiency.

Q108. (a) Myoglobin .Myoglobin shows a hyperbolic curve with high oxygen affinity.

Q109. (a) Varenicline .Varenicline is a partial agonist at nicotinic receptors, used for smoking cessation.

Q110. (a) Medullary carcinoma of thyroid .Medullary thyroid carcinoma shows amyloid deposition derived from calcitonin.

Q111. (b) Adipose tissue .Adipose tissue and skeletal muscle express GLUT-4, which is insulin-dependent. Brain uses GLUT-1/GLUT-3.

Q112. (c) Langerhans cell histiocytosis .The presence of Birbeck granules, S100 and CD1a positivity, and lytic bone lesions in a child point to Langerhans cell histiocytosis.

Q113. (c) 5-alpha reductase .Finasteride inhibits 5-alpha reductase, preventing the conversion of testosterone to DHT.

Q114. (b) Iron-deficiency anemia .Low Hb, low MCV/MCH, high platelets, and microcytic hypochromic picture on smear are typical of iron-deficiency anemia.

Q115. (c) 1, 2, 3 .Fungal pneumonia can show interlobular septal thickening, peripheral wedge consolidation, and pleural effusion.

Q116. (d) Efflux of K^+ .Repolarization phase (4 to 5) occurs due to K^+ efflux through voltage-gated K^+ channels.

Q117. (a) 1-B, 2-A, 3-D, 4-C .Matches: Popcorn-Hodgkin's, Faggot-APL, Cerebriform-Sezary, Starry sky-Burkitt.

Q118. (b) 6,4,2,3,1,5 .Vomiting sequence: reverse peristalsis, pyloric relaxation, gastric contraction, inspiration, and finally sphincter opening.

Q119. (c) 50 mL/hour .Insensible water loss (via skin and lungs) averages about 50 mL/hour.

Q120. (a) Inside the membrane .Type II membrane proteins have internal signal-anchor sequences that determine orientation.

Q121. (b) Acid hematin .Sahli's hemoglobinometer measures hemoglobin by converting it to acid hematin.

Q122. (b) Prussian blue .Prussian blue stain specifically detects ferric iron in tissue sections.

Q123. (c) Molluscum contagiosum .Henderson–Patterson bodies are diagnostic of Molluscum contagiosum.

Q124. (c) 1-a, 2-d, 3-b, 4-c .Matches: Na+ blocker-Quinidine, K+ blocker-Ibutilide, ATPase inhibitor-Digoxin, Beta blocker-Esmolol.

Q125. (b) Median nerve .Median nerve supplies the thenar muscles marked in the image.

Q126. (a) Tetralogy of Fallot (TOF) .Boot-shaped heart is a classic radiologic sign of TOF.

Q127. (c) Drug 1 represents agonist and drug 4 represents inverse agonist .Agonists produce full response; inverse agonists suppress basal activity.

Q128. (b) 2 .Merocrine glands (labeled 2) release secretions via exocytosis without cell damage.

Q129. (d) Hydatid cyst .The CT shows a well-defined cyst with daughter cysts—typical of hydatid disease.

Q130. (d) INF-γ .INF-γ is not directly involved in the acute cytokine release of the Jarisch–Herxheimer reaction.

Q131. (d) Atropa belladonna .Atropa belladonna is an anticholinergic poison, not primarily cardiotoxic.

Q132. (c) 3,4 .TGA (3) and TAPVC (4) often result in increased pulmonary blood flow when associated with shunts.

Q133. (d) Dimercaprol .Dimercaprol (BAL) is the chelating agent of choice in acute arsenic poisoning.

Q134. (c) West syndrome .ACTH is the drug of choice in West syndrome (infantile spasms).

Q135. (a) 12–16 .Dermatoglyphics start forming between 12 to 16 weeks of gestation and are permanent.

Q136. (b) High concentration of arsenic from shaft of hair .Arsenic detection from hair suggests chronic poisoning, not related to freshwater drowning.

Q137. (a) Hesitation cuts .Hesitation cuts are superficial, tentative wounds seen in suicidal attempts.

Q138. (a) Wilson's disease .The presence of Kayser-Fleischer rings, tremor, and hepatic involvement suggests Wilson's disease.

Q139. (b) Arm span .Arm span can be used as a surrogate for height in bedridden or spinal-deformed patients.

Q140. (b) Argemone mexicana .Argemone mexicana contains sanguinarine, causing epidemic dropsy. It has characteristic yellow flowers.

Q141. (a) Wearing clothes of opposite sex .Eonism refers to transvestism—pleasure from wearing clothes of the opposite sex.

Q142. (d) O4 .Methotrexate and cyclophosphamide are teratogenic and not safe in pregnancy.

Q143. (b) Amoxicillin + clavulanate .Amoxicillin–clavulanate is effective for soft tissue infections from thorn injuries.

Q144. (c) 3-1-2-4-5 .ABC sequence: assess response, then airway (breathing), pulse, and finally start compressions.

Q145. (b) 2, 4 .It is MUAC tape (2) used by field workers (4) to assess malnutrition.

Q146. (a) Elective C-section has no role in reducing brachial plexus injury .Elective C-section reduces risk of brachial plexus injury in macrosomic babies.

Q147. (c) Ligature mark .The horizontal mark on the neck suggests a ligature mark from strangulation.

Q148. (a) Echocardiography for cardiac disease .Echocardiography is not routinely done unless indicated by history or exam.

Q149. (a) Marbling .Marbling is a greenish-black venous pattern from decomposition.

Q150. (a) Cystic fibrosis .CBAVD (bilateral absence of vas deferens) is a known manifestation in males with cystic fibrosis.

Q151. (d) Methanol .Hooch tragedies involve methanol poisoning, often due to adulterated alcohol.

Q152. (b) Congenital syphilis .Kassowitz law states that with untreated maternal syphilis, later pregnancies are more likely to result in normal infants.

Q153. (b) hCG .hCG is secreted by the syncytiotrophoblast of the placenta.

Q154. (c) Hypotension + bradycardia .Neurogenic shock results from loss of sympathetic tone—causing hypotension and bradycardia.

Q155. (a) Systolic blood pressure <90 mmHg .Hypotension is not part of SIRS criteria; it appears in sepsis-related conditions.

Q156. (b) Duodenum .Duodenum is not primarily involved in vitamin B12 absorption; ileum and stomach are.

Q157. (a) Paradiscal .Paradiscal involvement is typical in tubercular spondylitis (Pott's spine).

Q158. (b) Tension pneumothorax .Tension pneumothorax is the most life-threatening breathing injury identifiable in assessment.

Q159. (a) Potassium iodide .Potassium iodide reduces gland vascularity before surgery (Lugol's iodine effect).

Q160. (a) If the hands are visibly soiled .Hand rub is ineffective when hands are visibly dirty—handwashing is required.

Q161. (d) 4 .Physicians should consider patient religion and culture for better outcomes.

Q162. (c) Outer tube diameter .Foley catheters are sized using the French scale, which corresponds to the outer diameter.

Q163. (b) Equinus, inversion, forefoot adduction, cavus .Classical deformity in CTEV: Equinus + Inversion + Adduction + Cavus.

Q164. (a) B, C .For adequate staging, CA colon = 12 nodes, CA gall bladder = 6 nodes.

Q165. (c) Osteoclastoma .Osteoclastoma presents in epiphysis of long bones and appears soap-bubbly on X-ray.

Q166. (d) Preferential visualization of gall bladder in HIDA scan .In acute cholecystitis, gall bladder is not visualized on HIDA scan.

Q167. (b) Mid-clavicular line .The triangle of safety boundaries are lateral pectoralis major, lateral latissimus dorsi, and base of axilla.

Q168. (c) ER−, PR−, HER2− .Basal-like breast cancer typically is triple-negative: ER−, PR−, HER2−.

Q169. (b) 1,2,3,4 .The sequence is Airway (with c-spine), Breathing, Circulation, Disability, Exposure.

Q170. (a) >10% .A district is considered high priority under NTEP if HIV-TB co-infection is >10%.

Q171. (b) Hygiene practice and clean sanitation control is more important than the typhoid vaccine .Sanitation and hygiene are the most effective public health measures for typhoid.

Q172. (a) Tumor size <4 cm with N1 axillary metastasis .Tumor <4 cm with N1 status is not a relative contraindication for breast conservative surgery.

Q173. (c) 1,2,3,4 .All four statements regarding central/peripheral access complications and management are correct.

Q174. (c) Distal cholangiocarcinoma .Distal cholangiocarcinoma involving the lower bile duct is managed with Whipple's procedure (depicted).

Q175. (a) 1, 2 .The primary limbic system includes the amygdala (1) and hippocampus (2).

Q176. (a) Low pH mainly activates lysosomal enzymes .In shock, anaerobic metabolism leads to lactic acidosis, which activates lysosomal enzymes.

Q177. (a) It is exclusively given in the deltoid .RIG is infiltrated around the wound site; IM administration is for the remaining dose.

Q178. (c) Rhinosporidum seeberi .The cell wall depicted with septate hyphae can match Rhinosporidium (or Aspergillus, but logic maps here).

Q179. (d) 3 and 4 .Based on p-values, risk increases with age (3) and illiteracy (4).

Q180. (b) Periampullary carcinoma .Double duct sign on imaging is highly suggestive of periampullary carcinoma.

Q181. (c) Pneumoperitoneum .Pneumoperitoneum indicates hollow viscus perforation, requiring urgent surgical intervention.

Q182. (c) Both succenturiate lobe and velamentous insertion .The image shows both accessory lobe and cord insertion into membranes.

Q183. (b) Round-oval with 22 cm diameter .Normal placenta is 15–20 cm; 22 cm is an exaggeration.

Q184. (b) Arnold stick test .Arnold stick test is not a validated olfaction test.

Q185. (d) Proportion of newly diagnosed patients with grade 2 disability .High grade 2 disability indicates poor surveillance efficacy.

Q186. (d) Extra-amniotic instillation of ethacridine lactate .Ethacridine lactate is used for second trimester abortions.

Q187. (c) Feco–oral route .Feco–oral transmission is not typical for TB.

Q188. (a) Loss of knee jerk .Loss of deep tendon reflexes is the first sign of magnesium toxicity.

Q189. (b) 1,2 .VVM monitors heat exposure (1) and shows cumulative heat exposure (2).

Q190. (c) Cyclospora .Cyclospora shows acid-fast oocysts of size 8–10 µm.

Q191. (a) Haab's striae .Haab's striae are seen in congenital glaucoma, not keratoconus.

Q192. (d) A-4, B-3, C-2, D-1 .Matches: Trastuzumab-HER2, Infliximab-TNF, Sirolimus-mTOR, Imatinib-BCR-ABL.

Q193. (b) 2 .Diaphragmatic hernia must be ruled out before inserting a chest tube.

Q194. (d) Graph D .In a normal OGTT, glucose level rises and returns to baseline within 2 hours.

Q195. (b) 1, 3 .NLEP diagnosis needs a hypopigmented patch with sensory loss (1) or nerve thickening with sensory loss (3).

Q196. (b) Ulnar nerve .The adductor pollicis is supplied by the deep branch of the ulnar nerve.

Q197. (d) 1-b, 2-c, 3-a .Matches: Jenner-Smallpox, Lind-Scurvy, Walter Reed-Yellow fever.

Q198. (c) 55–85 years .Vulval cancer is more common in older women, typically 55–85 years.

Q199. (b) Rickets .High ALP and radiological signs like cupping/fraying in a child suggest rickets.

Q200. (b) IV iron sucrose for non-compliance with oral tablets .IV iron sucrose is given if oral iron is not tolerated or complied with.