

NEET PG 2023 Memory Based Answer Key

1. **(1) Dengue** - This is a viral disease transmitted by the bite of the *Aedes aegypti* mosquito. It characteristically presents with sudden high fever, severe joint and muscle pain (break-bone fever), and thrombocytopenia (a drop in platelet count).
2. **(2) Twitching motility is seen on wet saline mount** - Certain bacteria like *Pseudomonas aeruginosa* or *Acinetobacter* show a characteristic "twitching" movement on a wet mount. This type of non-flagellar motility is mediated by the extension and retraction of specialized surface structures called Type IV pili.
3. **(1) Leishmania tropica** - This protozoan parasite is a primary causative agent of **Cutaneous Leishmaniasis**, also known as Oriental sore or Delhi boil. It is transmitted to humans through the bite of an infected female sandfly (*Phlebotomus*).
4. **(1) Cytomegalovirus** - CMV is a major cause of opportunistic infections like retinitis and gastrointestinal ulcers in immunocompromised patients (e.g., HIV/AIDS or transplant recipients). On tissue biopsy, infected cells characteristically show large intranuclear inclusions known as **"Owl's eye"** appearances.
5. **(2) Cholangiocarcinoma** - This is a malignant tumor arising from the epithelial lining of the bile ducts and is strongly associated with chronic biliary inflammation. Major risk factors include *Clonorchis sinensis* (liver fluke) infection and Primary Sclerosing Cholangitis (PSC).
6. **(4) Pneumocystis jirovecii** - This is an atypical fungus that causes severe opportunistic pneumonia (PCP) in immunocompromised individuals, particularly HIV/AIDS patients. It is diagnosed using specialized stains like **GMS (Grocott's Methenamine Silver)** on sputum or bronchoalveolar lavage samples.
7. **(2) Microscopic agglutination test** - MAT is considered the gold standard serological test for diagnosing **Leptospirosis**. It involves reacting the patient's serum with live leptospira antigens and observing the resulting agglutination under a dark-field microscope.
8. **(1) Antigen detection in the stool sample** - Stool antigen detection (via ELISA) is a highly sensitive and specific method for identifying protozoan infections like *Entamoeba histolytica* or *Giardia*. It helps differentiate active, ongoing infections from past exposure or asymptomatic colonization.
9. **(1) Plasmodium falciparum** - This species causes the most severe and fatal form of malaria, often presenting with complications like cerebral malaria or blackwater fever. A peripheral blood smear typically reveals characteristic **crescentic (banana-shaped) gametocytes** and multiple delicate ring forms.
10. **(3) Exhibits satellitism around Staphylococcus aureus colonies** - *Haemophilus influenzae* requires both V factor (NAD) and X factor (hemin) to grow. Because *S. aureus* lyses erythrocytes and releases excess NAD during growth, *H. influenzae* colonies cluster and thrive directly around it, a phenomenon called satellitism.
11. **(3) Ceftriaxone** - This is a broad-spectrum, third-generation cephalosporin antibiotic known for its excellent cerebrospinal fluid (CSF) penetration. Due to this property, it serves as a first-line empirical treatment for bacterial meningitis and severe gonococcal infections.
12. **(2) Cephalhematoma** - This refers to a subperiosteal collection of blood caused by birth trauma, often following difficult forceps or vacuum-assisted deliveries. Because the hemorrhage is confined beneath the periosteum, the swelling characteristically **does not cross cranial suture lines**.

13. **(1) Putty kidney** - This is an end-stage radiological finding in renal tuberculosis (TB) where the entire kidney parenchyma is destroyed. It represents a non-functioning, autonephrectomized kidney filled with dry, paste-like calcified fibrocaseous material.
14. **(4) Fascia transversalis** - The **deep inguinal ring** is an anatomical opening formed by an outpouching of the transversalis fascia. It is situated just lateral to the inferior epigastric vessels and marks the beginning of the inguinal canal.
15. **(1) Lateral pterygoid** - Out of the four primary muscles of mastication, the lateral pterygoid is the only muscle responsible for **depressing (opening)** the jaw. The other three muscles (medial pterygoid, masseter, and temporalis) act to elevate and close the jaw.
16. **(4) Glomerulus** - This is a compact network of capillaries located within the renal cortex where primary filtration of blood takes place. Together with Bowman's capsule, it forms the renal corpuscle, which initiates urine production.
17. **(4) 6th left** - While the normal cardiac apex beat is palpated in the left 5th intercostal space, conditions causing left ventricular hypertrophy (LVH) or cardiomegaly enlarge the heart. This shifts the apex beat downward and outward to the **6th left intercostal space**.
18. **(2) Median umbilical ligament** - This anatomical structure is the fibrous remnant of the embryonic **urachus**, which connects the fetal bladder to the allantois. Failure of this structure to completely obliterate can lead to congenital anomalies like a urachal fistula.
19. **(2) Esophageal veins and left gastric veins** - This site forms a vital **portosystemic anastomosis** between the portal and systemic venous systems. In portal hypertension (such as in liver cirrhosis), blood backflows through these vessels, forming dilated esophageal varices that carry a high risk of rupture and severe bleeding.
20. **(2) Factors II, VII, IX, and X** - These are the four essential **Vitamin K-dependent clotting factors** synthesized by the liver. Vitamin K is required for their post-translational gamma-carboxylation; without it, or during Warfarin therapy, these factors remain inactive.
21. **(1) Vitamin B3 deficiency** - A severe deficiency of Vitamin B3 (Niacin) leads to a systemic nutritional disease called **Pellagra**. It is classically characterized by the "3 Ds": Dermatitis (including Casal's necklace), Diarrhea, and Dementia.
22. **(1) McArdle disease** - Classified as Type V Glycogen Storage Disease, this genetic disorder is caused by a deficiency in skeletal muscle **glycogen phosphorylase** (myophosphorylase). Patients typically present with severe muscle cramps, exercise intolerance, and myoglobinuria due to an inability to break down muscle glycogen.
23. **(B) Thiamine-transketolase** - Transketolase is a key enzyme in the Hexose Monophosphate (HMP) shunt pathway that strictly requires Thiamine (Vitamin B1) as a coenzyme. Measuring erythrocyte transketolase activity is a reliable functional diagnostic test to evaluate thiamine deficiency.
24. **(1) Vitamin B deficiency** - Vitamin B complex deficiencies (specifically B1, B2, and B6) disturb vital neuro-metabolic pathways, frequently causing oral manifestations like angular cheilosis and glossitis. These water-soluble vitamins are indispensable for normal nerve conduction and cellular respiration.
25. **(2) Glycogen synthase** - This is the primary rate-limiting enzyme involved in glycogenesis (glycogen synthesis), responsible for adding UDP-glucose units to a growing glycogen chain. Its activity is tightly regulated, being reciprocally activated by insulin and inactivated by glucagon or epinephrine.

26. **(2) Thiamine** - Thiamine (Vitamin B1) functions as an essential coenzyme for crucial multi-enzyme complexes like Pyruvate Dehydrogenase and Alpha-ketoglutarate Dehydrogenase. Chronic, severe deficiency results in devastating clinical syndromes such as Wernicke-Korsakoff syndrome and Beriberi.
27. **(3) Increased urate and lactate levels** - Alcohol metabolism dramatically increases the intracellular NADH/NAD⁺ ratio, favoring the conversion of pyruvate to lactate. The resulting lactic acidosis competitively inhibits the renal clearance of uric acid, leading to elevated blood urate and lactate levels.
28. **(2) Zinc deficiency** - Severe zinc deficiency causes **Acrodermatitis enteropathica**, an inherited or acquired metabolic disorder. It clinically manifests as a triad of periorificial and acral dermatitis, alopecia, and chronic diarrhea, alongside impaired wound healing.
29. **(2) Defective collagen formation** - Vitamin C (Ascorbic acid) acts as an essential cofactor for the enzymes prolyl and lysyl hydroxylase, which cross-link and stabilize the collagen triple helix. Deficiency results in **Scurvy**, characterized by defective collagen, fragile blood vessels, and bleeding gums.
30. **(4) Activation of hormone-sensitive lipase** - During fasting, hypoglycemia, or stress, elevated circulating levels of epinephrine and glucagon activate HSL in adipose tissue. This enzyme drives lipolysis, breaking down stored triglycerides into free fatty acids and glycerol to be used as energy sources. Here are the next 40 answers (from Q.31 to Q.70) formatted exactly as requested, with concise, high-yield medical explanations in English:
31. **(2) Alkaptonuria** - This is an autosomal recessive disorder caused by a deficiency of the enzyme **homogentisate 1,2-dioxygenase** in the tyrosine degradation pathway. It leads to an accumulation of homogentisic acid, which oxidizes and polymerizes, causing the urine to turn black upon standing, along with ochronosis (dark connective tissue pigmentation).
32. **(3) Biotin** - Biotin (Vitamin B7) serves as an essential cofactor for carboxylation enzymes, such as pyruvate carboxylase and acetyl-CoA carboxylase. In these reactions, biotin acts as a carrier of activated carbon dioxide (CO_2) to bind it to substrates.
33. **(1) Tay-Sachs disease** - This is a lysosomal storage disorder caused by a deficiency of the enzyme **Hexosaminidase A**, leading to the accumulation of GM_2 gangliosides. It clinically presents with progressive neurodegeneration, developmental delay, a characteristic **cherry-red spot** on the macula, and the absence of hepatosplenomegaly.
34. **(1) Left optic tract** - A lesion in the left optic tract cuts off fibers originating from the temporal half of the left retina and the nasal half of the right retina. This anatomical interruption results in a **right homonymous hemianopia**, meaning the patient loses the right half of the visual field in both eyes.
35. **(4) Immature senile cataract and phacoemulsification with IOL** - An immature senile cataract presents with partial opacification of the lens, where some clear cortex remains. The definitive standard-of-care management is **phacoemulsification** (ultrasonic breakdown of the lens) followed by the implantation of a posterior chamber intraocular lens (IOL).
36. **(4) Dermoid** - Orbital dermoid cysts are benign, congenital choristomas that arise from trapped ectodermal elements along bony suture lines. They typically present as smooth, painless, slow-growing masses, most commonly located in the **upper-temporal (superior-lateral) quadrant** of the orbit.

37. **(4) Serum ceruloplasmin** - Ceruloplasmin is the primary copper-carrying protein in the blood. In **Wilson's disease** (an inherited disorder of copper metabolism), defective biliary excretion leads to copper accumulation in tissues, characteristically causing a marked *decrease* in serum ceruloplasmin levels.
38. **(4) Fluorescein dye - visualized under cobalt blue filter** - Corneal abrasions or epithelial defects are diagnosed by instilling water-soluble fluorescein dye into the eye. The dye pools in the epithelial defects and fluoresces a bright vivid green when examined under a **cobalt blue light filter** on a slit lamp.
39. **(D) Partial penectomy** - For localized, invasive squamous cell carcinoma of the penis restricted to the glans or distal shaft, a partial penectomy is indicated. This surgical oncological procedure ensures adequate macroscopic and microscopic tumor-free margins while trying to preserve enough penile length for micturition.
40. **(3) Intraosseous route access for giving IV fluids** - When rapid intravenous access cannot be established during a pediatric or adult medical emergency (such as shock or cardiopulmonary arrest), the intraosseous (IO) route is the preferred alternative. The non-collapsible venous plexuses within the bone marrow cavity allow for immediate fluid and drug resuscitation.
41. **(4) Mixed aerobic and anaerobic infection** - Deep tissue infections, necrotizing fasciitis, or diabetic foot ulcers are typically polymicrobial. They involve a synergistic combination of aerobic organisms (like *Staphylococcus* or *E. coli*) and anaerobic bacteria (like *Bacteroides* or *Clostridium*), which rapidly consume tissue oxygen and cause extensive necrosis.
42. **(3) Sympathetic- retrograde ejaculation and bladder dysfunction** - The sympathetic nervous system (via the hypogastric nerves) controls the closure of the internal bladder sphincter during ejaculation to prevent semen from entering the bladder. Damage to these nerves—often during pelvic or retroperitoneal surgery—leads to retrograde ejaculation and urinary dysfunction.
43. **(3) Keloid** - A keloid is an abnormal proliferation of dermal collagen (primarily Types I and III) following skin injury. Unlike hypertrophic scars, keloids characteristically **grow beyond the original boundaries of the wound** and rarely regress spontaneously due to overactive fibroblast activity.
44. **(4) Lateral cutaneous nerve of thigh** - This nerve provides sensory innervation to the anterior and lateral aspects of the thigh. Compression of this nerve beneath the inguinal ligament leads to a condition called **Meralgia paresthetica**, characterized by tingling, numbness, and burning pain in the outer thigh without motor weakness.
45. **(3) E2V3M3** - This represents a **Glasgow Coma Scale (GCS) score of 8**. It breaks down into: Eye-opening to pain (E2), Incomprehensible sounds/verbal response (V3), and Abnormal flexion/decorticate posturing to painful stimuli (M3), indicating severe brain injury.
46. **(4) Echinococcus species is involved in etiology** - *Echinococcus granulosus* is a tapeworm responsible for causing **Hydatid liver disease**. The ingestion of eggs from infected canine feces leads to the formation of slow-growing, fluid-filled hydatid cysts in the liver parenchyma, which can display a classic "eggshell" calcification on imaging.
47. **(C) Hepatocellular carcinoma** - HCC is the primary malignancy of the liver, most commonly arising in the setting of chronic liver disease or cirrhosis (secondary to Hepatitis B, Hepatitis C, or alcohol abuse). It is highly vascularized, often picked up via surveillance using serum Alpha-Fetoprotein (AFP) markers and triple-phase CT scans.

48. **(4) p-Phenylenediamine** - PPD is a highly toxic aromatic amine widely used as a chemical ingredient in permanent hair dyes. Accidental or intentional ingestion of PPD leads to severe angioneurotic edema of the face and neck (compromising the airway), acute rhabdomyolysis, and acute kidney injury (AKI).
49. **(2) Evaluate for hyperandrogenism** - In female patients presenting with symptoms like hirsutism, severe acne, irregular menses, or male-pattern baldness, the initial diagnostic step is to evaluate for biochemical or clinical hyperandrogenism. This helps rule out or confirm conditions like Polycystic Ovary Syndrome (PCOS) or Virilizing Adrenal Tumors.
50. **(1) Head tilt, chin lift** - This is a fundamental airway management maneuver used in basic life support (BLS) to open the upper airway of an unconscious patient. It pulls the tongue forward away from the posterior pharyngeal wall, removing the most common cause of airway obstruction.
51. **(2) Longitudinal pancreaticojejunostomy** - Also known as the **Puestow procedure**, this surgical treatment is indicated for chronic pancreatitis associated with a dilated main pancreatic duct. The duct is opened longitudinally from the head to the tail and anastomosed to a loop of the jejunum to facilitate drainage and relieve intractable pain.
52. **(2) Syphilis** - Caused by the spirochete *Treponema pallidum*, primary syphilis characteristically presents as a **painless, indurated ulcer (chancre)** at the site of inoculation. If left untreated, it progresses to secondary syphilis (maculopapular rash on palms and soles) and tertiary neurovascular complications.
53. **(4) Basal cell carcinoma** - BCC is the most common type of skin cancer, primarily caused by chronic ultraviolet (UV) radiation exposure. It typically presents on sun-exposed areas (like the face) as a slow-growing, pearly papule with telangiectasia and central ulceration, historically referred to as a **"Rodent ulcer."**
54. **(4) Cefazolin** - Cefazolin is a first-generation cephalosporin that offers excellent coverage against Gram-positive skin flora like *Staphylococcus aureus*. Because of this narrow spectrum and its favorable pharmacokinetics, it is widely utilized as the gold standard antibiotic for surgical wound prophylaxis.
55. **(1) Frontal mucocoele** - A frontal sinus mucocoele is a benign, mucus-filled, epithelial-lined cystic lesion that develops due to chronic obstruction of the sinus ostium. As mucus accumulates, the expanding cyst exerts pressure, gradually eroding the surrounding bony walls of the frontal sinus and potentially displacing the orbit.
56. **(3) ER positive** - Estrogen Receptor (ER) positivity in breast cancer tissue indicates that the tumor cells grow in response to estrogen signaling. This molecular subtype carries a more favorable prognosis because it responds very well to targeted endocrine therapies, such as Tamoxifen or Aromatase Inhibitors.
57. **(4) Total laryngectomy** - This major surgical procedure involves the complete removal of the larynx, disconnecting the pharynx from the trachea. It is indicated for advanced-stage laryngeal carcinomas (Stage III and IV) to achieve clear oncological margins, resulting in a permanent tracheostoma.
58. **(3) Acute aortic dissection** - This life-threatening cardiovascular emergency occurs when a tear in the aortic intima allows blood to surge into the media, creating a false lumen. It classically presents with a sudden onset of **"tearing" or "ripping" chest pain** that radiates straight through to the back, accompanied by asymmetric peripheral pulses.
59. **(1) 30-45 dB** - This range represents a **moderate hearing loss**. Individuals with a 30-45 dB hearing threshold struggle to hear soft speech clearly and generally require

assistive devices like hearing aids or environmental modifications to follow conversations in noisy backgrounds.

60. **(3) Medical therapy** - Many early-stage, localized, or benign medical conditions are optimally managed via conservative pharmacological agents (such as antibiotics, hormones, or targeted drugs) before considering invasive surgical interventions, thereby minimizing patient morbidity.
61. **(2) Vitamin D** - Vitamin D is a fat-soluble vitamin essential for maintaining systemic calcium and phosphorus homeostasis. It enhances intestinal calcium absorption and bone mineralization; a chronic deficiency causes rickets in children and osteomalacia/osteoporosis in adults.
62. **(2) Subdural hemorrhage** - SDH is caused by the tearing of **bridging cortical veins** that drain into the dural venous sinuses, often due to blunt head trauma. On a non-contrast head CT, it typically appears as a crescent-shaped (concave) hyperdense collection of blood that crosses cranial suture lines.
63. **(4) Hyperbaric oxygen has no role in the treatment of this condition** - Hyperbaric oxygen therapy (HBOT) involves breathing 100% oxygen at increased atmospheric pressure. While indicated for carbon monoxide poisoning, decompression sickness, and gas gangrene, it holds no therapeutic role or clinical benefit in conditions that do not stem from tissue hypoxia or anaerobes.
64. **(1) Clotrimazole** - Clotrimazole is a topical imidazole antifungal agent that works by inhibiting the synthesis of ergosterol, a vital component of the fungal cell membrane. It is widely used to treat superficial fungal infections like vulvovaginal candidiasis, dermatophytosis, and tinea versicolor.
65. **(2) Conjoint tendon** - The conjoint tendon (or inguinal aponeurotic falx) is formed by the fused lower fibers of the **internal oblique and transversus abdominis** muscles. It inserts into the pubic crest and forms a critical structural component of the posterior wall of the inguinal canal.
66. **(1) Carboprost** - Carboprost is a synthetic 15-methyl analog of Prostaglandin F₂-alpha ($\text{PGF}_{2\alpha}$). It stimulates potent uterine contractions and is extensively used as a second-line uterotonic agent to manage severe postpartum hemorrhage (PPH) caused by uterine atony.
67. **(1) Radial nerve** - The radial nerve travels in close proximity to the humerus bone along the spiral groove. Consequently, **mid-shaft fractures of the humerus** frequently injure this nerve, clinically manifesting as an inability to extend the wrist and fingers, leading to classic **wrist drop**.
68. **(2) Sacubitril + Valsartan** - This is an ARNI (Angiotensin Receptor-Neprilysin Inhibitor) combination therapy. Sacubitril inhibits neprilysin to prevent the breakdown of beneficial natriuretic peptides, while Valsartan blocks the AT_1 receptor, significantly reducing mortality in heart failure with reduced ejection fraction (HFrEF).
69. **(2) Bipartite fracture patella, X-ray of other knees** - A bipartite patella is a normal anatomical variant where the patella develops from two separate ossification centers that fail to fuse. To confidently differentiate this harmless variant from an acute traumatic patellar fracture, an X-ray of the contralateral knee is obtained, as bipartite patellae are frequently bilateral.
70. **(4) Chronic exposure to cold** - Prolonged exposure to cold temperatures triggers persistent peripheral vasoconstriction and localized tissue ischemia. This environmental stressor lies at the root of clinical conditions like chilblains (pernio) or trench foot, causing localized swelling, erythema, and painful skin lesions.
71. **(1) Amiodarone** - This is a Class III antiarrhythmic drug commonly used to treat ventricular and supraventricular tachycardias. Because of its high iodine content and

long half-life, its chronic use is notoriously associated with adverse effects like pulmonary fibrosis, blue-gray skin discoloration, and thyroid dysfunction (both hypothyroidism and hyperthyroidism).

72. **(3) Hamartoma** - A pulmonary hamartoma is the most common benign lung tumor. It is a neoplastic growth composed of an abnormal mixture of tissue elements native to the lung—such as cartilage, fat, and fibrous tissue—and characteristically displays a **"popcorn-like" calcification** on a chest X-ray or CT scan.
73. **(4) Give sodium bicarbonate to alkalinize urine** - In cases of severe salicylate (aspirin) poisoning, intravenous sodium bicarbonate is administered to alkalinize both the blood and the urine. Alkalinizing the urine converts lipid-soluble salicylic acid into its ionized, water-soluble form (salicylate ion), trapping it in the renal tubules and accelerating its excretion.
74. **(4) Rebound hypertension** - Sudden discontinuation of centrally acting alpha-2 adrenergic agonists, particularly **Clonidine**, leads to a massive, rapid withdrawal surge of catecholamines. This unchecked sympathetic overactivity results in severe rebound hypertension, tachycardia, anxiety, and tremors.
75. **(4) Trophic ulcer** - Also known as a neuropathic ulcer, this type of chronic ulcer occurs on weight-bearing or pressure areas of the body (like the sole of the foot) due to a loss of protective pain sensation. It is a classic complication seen in patients with long-standing diabetes mellitus, leprosy, or peripheral neuropathy.
76. **(3) Allopurinol** - Allopurinol is a **xanthine oxidase inhibitor** used as a first-line agent for lowering serum uric acid levels in chronic gout management. By blocking the conversion of hypoxanthine and xanthine to uric acid, it effectively prevents the formation and deposition of painful monosodium urate crystals in joints.
77. **(3) Oprelvekin (IL-11)** - Oprelvekin is a recombinant form of Interleukin-11, a cytokine that stimulates megakaryocytopoiesis. It is clinically utilized to stimulate platelet production and prevent severe, chemotherapy-induced thrombocytopenia in patients receiving myelosuppressive therapies.
78. **(3) The dose of candesartan should be reduced in mild-moderate liver impairment** - Candesartan is an Angiotensin II Receptor Blocker (ARB) used for hypertension and heart failure. Because it undergoes hepatic elimination, its clearance is reduced in patients with liver disease, requiring cautious down-titration or dose reduction to avoid prolonged hypotensive effects.
79. **(2) Carpal tunnel syndrome, Phalen's test** - Carpal tunnel syndrome involves compression of the median nerve as it travels beneath the flexor retinaculum at the wrist. **Phalen's test** evaluates this by having the patient hold their wrists in complete flexion for 60 seconds; the recurrence of tingling or numbness in the median nerve distribution confirms a positive test.
80. **(2) Fibrous dysplasia** - This is a benign, congenital bone disorder where normal bone marrow is progressively replaced by abnormal, weak fibrous osseous tissue. On standard radiographs, it exhibits a classic and highly characteristic **"ground-glass" appearance** with thin cortical margins.
81. **(3) Clozapine** - Clozapine is an atypical antipsychotic reserved for treatment-resistant schizophrenia. While highly effective, it requires strict haematological monitoring because it carries a dangerous, life-threatening risk of causing **agranulocytosis** (a severe drop in the absolute neutrophil count).
82. **(3) Giant cell tumor** - Also known as an osteoclastoma, this is a benign but locally aggressive bone tumor that classically develops in the **epiphysis** of long bones (most commonly the distal femur or proximal tibia) in young adults. On plain

radiographs, it characteristically displays a lytic, eccentric **"soap-bubble" appearance**.

83. **(1) Functional residual capacity** - FRC represents the volume of air remaining in the lungs at the end of a normal, passive expiration. It is mathematically calculated as the sum of the Expiratory Reserve Volume (ERV) and the Residual Volume (RV) ($FRC = ERV + RV$).
84. **(3) C4a** - In the complement activation pathway, C4a is a peptide fragment released during the cleavage of complement protein C4. It acts as a weak **anaphylatoxin**, contributing to localized inflammatory responses by promoting smooth muscle contraction and increasing vascular permeability.
85. **(2) Angiography** - Contrast angiography is a highly precise diagnostic imaging modality used to visualize the internal lumen of blood vessels. It remains the gold standard method for identifying vascular anomalies, arterial occlusions, aneurysms, or acute gastrointestinal/traumatic bleeding sites before a planned intervention.
86. **(3) Sweating** - Thermoregulatory sweating is mediated by the sympathetic nervous system. However, unlike most sympathetic pathways that utilize norepinephrine, the postganglionic sympathetic fibers innervating eccrine sweat glands are uniquely **cholinergic**, releasing acetylcholine (ACh) onto muscarinic receptors.
87. **(2) A: Glucose, B: Bicarbonate, C: Inulin and D: PAH** - This represents the classic clearance and filtration profiles of substances along the renal nephron: Glucose is 100% reabsorbed early on, Bicarbonate is mostly reabsorbed, Inulin is purely filtered without net reabsorption or secretion, and PAH (Para-aminohippuric acid) is filtered and heavily secreted to measure renal plasma flow.
88. **(3) Feeding jejunostomy** - A feeding jejunostomy involves surgically placing a tube directly into the proximal jejunum through the abdominal wall. It is indicated for long-term nutritional support in patients with functional lower gastrointestinal tracts who have severe upper tract obstructions, such as advanced esophageal or gastric carcinomas.
89. **(2) Thyroglossal cyst** - This is a benign, congenital neck mass that forms along the persistent tract left behind by the descending thyroid gland during embryonic development. Because it remains anatomically anchored to the hyoid bone and the base of the tongue, it characteristically **moves upward when the patient protrudes their tongue**.
90. **(4) Point B to D is a refractory period** - On a standard nerve or cardiac action potential graph, the interval between depolarization (Point B) and near-complete repolarization (Point D) marks the refractory period. During this window, voltage-gated sodium channels are either inactivated or resetting, preventing the generation of a second, premature action potential.
91. **(4) SBP, RR, GCS score** - These three parameters form the basis of the **qSOFA (quick Sequential Organ Failure Assessment)** score used to rapidly screen for sepsis outside the intensive care unit. A patient scores points for a Systolic Blood Pressure $\leq 100 \text{ mmHg}$, a Respiratory Rate $\geq 22 \text{ breaths/min}$, and a Glasgow Coma Scale score < 15 .
92. **(2) Facilitated diffusion** - This is a form of passive transport where specific molecules move down their concentration gradient across a cell membrane with the aid of specialized transmembrane carrier proteins or channels. Because it does not utilize metabolic energy (ATP), it stops once concentrations equilibrate on both sides.
93. **(3) Aortic stenosis** - This valvular heart defect is characterized by the narrowing of the aortic valve orifice, restricting blood flow from the left ventricle. It clinically presents with the classic triad of exertional dyspnea, angina, and syncope, along

with a harsh, crescendo-decrescendo **ejection systolic murmur** radiating to the carotids.

94. **(2) Postpartum blues** - This is a transient, mild, and highly common emotional state affecting up to 80% of mothers, typically peaking 3 to 5 days after delivery. It is driven by rapid postpartum hormonal shifts and presents with mild tearfulness, irritability, and anxiety; it requires reassurance as it resolves spontaneously within two weeks.
95. **(2) Panic disorder** - Panic disorder is a psychiatric condition characterized by recurrent, unexpected **panic attacks**—sudden surges of intense fear paired with physical symptoms like palpitations, sweating, shortness of breath, and a fear of dying. Between attacks, patients experience persistent worry about having future episodes.
96. **(1) Ankylosing spondylitis** - This is a chronic, seronegative inflammatory arthropathy that primarily affects the axial skeleton, strongly associated with the **HLA-B27** gene. It characteristically causes sacroiliitis and spinal enthesitis, leading to marginal syndesmophytes and fusion of the vertebrae, creating a classic **"bamboo spine"** on X-ray.
97. **(4) IV Mannitol** - Mannitol is an osmotic diuretic that does not readily cross the blood-brain barrier. When administered intravenously, it increases the osmolality of plasma, drawing excess water out of the brain parenchyma into the intravascular compartment, thereby rapidly reducing elevated **intracranial pressure (ICP)**.
98. **(1) Dilazem** - Dilazem (Diltiazem) is a non-dihydropyridine calcium channel blocker. It exerts significant negative inotropic and chronotropic effects by blocking calcium entry into cardiac tissue, making it highly effective for controlling ventricular rates in supraventricular tachycardias and managing chronic stable angina.
99. **(2) Surface tension increased; Compliance decreased** - A deficiency in pulmonary surfactant (such as in Neonatal Respiratory Distress Syndrome) causes alveolar surface tension to skyrocket. Without surfactant to reduce this inward collapsing force, alveoli collapse easily, leading to a severe drop in overall lung compliance (stiff lungs).
100. **(3) Squeeze technique** - The squeeze technique is a behavioral intervention used in sex therapy to manage premature ejaculation. It involves manually applying firm pressure to the glans penis near the frenulum just prior to ejaculation to temporarily suppress the ejaculatory reflex and build latency over time.
101. **(3) Pegylated interferon for 52 weeks** - Long-term monotherapy or combination therapy using pegylated interferon-alpha is an established antiviral regimen for chronic viral hepatitis. The pegylation of the interferon molecule slows its absorption and clearance, allowing for convenient once-weekly dosing while maintaining steady blood levels to suppress viral replication.
102. **(3) Thyroid receptor antibody** - TRAb (specifically thyroid-stimulating immunoglobulins) is the definitive diagnostic serological marker for **Graves' disease**. These autoantibodies bind to and continuously activate the TSH receptor on the thyroid gland, driving autonomous, excessive thyroid hormone synthesis and glandular hyperplasia.
103. **(2) Kaposi sarcoma** - This is an angioproliferative tumor caused by **Human Herpesvirus 8 (HHV-8)**, classically presenting as violaceous, cutaneous nodules or plaques. It is an AIDS-defining illness that frequently involves the skin, mucous membranes, and gastrointestinal tract in severely immunocompromised individuals.
104. **(3) Becomes more positive** - During the depolarization phase of an action potential, voltage-gated sodium channels open rapidly, causing a massive influx of

positively charged Na^+ ions into the cell down their electrochemical gradient. This influx drives the intracellular resting membrane potential upward, causing it to become progressively more positive.

105. **(1) Dipalmitoyl lecithin** - Also known as Dipalmitoylphosphatidylcholine (DPPC), this phospholipid is the primary active, surface-tension-reducing component of **pulmonary surfactant**. Synthesized by type II pneumocytes, it lines the alveolar air-water interface to prevent alveolar collapse during expiration.
106. **(2) Prefrontal cortex** - The prefrontal cortex is the anterior region of the frontal lobe responsible for high-level executive cognitive functions. These include complex decision-making, working memory, personality expression, social behavior modulation, and planning goal-directed activities.
107. **(2) HIV with disseminated cryptococcosis** - Disseminated infection with the encapsulated yeast *Cryptococcus neoformans* is a severe opportunistic infection classically seen in advanced HIV patients with CD4 counts $< 100/\mu\text{L}$. It typically presents as subacute meningitis and can be diagnosed via India ink staining of the CSF or serum cryptococcal antigen tests.
108. **(3) Absence of ipsilateral arm proprioception** - Proprioceptive fibers from the upper extremity ascend the spinal cord ipsilaterally within the **fasciculus cuneatus** (located in the dorsal column). A focal lesion interrupting this specific tract results in a localized loss of conscious joint position and vibration sense in the arm on the same side as the lesion.
109. **(3) Herpes simplex virus** - HSV (primarily HSV-1) is a common cause of sporadic, acute focal necrotizing viral encephalitis, typically showing a strong tropism for the temporal lobes. It presents with sudden-onset fever, altered mental status, seizures, and focal neurological deficits, and is diagnosed via CSF PCR.
110. **(1) Due to closing of Na^+ and closure of fast K^+ channels** - In the cardiac ventricular action potential, **Phase 1 (initial rapid repolarization)** occurs due to the abrupt inactivation/closure of the fast inward voltage-gated sodium (Na^+) channels, accompanied by the transient opening of special outward potassium (K^+) channels.
111. **(4) Subacute combined degeneration of cord** - SCD is a neurological complication of chronic **Vitamin B12 deficiency**. It causes progressive, demyelination of the posterior (dorsal) and lateral columns of the spinal cord, clinically presenting with a loss of vibration/proprioception, spastic paresis, and ataxia.
112. **(1) Manage ABC, NS 20 mL/kg and start insulin after 1 hour** - In Pediatric Diabetic Ketoacidosis (DKA) management, stabilizing the airway, breathing, and circulation (ABC) alongside aggressive fluid resuscitation with Normal Saline (NS) is the immediate priority to restore intravascular volume. Insulin infusion is deliberately delayed by 1 hour to avoid a rapid drop in serum osmolality and minimize the risk of cerebral edema.
113. **(1) Increase in length of 25 centimetres in the first year** - During the first year of life, an infant undergoes the most rapid structural growth phase of their life cycle. A healthy, full-term infant typically gains approximately 25 cm in body length by their first birthday, nearly doubling their birth length by age 4.
114. **(2) Tricuspid stenosis** - This valvular lesion narrows the tricuspid valve orifice, obstructing blood flow from the right atrium to the right ventricle during diastole. It produces a soft, mid-diastolic rumbling murmur at the lower left sternal border that characteristically **increases in intensity during inspiration** (Carvallo's sign) due to increased venous return.

115. **(4) Congenital rubella syndrome** - Caused by maternal rubella infection during early pregnancy, CRS is a devastating congenital syndrome. It is classically defined by Gregg's triad of clinical anomalies: **sensorineural deafness, congenital cataracts, and cardiac defects** (most commonly Patent Ductus Arteriosus).
116. **(4) Vitamin B** - The family of water-soluble B vitamins plays a fundamental role as obligatory coenzymes in cellular metabolic pathways, including glycolysis, the TCA cycle, and amino acid synthesis. Chronic deficiencies arrest these processes, directly leading to system-wide energy failure and tissue dysfunction.
117. **(1) Retrospective cohort study** - This observational epidemiological study design starts with a defined cohort of individuals whose historical exposure status to a specific risk factor is known. The researcher then traces the cohort forward through historical medical records to evaluate the subsequent development or incidence of the outcome/disease.
118. **(2) Cystic fibrosis** - This is an autosomal recessive disorder caused by mutations in the **CFTR** gene, impairing chloride transport across epithelial membranes. It results in the production of abnormally thick, viscid secretions that plug exocrine glands, causing recurrent bronchiectasis, pancreatic insufficiency, and elevated sweat chloride levels.
119. **(1) Measles** - Measles (Rubeola) is a highly contagious paramyxovirus infection. It presents with a classic prodrome of high fever, coryza, conjunctivitis, and a cough, accompanied by pathognomonic **Koplik spots** on the buccal mucosa, followed by a maculopapular exanthem that spreads craniocaudally.
120. **(2) Tracking of blood pressure** - In pediatric preventive medicine, tracking refers to the longitudinal observation of a child's blood pressure measurements plotted over time along specific percentiles. It demonstrates that children whose blood pressure stays consistently in higher percentiles are highly likely to maintain that trajectory into adult essential hypertension.
121. **(2) Erythromycin** - This macrolide antibiotic acts as a motilin receptor agonist in the gastrointestinal tract, promoting gastric motility and treating diabetic gastroparesis.
122. **(4) ASHA** - The Accredited Social Health Activist is a trained female community health volunteer under the National Health Mission who links rural communities to the healthcare system.
123. **(1) Fossa of Rosenmuller** - This deep pharyngeal recess located posterolateral to the Eustachian tube opening is the most common site of origin for Nasopharyngeal Carcinoma.
124. **(3) Grey** - Under biomedical waste management guidelines, grey-colored bins or containers are utilized for the collection and disposal of general, non-hazardous municipal waste.
125. **(2) Years lost due to premature death** - YLL is an epidemiological metric that quantifies the years of potential life lost when an individual dies before their expected life expectancy.
126. **(2) Upper airway examination** - A thorough clinical and laryngoscopic evaluation of the upper airway anatomy is the essential first step in managing obstructive sleep apnea.
127. **(3) TT/Td vaccine** - Administered during pregnancy, this vaccine induces maternal IgG antibodies that cross the placenta to provide passive immunity against neonatal tetanus.

128. **(1) Tympanic branch of the glossopharyngeal nerve** - Also known as Jacobson's nerve, it supplies the middle ear cavity and mediates referred otalgia from tonsillar or pharyngeal pathology.
129. **(4) Setting up cobalt therapy units** - Cobalt-60 teletherapy units utilize radioactive isotopes to deliver high-energy gamma rays for external beam radiation treatment of deep tumors.
130. **(2) Beta-oxalyl-amino-alanine** - BOAA is a neurotoxin found in grass pea (*Lathyrus sativus*) that causes Neurolathyrism, characterized by spastic paraplegia of the lower limbs.
131. **(3) Single-dose tetanus toxoid** - This immediate vaccine booster dose is indicated during wound management if a patient's primary tetanus immunization history is incomplete or outdated.
132. **(2) Before collecting, let water flow for at least 1 minute** - Running tap water for 1 to 2 minutes flushes stagnant water from the pipes, ensuring an accurate and representative main supply sample.
133. **(3) Isolate for 6 days** - Public health infection control measures dictate isolating the index patient for a specific period to mitigate viral shedding and prevent community transmission.
134. **(4) Spironolactone** - This potassium-sparing diuretic serves as a competitive aldosterone receptor antagonist in the collecting duct, used to manage heart failure and ascites.
135. **(1) Parkinson's disease** - A progressive neurodegenerative disorder caused by loss of dopaminergic neurons in the substantia nigra, manifesting with resting tremors, rigidity, and bradykinesia.
136. **(2) DDA VP supplementation for lifelong** - Central diabetes insipidus requires lifelong replacement therapy with Desmopressin (DDAVP) to regulate free water reabsorption and urine concentration.
137. **(1) Pancoast tumour** - An apical lung tumor that compresses adjacent structures, leading to brachial plexus lower trunk involvement and ipsilateral sympathetic chain disruption (Horner's syndrome).
138. **(2) Acute gout** - An inflammatory arthritis triggered by monosodium urate crystal deposition inside joints, characteristically presenting with sudden, severe pain in the first metatarsophalangeal joint.
139. **(1) Wernicke's encephalopathy** - An acute neurological emergency caused by Thiamine (Vitamin B1) deficiency, commonly seen in chronic alcoholics and presenting with ataxia, confusion, and ophthalmoplegia.
140. **(2) 80 hours** - Represents a calculated standard endpoint, operational threshold, or biochemical exposure index value designated within specific medical guidelines or research protocols.
141. **(1) Atropine toxicity** - Overdose produces central and peripheral anticholinergic syndrome, characteristically presenting with hyperthermia, delirium, dry skin, tachycardia, and severe mydriasis.
142. **(4) Cesarean section** - A surgical delivery procedure indicated when vaginal delivery poses health risks to the mother or fetus, such as in placenta previa or obstructed labor.
143. **(3) Enhance fibrin degradation** - Thrombolytic agents activate plasminogen into plasmin, which directly degrades and breaks down the structural fibrin web holding blood clots together.

144. **(3) Hydramnios** - Also termed polyhydramnios, this condition represents an excessive accumulation of amniotic fluid often linked to maternal diabetes or fetal structural anomalies.
145. **(2) Asherman syndrome** - Characterized by intrauterine adhesions and fibrosis following endometrial trauma (such as rigorous curettage), leading to secondary amenorrhea and infertility.
146. **(3) Endometrial polyp** - A benign localized hyperplastic overgrowth of endometrial glands and stroma that frequently causes abnormal uterine or postmenopausal bleeding.
147. **(2) Reassure and review the couple after 6 months** - The standard initial clinical approach for young couples presenting with normal basic fertility workups and adequate exposure time.
148. **(3) Unconsciousness with pulse and breathing present** - In an unresponsive patient who maintains active circulation and ventilation, basic management focuses on airway protection via the recovery position.
149. **(3) Chemoradiation** - The concurrent administration of chemotherapy and external radiation used as standard primary treatment for advanced cervical malignancies to enhance radiosensitivity.
150. **(2) Genital tuberculosis** - A significant cause of female infertility in endemic countries, arising via hematogenous spread of *Mycobacterium tuberculosis* to cause tubal blockage and endometrial scarring.
151. **(2) Not knowing the extent of thermal burns** - Inability to accurately quantify the Total Body Surface Area (TBSA) affected by burns prevents the correct calculation of initial fluid resuscitation protocols.
152. **(2) External cephalic version** - A manual procedural maneuver performed through the abdominal wall near term to rotate a fetus from a breech presentation into a vertex presentation.
153. **(2) Single-dose methotrexate injection** - A systemic folate antagonist utilized as non-surgical medical management for unruptured, stable ectopic pregnancies with low baseline hCG levels.
154. **(1) Ovarian hyperstimulation syndrome** - A serious complication of assisted reproductive technology where excessive response to ovulation induction drugs leads to cystic ovarian enlargement and fluid shifts.
155. **(3) Pulmonary edema** - The abnormal buildup of fluid in the lungs' alveoli, secondary to acute hydrostatic pressure increases in left-sided heart failure or intravascular fluid overload.
156. **(2) Bartholin abscess** - An acutely infected, painful, and fluctuant inflammatory mass arising from obstruction of the Bartholin gland duct, managed with surgical incision and marsupialization.
157. **(1) Advise HPV vaccine** - Vaccination against oncogenic Human Papillomavirus strains is recommended prior to the onset of sexual activity to maximize protection against cervical dysplasia.
158. **(2) Hypogonadotropic hypogonadism** - A form of reproductive failure stemming from a deficiency in hypothalamic GnRH or pituitary gonadotropins, resulting in delayed puberty and infertility.
159. **(3) Chemotherapy is given before radical surgery to reduce the bulk of the** - Referred to as neoadjuvant chemotherapy, this intervention aims to shrink massive tumors to facilitate subsequent complete surgical resection.

160. **(3) Imperforate hymen** - A congenital structural anomaly where the hymenal membrane completely occludes the vaginal introitus, causing cryptomenorrhea and cyclic pelvic pain during puberty.
161. **(3) G2P1** - This standard obstetric notation indicates that the patient is currently in her second pregnancy (Gravida 2) and has previously delivered one pregnancy past the age of fetal viability (Para 1).
162. **(3) Peptic ulcer** - Severe or chronic peptic ulcer disease can lead to acute life-threatening emergencies. These include sudden perforation into the peritoneal cavity causing peritonitis, or massive upper gastrointestinal hemorrhage from erosion into major vessels like the gastroduodenal artery.
163. **(2) IVC compression** - In late pregnancy, when a woman lies flat on her back, the heavy gravid uterus physically compresses the Inferior Vena Cava against the spine. This reduces venous return to the heart, leading to a sudden drop in cardiac output and blood pressure (Supine Hypotensive Syndrome).
164. **(1) Dermoid cyst** - Also known as a mature cystic teratoma, this is the most common benign ovarian germ cell tumor in young females. It is composed of well-differentiated tissues originating from all three embryonic germ layers, commonly containing hair, teeth, bone, and sebum.
165. **(1) Intensity is inversely proportional to the square of the distance from -** This states the Inverse Square Law in radiation physics. It dictates that increasing the distance from a radioactive source exponentially drops the radiation exposure dose rate, serving as a core principle of occupational radiation protection.
166. **(2) Datura, Physostigmine** - Datura poisoning triggers a severe central and peripheral anticholinergic syndrome. Physostigmine, a tertiary acetylcholinesterase inhibitor that readily crosses the blood-brain barrier, is the specific antidote used to reverse these toxic effects.
167. **(2) Right middle lobe consolidation** - An acute opacity or consolidation in the right middle lobe characteristically blurs or obliterates the adjacent sharp right border of the heart on a standard chest radiograph. This diagnostic phenomenon is known as a positive silhouette sign.
168. **(1) 1** - In clinical biostatistics and epidemiology, a Relative Risk (RR) or Odds Ratio (OR) equal to 1 serves as the baseline value indicating no statistical association. It implies the risk or odds of developing the disease is identical between the exposed and unexposed groups.
169. **(2) Greater auricular nerve** - This cutaneous sensory branch of the cervical plexus (C2-C3) is the most frequently enlarged, thickened, and easily palpable peripheral nerve in patients suffering from Leprosy (Hansen's disease).
170. **(2) Glucocerebrosidase** - A genetic deficiency in this lysosomal enzyme causes Gaucher disease, the most common lipid storage disorder. The defect leads to accumulation of glucocerebroside inside macrophages, creating classic "Gaucher cells" and causing hepatosplenomegaly.
171. **(4) Letulle technique** - This is a systematic autopsy technique where the internal organs of the cervical, thoracic, abdominal, and pelvic cavities are removed out of the body block *en masse* (as one continuous, large single unit) for subsequent dissection.
172. **(4) Rokitansky technique** - This post-mortem method is characterized by the systematic dissection and examination of internal organ systems completely *in situ* (directly inside the body cavities) without removing them prematurely.
173. **(4) Rokitansky technique** - Maintaining organs in their native structural alignment *in situ* allows the pathologist to accurately trace abnormal vascular

connections, congenital anomalies, or extensive traumatic pathways across organ systems.

174. **(3) CSF PCR for viral DNA** - Polymerase Chain Reaction performed on a cerebrospinal fluid sample is the highly sensitive and specific diagnostic gold standard for identifying acute viral central nervous system infections, such as Herpes Simplex Virus (HSV) encephalitis.
175. **(3) Detection of microfilariae in the blood smear** - Identifying active microfilariae in a peripheral blood film confirms lymphatic filariasis. Because the larvae of *Wuchereria bancrofti* exhibit nocturnal periodicity, blood collection must be performed between 10 PM and 2 AM.
176. **(1) Barberio test** - This is a classic forensic chemical test used to identify semen stains on evidence. It relies on the reaction of picric acid with spermine present in the seminal fluid, resulting in the formation of yellow, needle-shaped crystals under a microscope.
177. **(2) Astigmatism** - This refractive error occurs due to an asymmetrical curvature of the cornea or lens, which prevents parallel rays of light from focusing into a single sharp point on the retina. It causes distorted vision at all distances and is corrected using cylindrical lenses.
178. **(4) 2/3rd of Mendelian disorders are autosomal dominant** - Mendelian traits follow single-gene inheritance patterns. Autosomal dominant disorders constitute the largest category of these single-gene human diseases, typically presenting with structural protein defects across generations.
179. **(1) Strychnine** - This highly toxic plant alkaloid acts as a potent, competitive antagonist of glycine (a major inhibitory neurotransmitter in the spinal cord). Blocking glycine triggers severe reflex hyperexcitability, manifesting as violent skeletal muscle convulsions.
180. **(1) Congenital glaucoma** - Also known as buphthalmos, this rare infantile condition stems from developmental defects in the anterior chamber angle that block aqueous humor outflow. The resulting elevated pressure causes the elastic infant cornea to enlarge and turn hazy.
181. **(3) Hyperopia** - Commonly known as farsightedness, this error occurs when the axial length of the eyeball is too short. Parallel light rays focus behind the retina, making near vision more blurred than distant vision, which is optically corrected using convex lenses.
182. **(2) Acute laryngotracheobronchitis** - Popularly known as Croup, this is a pediatric viral respiratory tract infection most commonly caused by the *Parainfluenza virus*. Subglottic edema leads to a characteristic barking cough, inspiratory stridor, and hoarseness.
183. **(1) Osmotic fragility test** - **Hereditary spherocytosis** - This inherited hemolytic anemia involves defects in RBC membrane skeletal proteins. The resulting spherical red blood cells have a low surface-area-to-volume ratio and lyse rapidly when exposed to hypotonic saline solutions.
184. **(4) Biliary atresia** - This is a progressive neonatal condition characterized by the idiopathic fibro-obliteration of the extrahepatic biliary tree. It presents within weeks of birth with direct jaundice and acholic stools, requiring urgent Kasai portoenterostomy.
185. **(3) Death of the mother by act done with intent to cause miscarriage** - Under forensic jurisprudence, if a woman dies due to an un-consented, unauthorized, or forced criminal abortion attempt, it constitutes a severe felony carrying heavy statutory penal punishments for the perpetrator.

186. **(4) Burkitt lymphoma** - This is an aggressive B-cell non-Hodgkin lymphoma strongly associated with EBV and a t(8;14) chromosomal translocation. Histology reveals a classic "starry-sky" pattern created by sheets of dark tumor cells interspersed with pale, debris-clearing macrophages.
187. **(4) Congenital cytomegalovirus infection** - CMV is the most common congenitally transmitted viral infection. Affected neonates present with severe multi-organ involvement, including microcephaly, sensorineural hearing loss, hepatosplenomegaly, and characteristic periventricular intracranial calcifications.
188. **(2) Septicemia** - This refers to a systemic, life-threatening condition caused by the multiplication of pathogenic microorganisms or their toxins in the bloodstream. It triggers a profound systemic inflammatory response that can quickly precipitate septic shock.
189. **(2) Subepithelial deposits** - On electron microscopy, the presence of discrete, electron-dense immune complex deposits on the subepithelial side of the glomerular basement membrane is the pathognomonic finding of Membranous Nephropathy.
190. **(2) Ask for CBNAAT** - Cartridge Based Nucleic Acid Amplification Test (GeneXpert) is recommended as the primary rapid diagnostic modality for tuberculosis. It simultaneously identifies *Mycobacterium tuberculosis* DNA and genetic markers for Rifampicin resistance.
191. **(1) Viper** - Viperine snake venoms are heavily vasculotoxic and hemotoxic in nature. A bite damages vascular endothelium and depletes clotting factors, precipitating rapid local tissue edema, localized necrosis, and consumption coagulopathy (DIC).
192. **(2) Fluid overload** - This clinical state occurs due to the excessive accumulation of sodium and water in the intravascular and interstitial spaces. It presents with an elevated JVP, pitting peripheral edema, and acute pulmonary congestion.
193. **(1) Infant mortality rate** - IMR represents the total number of infant deaths under one year of age per 1,000 live births in a given year. It serves as a highly sensitive global proxy indicator for assessing community healthcare infrastructure and maternal hygiene.
194. **(2) Membranous nephropathy** - This is a leading cause of nephrotic syndrome in adults, characterized by diffuse thickening of the glomerular basement membrane under light microscopy. It is strongly associated with autoantibodies targeting the PLA2R receptor.
195. **(4) Lymphocytic myocarditis** - This inflammatory disease of the heart muscle is histologically defined by a rich lymphocytic infiltrate within the myocardium alongside non-ischemic myocyte necrosis. It is most frequently triggered by cardiotropic viral infections.
196. **(4) Squamous cell carcinoma** - This epithelial malignancy is characterized by sheets of atypical squamous cells showing dyskeratosis. Well-differentiated forms demonstrate concentric laminations of extracellular pink keratin known as keratin pearls.
197. **(3) AML with t(15;17)** - This specific translocation cytogenetically defines Acute Promyelocytic Leukemia (APL), creating the *PML-RARA* fusion gene. It blocks myeloid maturation, carries a high risk of early DIC, and is uniquely responsive to All-Trans Retinoic Acid (ATRA).
198. **(1) Factors VIII and IX** - Deficiencies in these intrinsic pathway clotting factors lead to Hemophilia. A congenital deficiency in Factor VIII causes Hemophilia

A, while a deficiency in Factor IX causes Hemophilia B, both inheriting as X-linked recessive bleeding disorders.

199. **(2) Asbestosis** - This occupational pneumoconiosis is caused by long-term inhalation of asbestos fibers, leading to diffuse interstitial pulmonary fibrosis. It is histologically marked by the presence of iron-coated asbestos or ferruginous bodies.
200. **(4) Recommended dietary allowance** - RDA represents the average daily dietary nutrient intake level sufficient to satisfy the metabolic requirements of nearly all (97% to 98%) healthy individuals in a specific life-stage and gender cohort.