

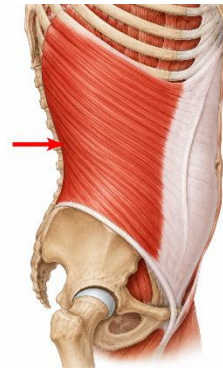
INICET May 2026 — Recall Questions with Answers

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ANATOMY

Q. In the diagram of the abdominal wall musculature, the muscle labelled 'X' and the structure formed by its aponeurosis are best identified as:

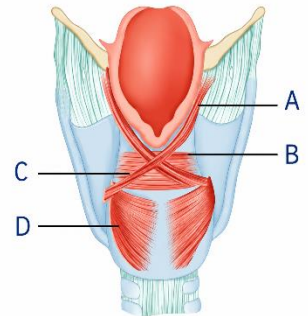
- A. External oblique — Inguinal ligament
- B. Internal oblique — Conjoint tendon
- C. Transversus abdominis — Conjoint tendon
- D. Rectus abdominis — Linea alba



Answer: A

Q. In the labelled diagram of laryngeal intrinsic muscles, which labelled muscle is solely responsible for abduction of the vocal cords?

- A. Muscle labelled 'a' (Posterior cricoarytenoid)
- B. Muscle labelled 'b'
- C. Muscle labelled 'c'
- D. Muscle labelled 'd'

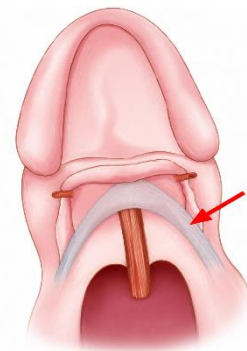


Answer: A

Q. Which muscle, as shown in the diagram, attaches to the cartilaginous portion of the Eustachian tube and also blends with the soft palate?

- A. Stylopharyngeus
- B. Tensor veli palatini
- C. Levator veli palatini
- D. Palatopharyngeus

Answer: C



Q. Match each of the following organs with its correct embryological tissue of origin:

Organ	Embryological Origin
A. Thyroid gland	1. Neural crest cells
B. Adrenal medulla	2. Intermediate mesoderm
C. Kidney	3. Endoderm

- A. A-3, B-1, C-2
- B. A-1, B-3, C-2
- C. A-2, B-1, C-3
- D. A-1, B-2, C-3

Answer: A

Q. Match each of the following gastrointestinal organs with its distinctive histological feature:

Organ	Histological Feature
1. Ileum	a. Taenia coli
2. Transverse colon	b. Villi
3. Esophagus	c. Peyer's patches
4. Duodenum	d. Non-keratinized stratified squamous epithelium

- A. 1-c, 2-a, 3-d, 4-b

- B. 1-a, 2-c, 3-d, 4-b
- C. 1-c, 2-b, 3-a, 4-d
- D. 1-d, 2-a, 3-c, 4-b

Answer: A

Q. A developmental remnant of the embryological hindgut persisting in the retrorectal (presacral) space is most likely to give rise to which of the following lesions?

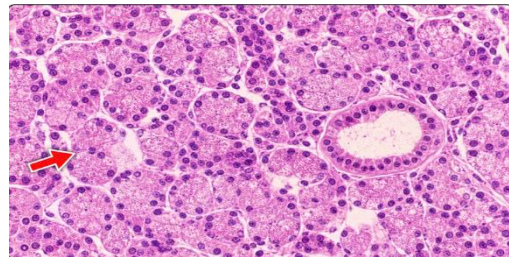
- A. Chondroma
- B. Tailgut cyst
- C. Epidermoid cyst
- D. Dermoid cyst

Answer: B

Q. The histological section shown in the image, characterized by predominantly serous acini, is best identified as which organ?

- A. Sublingual salivary gland
- B. Pancreas
- C. Parotid gland
- D. Liver

Answer: C



Q. A failure of fusion of the maxillary process with the medial nasal process during embryonic development results in which type of cleft anomaly?

- A. Oblique cleft lip
- B. Midline cleft lip
- C. Bilateral cleft
- D. Cleft palate

Answer: B



PHYSIOLOGY

Q. Which physiological abnormality increases renin secretion?

- A. Reduced renal perfusion pressure
- B. Increased extracellular fluid volume
- C. Elevated renal perfusion pressure
- D. Elevated sodium load to macula densa

Answer: A

Q. Damage to the glomerular capillary wall causes which of the following to appear in urine?

- A. Uric acid
- B. Glucose
- C. Ketones
- D. Proteins

Answer: D

Q. Emotional tone and prosody of speech is primarily controlled by which brain region?

- A. Posterior superior temporal gyrus
- B. Posterior inferior parietal gyrus
- C. Precentral gyrus
- D. Cingulate gyrus

Answer: D

Q. Reason for biphasic flow in right coronary artery?

- A. Increased aortic pressure
- B. Increased right ventricular mass
- C. High pressure in right ventricle
- D. Low pressure in right ventricle

Answer: D

Q. Which adrenergic or muscarinic receptor subtype is coupled to the Gs protein?

- A. M1 receptor
- B. M2 receptor
- C. Alpha adrenergic receptor
- D. Beta adrenergic receptor

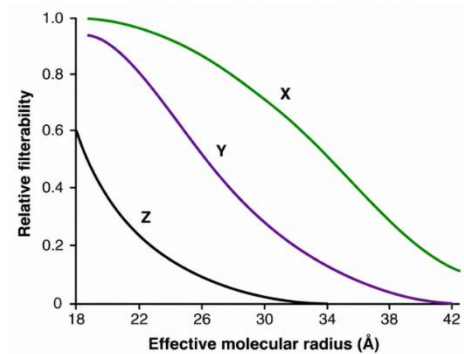
Answer: D

Q. In a graph of glomerular filterability vs. effective molecular radius, if X and Y are two molecules, which statement is correct?

1. Y has more filterability than X
2. Y has more filterability than Z
3. X has less filterability than Y
4. X represents positively charged molecules

- A. 1 and 2
- B. 2 and 3
- C. 3 and 4
- D. 1 and 4

Answer: C



Q. Which sensory receptor generates a hyperpolarizing receptor potential upon stimulation?

- A. Visual receptor (rods/cones)
- B. Gustatory receptor
- C. Olfactory receptor
- D. Auditory receptor

Answer: A

Q. Which cerebral lobe primarily governs hand–eye coordination?

- A. Frontal
- B. Parietal
- C. Occipital
- D. Temporal

Answer: B

Q. Which structure in the nephron functions as the counter-current multiplier to help concentrate urine?

- A. Thick ascending loop of Henle
- B. Thin ascending loop of Henle
- C. Collecting duct
- D. Vasa recta

Answer: A

Q. Following a bolus administration of insulin, which of the following occurs?

- A. Glucose uptake into the liver via GLUT 4
- B. Glucose uptake into muscle via GLUT 4
- C. Glucose uptake into muscle via GLUT 2
- D. Glucose uptake into the liver via GLUT 2

Answer: B

Q. If a patient is on testosterone therapy, what changes can one see in LH and FSH levels?

- A. Increased LH, decreased FSH
- B. Decreased LH, increased FSH
- C. Increased LH, increased FSH
- D. Decreased LH, decreased FSH

Answer: D

Q. During oral rehydration therapy in diarrhoea, which transporter is most active in promoting fluid absorption?

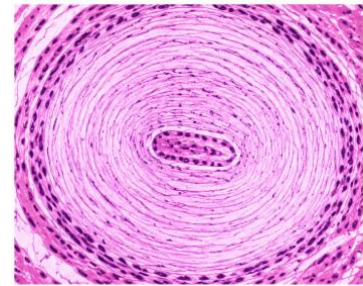
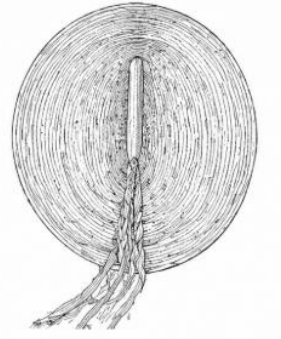
- A. CFTR
- B. NHE
- C. SGLT1
- D. Na⁺-K⁺ ATPase

Answer: C

Q. Identify the skin receptor shown in the image:

- A. Pacinian corpuscle
- B. Merkel disc
- C. Ruffini ending
- D. Meissner corpuscle

Answer: A



Q. Intercalated disc is composed of:

1. Cadherins
2. Desmosomes
3. Gap junctions
4. Tight junctions

- A. 1, 2 and 3
- B. 2, 3 and 4
- C. 1, 3 and 4
- D. 1,2, 3 and 4

Answer: A

Q. Which of the following statements regarding hormones and their metabolic actions are correct?

- A. Insulin increases protein synthesis
- B. Thyroxine decreases basal metabolic rate
- C. Insulin decreases blood glucose levels
- D. Epinephrine increases glycogenolysis
- E. Glucagon increases gluconeogenesis

- A. A, B and C only
- B. A, C and D only
- C. A, C, D and E only
- D. All of the above

Answer: C

BIOCHEMISTRY

Q. Elevated serum triglyceride levels are observed in all of the following conditions EXCEPT:

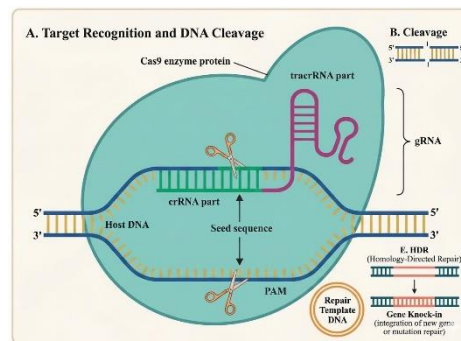
- A. Abetalipoproteinemia
- B. Type 2 diabetes mellitus
- C. High fructose diet
- D. Nephrotic syndrome

Answer: A

Q. Which molecular biotechnology is depicted in the image shown below:

- A. Microarray analysis
- B. In situ hybridization
- C. CRISPR-Cas9 gene editing system
- D. DNA sequencing

Answer: C



Q. Which coenzyme is essential for carrying out transamination reactions in amino acid metabolism?

- A. Thiamine pyrophosphate (TPP)
- B. Nicotinamide adenine dinucleotide (NAD)
- C. Pyridoxal phosphate (PLP)
- D. Flavin adenine dinucleotide (FAD)

Answer: C

Q. Which of the following gives a negative Benedict's test?

- A. Sucrose
- B. Glucose
- C. Fructose
- D. Ascorbic acid

Answer: A

Q. Match the following:

1. Metabolic acidosis	a. Hyperventilation
2. Metabolic alkalosis	b. Bronchopneumonia
3. Respiratory acidosis	c. Pyloric stenosis
4. Respiratory alkalosis	d. Glycol poisoning

- A. 1-c, 2-d, 3-b, 4-a
- B. 1-c, 2-d, 3-a, 4-b
- C. 1-a, 2-c, 3-b, 4-d
- D. 1-d, 2-c, 3-b, 4-a

Answer: D

Q. Match the following:

1. Most essential fatty acid	a. Safflower oil
2. Amino acid (AA) score	b. Protein scoring system
3. Oil rich in essential fatty acid	c. Protein quality + digestibility
4. Net Protein Utilization (NPU)	d. Linoleic acid

- A. 1-d, 2-c, 3-a, 4-b
- B. 1-b, 2-d, 3-c, 4-a
- C. 1-d, 2-b, 3-a, 4-c
- D. 1-a, 2-b, 3-d, 4-c

Answer: C

Q. Assertion: The structural diversity of glycans exceeds that of proteins.

Reason: Glycans are not assembled using a genetic template and can form branched chains with variable linkages.

- A. A is true, but R is false
- B. A is false, but R is true
- C. Both A and R are true, and R is the correct explanation of A
- D. Both A and R are true, but R is not the correct explanation of A

Answer: C

Q. Which of the following enzymes are active in the dephosphorylated state?

- 1. Glycogen synthase
- 2. Glycogen phosphorylase
- 3. Fructose-2,6-bisphosphatase
- 4. Phosphofructokinase-2 (PFK-2)

- A. 1 and 2
- B. 2 and 3
- C. 3 and 4
- D. 1 and 4

Answer: D

Q. In DNA replication, which enzyme synthesizes RNA primers?

- A. Topoisomerase
- B. DNA polymerase II
- C. DNA polymerase III
- D. Primase

Answer: D

Q. Which of the following amino acid classifications are correctly matched?

1. Uncharged polar AA – Cysteine
2. Nonpolar AA – Histidine
3. Basic AA – Proline
4. Basic AA – Lysine

- A. A and B
- B. C and D
- C. B and C
- D. A and D

Answer: D

Q. A newborn presents with craniofacial abnormalities, severely reduced muscle tone, and seizures. Biochemical analysis reveals elevated very long chain fatty acids in serum. What is the most likely underlying cause?

- A. Mitochondrial inheritance
- B. Lysosomal storage disorder
- C. Peroxisomal biogenesis defect
- D. Simultaneously activate multiple tumor suppressor genes

Answer: C

Q. A laboratory worker accidentally inhales fumes of an oxidative phosphorylation uncoupling agent. Which of the following physiological changes is most likely to occur?

- A. ↓ O₂ consumption, ↑ Body temperature, ↑ ATP production
- B. ↑ O₂ consumption, ↑ Body temperature, ↓ ATP production
- C. ↑ O₂ consumption, ↓ Body temperature, ↑ ATP production
- D. ↓ O₂ consumption, ↓ Body temperature, ↓ ATP production

Answer: B

MICROBIOLOGY

Q. The image shown depicts a piece of sterilization equipment. Which of the following statements regarding its sterilization properties is INCORRECT?

- A. It is a method of moist heat sterilization operating above 100°C
- B. Bowie-Dick test positive
- C. Prions are completely destroyed at 121°C for 15 minutes
- D. It is commonly used for sterilizing culture media



Answer: C

Q. A 32-year-old woman with a history of splenectomy presents to the emergency department with sudden-onset high-grade fever, vomiting, hypotension, and rapidly progressive septic shock. Her symptoms began 2 weeks after a minor febrile illness. Which organism is the most likely causative agent of this life-threatening condition?

- A. Escherichia coli
- B. Staphylococcus aureus
- C. Streptococcus pneumoniae
- D. Pseudomonas aeruginosa

Answer: C

Q. Which of the following reagents is used for the digestion and decontamination of a sputum sample collected for tuberculosis diagnosis?

- A. HCl with NAC
- B. H₂SO₄ with NAC
- C. HNO₃ with NALC
- D. NaOH with NALC

Answer: D

Q. A patient presents with fever, headache, and neck stiffness suggestive of meningitis. CSF examination is performed, and Nigrosin stain reveals encapsulated budding yeast cells. Which of the following organisms is the most likely causative agent?

- A. *Aspergillus fumigatus*
- B. *Pneumocystis jirovecii*
- C. *Histoplasma capsulatum*
- D. *Cryptococcus neoformans*

Answer: D

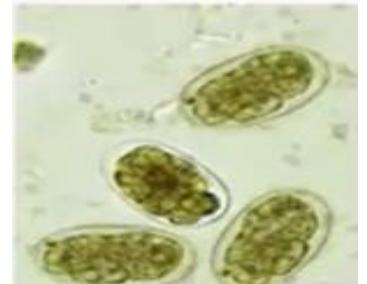
Q. A female presents with high grade fever, diffuse erythematous rash and hypotension. She is currently menstruating and using tampons. The toxin responsible acts by?

- A. MHC class I molecule only
- B. CD4 receptor only
- C. B-cell receptor and IgG
- D. V β region of the T-cell receptor and MHC class II molecule

Answer: D

Q. A young female presents with fatigue, pallor, and symptoms suggestive of iron deficiency anemia. A microscopic image of her stool examination is provided. Which of the following statements is correct regarding the parasite identified?

- A. Infection occurs by ingestion of cysts in contaminated food or water
- B. Infection occurs by active penetration of infective larvae through the skin
- C. The image represents eggs of *Enterobius vermicularis*
- D. The parasite shown is *Ascaris lumbricoides*



Answer: B

Q7. Which of the following statements are true about diphtheria toxin?

- A. It inhibits EF-2
- B. It is an A-B type exotoxin
- C. It has particular affinity for myocardial and nervous tissue
- D. Toxin is produced only by strains carrying a plasmid

Choose the correct answer:

- A. A and C
- B. A, B and C
- C. All are correct
- D. B and D

Answer: B

Q8. The virulence of *Bacillus anthracis* is mediated by two key plasmid-encoded factors. Which of the following is the correct biochemical composition?

- A. pXO1 poly-D-glutamate capsule
- B. pXO1 polysaccharide capsule
- C. pXO2 polysaccharide capsule
- D. pXO2 poly-D-glutamate capsule

Answer: A

Q9. A 38-year-old man with advanced HIV infection (CD4 count: 60 cells/mm³) presents with chronic watery diarrhea for 2 months, significant weight loss, intermittent fever, and fatigue. Colonoscopy is performed, and biopsy from the colonic mucosa demonstrates trophozoites with RBCs. What is the most likely causative organism?

- A. *Giardia lamblia*
- B. *Cryptococcus neoformans*
- C. *Cryptosporidium parvum*
- D. *Entamoeba histolytica*

Answer: D

Q10. Which of the following bacteria possesses two circular DNA molecules (i.e., two distinct chromosomes) in its genome?

- A. *Escherichia coli*
- B. *Vibrio cholerae*
- C. *Salmonella typhi*
- D. *Shigella dysenteriae*

Answer: B

Q11. A diabetic patient presents with facial pain, black nasal eschar and eye pain following corticosteroid therapy. What is the etiological agent?

- A. *Candida tropicalis*
- B. *Aspergillus fumigatus*
- C. *Cryptococcus neoformans*
- D. *Rhizopus*

Answer: D

PATHOLOGY

Q. Which of the following vasculitis is NOT classified as a medium-vessel disease?

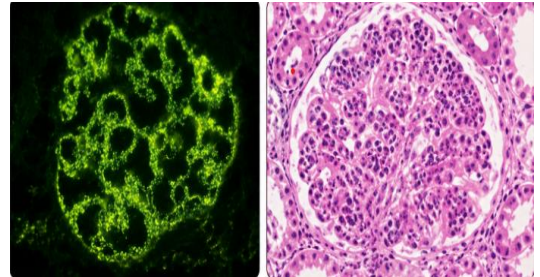
- A. Microscopic polyangiitis (MPA)
- B. Polyarteritis nodosa (PAN)
- C. Buerger's disease (Thromboangiitis obliterans)
- D. Kawasaki disease

Answer: A

Q. A 12-year-old presents with hypertension and hematuria. Serum C3 is raised. Renal biopsy shows subepithelial hump deposits on EM. What is the most likely diagnosis?

- A. Goodpasture syndrome
- B. Membranous glomerulonephritis
- C. Post-streptococcal glomerulonephritis (PSGN)
- D. Minimal change disease

Answer: C



Q. A patient with long-standing chronic inflammatory disease develops systemic amyloidosis. Which amyloid protein subtype is characteristically deposited?

- A. ATTR
- B. Abeta2m
- C. AL
- D. AA

Answer: D

Q. A patient presents with Hb 8 g/dL, MCV 62 fL, and low serum ferritin. Which type of anemia is most likely?

- A. Sideroblastic anemia
- B. Megaloblastic anemia
- C. Iron deficiency anemia
- D. Aplastic anemia

Answer: C

Q. Which of the following is an INCORRECT pairing of virus and associated malignancy?

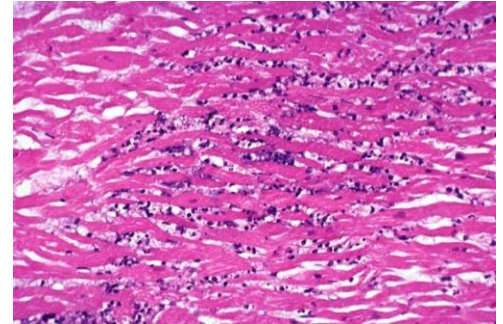
- A. CMV — Nasopharyngeal carcinoma

- B. HTLV-1 — Adult T-cell lymphoma
- C. EBV — Burkitt lymphoma
- D. HHV-8 — Kaposi sarcoma

Answer: A

Q. Histopathological examination of cardiac tissue from a post-MI patient shows a predominant neutrophilic infiltrate. This finding corresponds to which post-infarction time window?

- A. 2–3 months
- B. 12–24 hours
- C. 1–3 days
- D. 7–10 days



Answer: C

Q. A patient diagnosed with beta-thalassemia major is being evaluated. Which of the following is characteristically associated with this condition?

- A. Iron overload
- B. Leukopoiesis
- C. Ineffective hematopoiesis
- D. Intravascular hemolysis

Answer: D

Q. Which of the following statements regarding wound healing is correct?

- A. The inflammatory phase is directly followed by the exudative phase
- B. Type I collagen is deposited in early wound healing in a random haphazard manner
- C. Angiogenesis occurs during the proliferative phase
- D. Type III collagen replaces Type I collagen in a 3:1 ratio

Answer: C

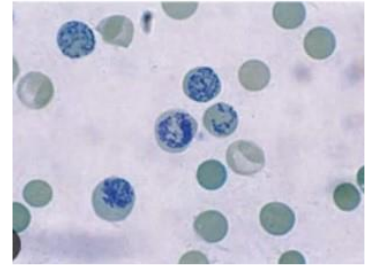
Q. Which statement correctly describes incomplete penetrance?

- A. All children of an affected parent will be clinically affected
- B. The disease will not manifest in any individual of the next generation
- C. Multiple individuals in one generation are affected but the next generation is entirely spared
- D. Alternate generations of pedigree are affected by the condition

Answer: C

Q. A peripheral blood smear is shown below. Which supravital stain was used?

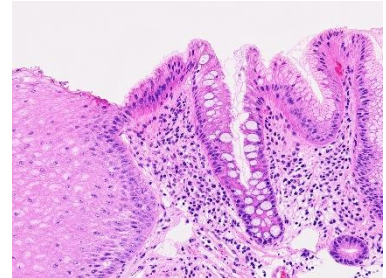
- A. Giemsa stain
- B. New Methylene Blue
- C. Leishman stain
- D. Diff-Quik stain



Answer: B

Q. On histopathological examination of the gastro-esophageal junction, the following image is observed. What is the probable diagnosis?

- A. Low grade dysplasia
- B. Squamous cell carcinoma
- C. Adenocarcinoma
- D. Barrett's esophagus



Answer: D

Q. A pathologist receives a formalin-fixed paraffin-embedded (FFPE) tissue section. Which technique is most appropriate to identify and localize specific proteins within this section in situ?

- A. Fluorescence in situ hybridisation (FISH)
- B. Flow cytometry
- C. Western blot
- D. Immunohistochemistry (IHC)

Answer: D

Q. A patient from North-East India presents with pulmonary cavitary lesions and hepatic nodules. Sputum AFB smear is negative. Biopsy shows caseating granulomas with Langhans-type giant cells and raised ESR. What is the most probable diagnosis?

- A. Toxoplasmosis
- B. Tuberculosis
- C. Histoplasmosis
- D. Sarcoidosis

Answer: B

Q. An 8-year-old boy presents with freckling in the armpits, soft skin tumors over the back, and learning difficulties. His father has similar skin lesions. The images show findings under slit lamp. What is the most likely diagnosis?

- A. Neurofibromatosis type 2 (NF2)
- B. Tuberous sclerosis complex
- C. Sturge-Weber syndrome
- D. Neurofibromatosis type 1 (NF1)



Answer: D

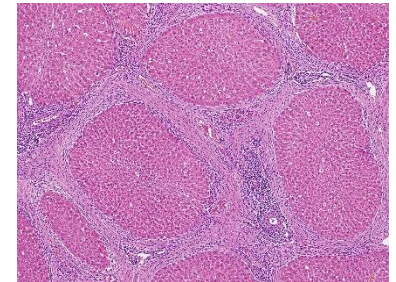
Q. What is the primary molecular mechanism by which UV light induces carcinogenesis?

- A. Inhibition of TP53
- B. Activation of NF-kappa β signaling pathway
- C. Thymine dimers
- D. Upregulation of cyclin proteins

Answer: C

Q. On histopathological examination of liver from a chronic alcoholic, the following image is observed. Which special stain is the best choice to confirm the diagnosis?

- A. Gomori Methenamine Silver (GMS)
- B. Periodic Acid Schiff (PAS)
- C. Masson Trichrome
- D. Gram stain

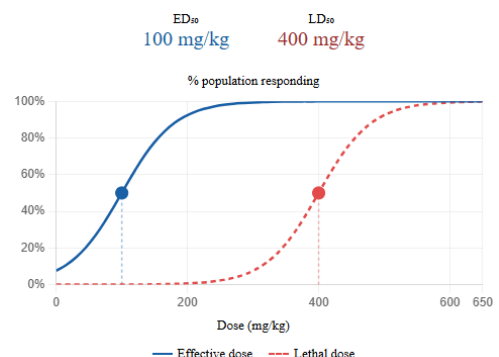


Answer: C

PHARMACOLOGY

Q. Calculate the Therapeutic Index of the given drug from the dose-response curve below:

- A. 0.25
- B. 0.75
- C. 2
- D. 4



Answer: D

Q. What is the mechanism of action of Resmetirom?

- A. Blockage at NPC1L1 transporter
- B. Activation of PPAR- γ
- C. Blockage of Acetyl Co-A carboxylase
- D. Stimulation of Thyroid Hormone Receptor- β

Answer: D

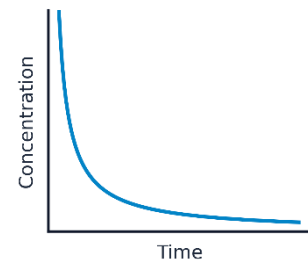
Q. What is the mechanism of action of Pretomanid under the BPaLM regimen?

- A. Inhibition of ATP synthase
- B. Inhibition of RNA polymerase
- C. Inhibition of mycolic acid synthesis
- D. Inhibition of arabinoglycan synthesis

Answer: C

Q. Identify the type of elimination kinetics represented in the given graph:

- A. First-order kinetics
- B. Zero-order kinetics
- C. Nonlinear kinetics
- D. Saturation kinetics



Answer: A

Q. A 45-year-old chronic smoker is being counselled for smoking cessation therapy. Which of the following statements regarding nicotine replacement and pharmacotherapy is correct?

- A. Acidic beverages should be avoided 15 minutes before using nicotine gum to maximize absorption
- B. Nicotine patch provides superior efficacy compared to nicotine gum
- C. Bupropion is associated with more adverse effects than Varenicline
- D. Varenicline carries a black box warning for cardiovascular toxicity

Answer: A

Q. Lamotrigine is most effective in which of the following seizure types?

- A. Absence seizures
- B. Tonic-clonic seizures
- C. Atonic seizures
- D. Myoclonic seizures

Answer: B

Q. Unlike other calcium channel blockers, Cilnidipine does not cause reflex tachycardia. What is the reason for this?

- A. It additionally blocks N-type calcium channels
- B. It additionally blocks T-type calcium channels
- C. It additionally blocks C-type calcium channels
- D. It additionally blocks sodium channels

Answer: A

Q. A patient is diagnosed with invasive mucormycosis following COVID-19 infection. Which of the following antifungal agents has NO activity against Mucor species and should be avoided?

- A. Voriconazole
- B. Isavuconazole
- C. Posaconazole
- D. Liposomal Amphotericin B

Answer: A

Q. Regarding ESBL-producing organisms and their treatment, which of the following statements are correct?

1. 1st generation cephalosporins such as Cefazolin retain activity against ESBL producers, unlike 3rd generation
2. Carbapenems have proven clinical efficacy against ESBL-producing organisms
3. The beta-lactamase enzyme responsible for ESBL resistance is encoded on transferable plasmids
4. Piperacillin-Tazobactam is a reliable and effective alternative to Carbapenems

- A. 1, 2 and 4 only
- B. 2, 3 and 4 only
- C. 1, 2 and 3 only
- D. 1, 2, 3 and 4 all

Answer: B

Q. Which of the following statements is correct regarding Ticagrelor?

- A. It is associated with reduced risk of intracranial bleeding compared to Clopidogrel
- B. It requires hepatic enzymatic activation to produce its active metabolite
- C. It exerts its antiplatelet effect by directly blocking the P2Y₁₂ ADP receptor
- D. Its antiplatelet action is irreversible and persists until new platelets are formed

Answer: C

Q. Match the following antibiotic with its most commonly associated organism:

1. Streptomycin	a. Streptococcal pharyngitis
2. Amoxicillin	b. H. pylori
3. Doxycycline	c. Mycobacterium tuberculosis
4. Clarithromycin	d. Chlamydia trachomatis

- A. 1-c, 2-a, 3-d, 4-b
- B. 1-c, 2-b, 3-d, 4-a
- C. 1-a, 2-c, 3-b, 4-d
- D. 1-d, 2-a, 3-c, 4-b

Answer: A

Q. Which of the following is correctly matched (Anti-aging compound — Molecular pathway)?

- A. Resveratrol — mTOR inhibition
- B. Caloric restriction — Sirtuin (SIRT-1)
- C. Metformin — AMPK pathway
- D. Rapamycin — IGF-1/Insulin pathway

Answer: C

Q. All the following are ligand-gated ion channels EXCEPT:

- A. H2 receptor
- B. 5-HT3 receptor
- C. GABA-A receptor
- D. Nicotinic receptor

Answer: A

Q. A wound swab reveals gram-positive cocci in clusters, catalase-positive, sensitive to Cefoxitin and Oxacillin. What is the drug of choice?

- A. Ceftriaxone
- B. Vancomycin
- C. Cloxacillin
- D. Amoxicillin/Clavulanate

Answer: C

Q. Which of the following drug-receptor target pairings are correctly matched? 1. Trastuzumab — HER2 receptor 2. Sunitinib — HER1 (EGFR) 3. Gefitinib — HER1 (EGFR)

- A. Only 1 is correct

- B. 1 and 3 are correct
- C. 2 and 3 are correct
- D. All are correct

Answer: B

Q. A novel anti-aging compound induces autophagy by inhibiting EP300 histone acetyltransferase, leading to deacetylation of autophagy-related proteins. Which known anti-aging agent works by the same mechanism?

- A. Rapamycin
- B. Metformin
- C. Resveratrol
- D. Spermidine

Answer: D

FMT

Q. A 16-year-old rape survivor presents at 16 weeks of pregnancy. All of the following are responsibilities of the examining doctor EXCEPT:

- A. Fetal tissues for DNA to be preserved
- B. Inform the police
- C. MTP if needed can be conducted by one doctor's opinion
- D. Parents' consent for medicolegal examination

Answer: D

Q. The injury shown in the image is best described as:

- A. Laceration
- B. Contusion
- C. Stab injury
- D. Bomb blast



Answer: A

Q. Following an explosion, a person sustained burns to the face and chest. What type of blast injury is this?

- A. Primary blast injury
- B. Secondary blast injury
- C. Tertiary blast injury
- D. Quaternary blast injury

Answer: B

Q. Which type of injury is characterized by the 'sparrow foot' pattern?

- A. Bomb blast
- B. Motor vehicle accident
- C. Contusion
- D. Collision

Answer: B

Q. Match each poison with its characteristic feature:

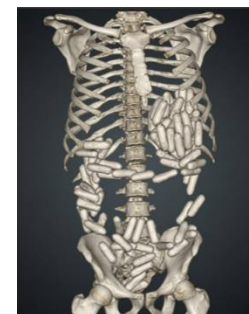
Column I — Poison	Column II — Feature
A. Carbon monoxide poisoning	1. Smell of bitter almond
B. Organophosphorus poisoning	2. Pinpoint pupil with secretions
C. Phosphorus poisoning	3. Cherry red discoloration
D. Cyanide poisoning	4. Garlicky odour

- A. A-4, B-2, C-3, D-1
- B. A-1, B-2, C-3, D-4
- C. A-4, B-3, C-1, D-2
- D. A-3, B-2, C-4, D-1

Answer: D

Q. A male traveller from Afghanistan is found dead in a hotel room. Autopsy shows the stomach packed with foreign substances. What is this phenomenon called?

- A. Body packing
- B. Body stuffing
- C. Body storage
- D. Body smuggle



Answer: A

Q. After ingesting a liquid, a patient presents with pinpoint pupils, respiratory depression, excessive salivation, bradycardia, sweating, and lacrimation. What is the treatment of choice?

- A. Pralidoxime
- B. Atropine
- C. Flumazenil
- D. Naloxone

Answer: B

Q. Based on the image, what is the range of the firearm wound?

- A. Close
- B. Contact
- C. Exit wound
- D. Distant

Answer: D

Q. An infant ingests a pesticide. Which drug reverses the acetylcholinesterase block?

- A. Pralidoxime
- B. Atropine
- C. Flumazenil
- D. Naloxone

Answer: A

Q. Respiratory depression is NOT a feature of which of the following poisonings?

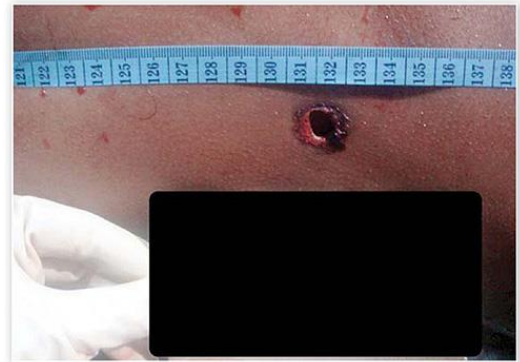
- A. Gelsemium
- B. Strychnine
- C. Opium
- D. Dhatura

Answer: B

Q. A child presents with hypotension, respiratory depression, and pinpoint pupils. What is the most appropriate antidote?

- A. Naloxone
- B. Flumazenil
- C. Naltrexone
- D. Atropine

Answer: A



OPHTHALMOLOGY

Q. A patient has sudden painful loss of vision with RAPD but a normal-appearing optic disc on funduscopy. What is the diagnosis?

- A. AION
- B. Central retinal artery occlusion
- C. Retrobulbar neuritis
- D. Papilledema

Answer: C

Q. What is the expected amplitude of accommodation in a healthy child?

- A. 2D
- B. 5D
- C. 14D
- D. 25D

Answer: C

Q. Images show café-au-lait spots, Lisch nodules on the iris, and swelling near the eye. Identify the most likely syndrome:

- A. NF-1
- B. Tuberous sclerosis
- C. Sturge-Weber syndrome
- D. Von Hippel-Lindau disease

Answer: A

Q. Which of the following correctly describes the changes that take place during dark adaptation?

- A) Retinol is converted to vitamin D**
- B) Dilated pupils**
- C) Eyes sensitive to light**
- D) Functional rhodopsin is formed (Opsin binds with 11-cis-retinal)**

- A. A and B
- B. B only
- C. B, C and D
- D. D only

Answer: D

Q. Which of the following structures is NOT part of the trabecular outflow pathway?

- A. Trabecular meshwork
- B. Uveoscleral pathway
- C. Schlemm's canal
- D. Collector vessels

Answer: B

Q. Which features help distinguish central nystagmus from peripheral nystagmus?

- A. Direction and duration
- B. Latency
- C. Fatigue
- D. All of the above

Answer: D

ENT

Q. A patient develops acute-onset severe unilateral hearing loss with no identifiable cause. Audiometry confirms sensorineural hearing loss. Which of the following pharmacological regimens is considered the first-line treatment for this condition?

- A. Intratympanic steroid injections
- B. Topical steroid ear drops
- C. Gentamicin combined with systemic steroids
- D. Oral prednisolone (systemic corticosteroids)

Answer: D

Q. A patient is evaluated for a rare orofacial syndrome. The classical diagnostic triad of this condition is being reviewed. Which of the following is NOT a component of the Melkersson-Rosenthal syndrome triad?

- A. Lower motor neuron facial palsy
- B. Proptosis (forward displacement of the eyeball)
- C. Orofacial granulomatous oedema
- D. Fissured (scrotal) tongue

Answer: B

Q. A female patient presents with recurrent epistaxis and a unilateral nasal cavity mass. CT scan reveals localised bony erosion. Among the following differential diagnoses, which is the LEAST likely cause of these findings?

- A. Inverted papilloma with malignant transformation
- B. Olfactory esthesioneuroblastoma
- C. Antrochoanal polyp
- D. Juvenile nasopharyngeal angiofibroma

Answer: C

Q. An elderly immunocompromised patient presents with blood-stained nasal discharge and a black necrotic eschar covering the right nasal cavity, hard palate, and nasal turbinates. Histopathology reveals broad aseptate hyphae. Which organism is the most common causative agent of this life-threatening condition?

- A. Candida albicans
- B. Cryptococcus neoformans
- C. Aspergillus fumigatus
- D. Rhizopus species

Answer: D

COMMUNITY MEDICINE

Q. Calculate the Odds Ratio with the following data:

	Cancer	No Cancer
Smoking	80	20
No Smoking	40	60

- A. 6
- B. 8
- C. 10
- D. 12

Answer: A

Q. Assertion: In a nested case-control study, incidence rates can be derived from the parent cohort. Reason: Nested case-control studies have the ability to estimate relative risk accurately.

- A. Both assertion and reason are correct, and the reason is the correct explanation of the assertion
- B. Both assertion and reason are correct, but they are unrelated
- C. Assertion is correct, but the reason is incorrect
- D. Assertion is incorrect, but the reason is correct

Answer: B

Q. Health data from 15 nations investigates the relationship between per capita tobacco consumption and national COPD prevalence, revealing a strong positive correlation. Which study type best describes this?

- A. Case control study
- B. Cohort study

- C. Cross sectional study
- D. Ecological study

Answer: D

Q. A new screening test is evaluated in a population of 1,000 individuals. Of these, 100 individuals are known to have the disease. The test correctly identifies 90 of the diseased individuals, while 50 non-diseased individuals are false positive. Based on the data below, what is the Positive Predictive Value (PPV) of this screening test?

Screening Test	Diseased	Non-Diseased
Test Positive	90	50
Test Negative	10	850
Total	100	900

- A. 90%
- B. 98%
- C. 64%
- D. 47%

Answer: C

Q. In a defined population, approximately 67% of all stroke cases are attributable to uncontrolled hypertension. If hypertension were adequately managed, 2/3rd of stroke burden could be eliminated. This is an example of:

- A. Relative risk
- B. Attributable risk
- C. Population attributable risk
- D. Odds Ratio

Answer: C

Q. Which statement is correct regarding assessment of heterogeneity in meta-analysis?

- A. It directly quantifies and corrects for publication bias
- B. It evaluates the degree of variability in results across the combined studies
- C. It automatically removes confounding variables from individual studies
- D. It computes the incidence rate of the outcome across all populations

Answer: B

Q. On investigating an outbreak, an epidemiologist plots epidemic curve of acute febrile illness showing successive clusters separated by approximately 1 incubation period apart. Which of the following diseases shows this pattern of propagated spread?

- A. Measles
- B. Salmonellosis
- C. Typhoid
- D. Food poisoning

Answer: A

Q. On evaluating an influenza vaccine, it demonstrated an efficacy of 95% in randomized controlled trials and an effectiveness of 90% in post-marketing surveillance studies. Which of the following statement is incorrect?

- A. Vaccinated individuals demonstrate a 95% reduction in disease risk vs unvaccinated
- B. Vaccinated individuals show a 90% reduction in influenza risk in real-world settings
- C. The vaccine confers absolute and complete protection against influenza infection
- D. Vaccine effectiveness can be lower than efficacy in real-world settings

Answer: C

Q. Which of the following statement is correct with respect to the Pearl Index?

- A. Number of accidental pregnancies per 100 woman-years of contraceptive use
- B. Number of accidental pregnancies in 100 women using a contraceptive for 1 year
- C. Number of live births per 100 woman-years
- D. Number of pregnancies including abortions per 100 couples

Answer: A

Q. Under the RMNCH+A programme, a state is categorized in the "Red" zone. Which criterion is likely responsible for this classification?

- A. MMR lower than the national benchmark
- B. Institutional delivery rate meeting the nationally accepted threshold
- C. IMR exceeding the national average by 20% or more
- D. Full immunization coverage achieving the desired target

Answer: C

OBGYN

Q. A 34-year-old female, G2P1, with a history of pre-eclampsia in her previous pregnancy, comes for her first ANC visit at 12 weeks. What is the most appropriate intervention for prevention of pre-eclampsia in her current pregnancy?

- A. Low-dose aspirin
- B. Low-dose aspirin with Low Molecular Weight Heparin (LMWH)
- C. Low calcium intake
- D. Low salt intake

Answer: A

Q. A 21-year-old girl presents with primary amenorrhea. Examination shows absent uterus, present breast development, and sparse pubic and axillary hair. What is the genetic etiology?

- A. MRKH

- B. Androgen insensitivity
- C. Turner's syndrome
- D. CAH

Answer: A

Q. Match the following conditions with their hormonal profiles:

Condition	Hormonal Profile
1. PCOS	A. Normal FSH, Normal LH, Normal Estradiol
2. Primary Ovarian Failure	B. Decreased FSH, Decreased LH, Decreased Estradiol
3. Asherman Syndrome	C. Increased LH, Normal to Low FSH (High LH:FSH ratio)
4. Sheehan Syndrome	D. Markedly Increased FSH, Low Estradiol

- A. 1-C, 2-D, 3-A, 4-B
- B. 1-A, 2-B, 3-C, 4-D
- C. 1-D, 2-C, 3-B, 4-A
- D. 1-C, 2-A, 3-D, 4-B

Answer: A

Q. A woman presents with frothy green vaginal discharge, intense pruritus, and a negative Whiff test. What is seen on microscopy?

- A. Motile flagellate organisms
- B. Clue cells
- C. Yeasts with pseudo hyphae
- D. Candida

Answer: A

Q. Which of the following is classified as a probable sign of pregnancy?

- A. Hegar's sign
- B. Goodell's sign
- C. Braxton Hicks contractions
- D. Seitz sign

- A. A and B only
- B. A, B and C only

- C. B, C and D only
- D. A, B, C and D

Answer: B

Q. Which of the following statements regarding the HPV vaccine is correct?

- A. One dose can be given instead of two
- B. Live HPV vaccine is 100% protective for all HPV variants
- C. Primary target age is 9–14 years
- D. 90% of 15-year-old girls to be vaccinated

Answer: C

Q. A primigravida delivers the fetal head but the shoulders fail to deliver despite routine traction. What is the first step in management?

- A. McRoberts maneuver with suprapubic pressure
- B. Wood's corkscrew maneuver
- C. Rubin maneuver
- D. Zavanelli maneuver

Answer: A

Q. A patient is unable to pass urine four hours after an instrumental vaginal delivery. Examination reveals a bluish cystic swelling in the vaginal wall. What is the most likely diagnosis?

- A. Vaginal hematoma
- B. Perineal tear
- C. Bartholin's cyst
- D. Cystocoele

Answer: A

Q. What is the primary cause of mild breathlessness experienced during normal pregnancy?

- A. Decreased tidal volume
- B. Progesterone-induced stimulation of the respiratory centre
- C. Reduced oxygen intake
- D. Increased arterial PCO₂ levels

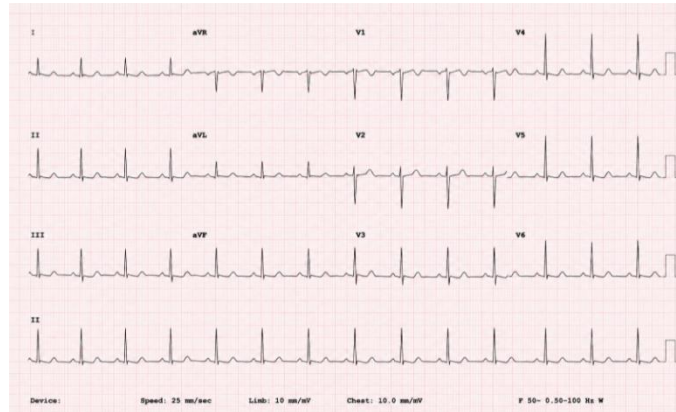
Answer: B

MEDICINE

Q. A 58-year-old male presents with crushing chest pain radiating to the jaw. His ECG reveals ST-segment elevation in leads II, III, and aVF. Which coronary artery is most likely occluded?

- A. Right coronary artery
- B. Posterior descending artery
- C. Left circumflex artery
- D. Anterior interventricular artery

Answer: A



Q. A patient presents with hypercalcemia due to malignancy. According to the correct sequence of management, what should be the first step?

- A. Administration of loop diuretics
- B. Intravenous rehydration with normal saline
- C. Administration of bisphosphonates
- D. Other supportive measures

Answer: B

Q. A patient presents to the emergency room with breathlessness. Cardiac causes are suspected but need to be differentiated from obstructive lung disease. Which of the following features is more characteristic of heart failure?

- A. Chest tightness
- B. Not able to take deep breath
- C. Air hunger
- D. Intermittent wheezing

Answer: C

Q. Which of the following is least likely to be considered a major independent risk factor for falls in the elderly?

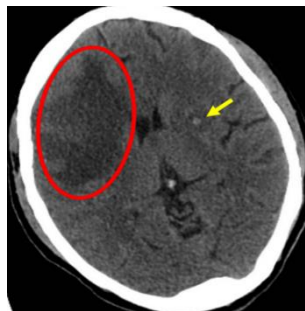
- A. Muscle weakness (Sarcopenia)
- B. Hearing impairment
- C. Advanced age
- D. Arthritis

Answer: B

Q. A 35-year-old HIV-positive female on irregular ART presents with headache, confusion, fever, and right-sided weakness. Her CD4 count is 40 cells/mm³. MRI brain shows multiple ring-enhancing lesions in the basal ganglia. What is the most likely diagnosis?

- A. Cerebral toxoplasmosis
- B. Primary CNS lymphoma
- C. Progressive multifocal leukoencephalopathy (PML)
- D. Neurocysticercosis

Answer: A



Q. A patient on long-term steroid therapy presents with centripetal obesity, buffalo hump, and abdominal striae. Dexamethasone suppression test confirms the diagnosis. What is the next investigation to identify the source?

- A. ACTH level
- B. CECT adrenal
- C. Non-contrast CT adrenal
- D. MRI pituitary gland

Answer: A

Q. A 5-year-old child presents with recurrent episodes since age 3, characterized by sudden behavioral arrest, repetitive picking movements of the right hand, and goosebumps. The child is unresponsive during episodes and has no memory of them afterward. Which of the following is correct?

1. Focal seizure with intact awareness
2. Focal seizure with impaired awareness
3. Frontal lobe semiology
4. Temporal lobe semiology

- A. 1 and 3
- B. 2 and 4
- C. 2 and 3
- D. 1 and 4

Answer: B

Q. In which of the following conditions is cyanosis most likely to be a clinical finding?

- A. Eisenmenger syndrome

- B. Atrioventricular septal defect
- C. Partial anomalous pulmonary venous connection
- D. Advanced aortic stenosis

Answer: A

Q. A 38-year-old male presents with sudden onset palpitations. He has no known comorbidities and his vitals are stable. ECG shows an irregularly irregular rhythm with no identifiable P waves and a ventricular rate of 130 beats per minute. What is the most likely diagnosis?

- A. Multifocal atrial tachycardia
- B. Atrial fibrillation
- C. Atrial flutter
- D. Supraventricular tachycardia

Answer: B

Q. A 45-year-old farmer from Northeast India presents with low-grade fever, progressive weight loss, night sweats, and productive cough. Chest CT reveals upper lobe cavitory lesions. Lung biopsy shows granulomatous inflammation with caseous necrosis and abundant histiocyte infiltration. What is the most likely diagnosis?

- A. Aspergillosis
- B. Histoplasmosis
- C. Sarcoidosis
- D. Cryptococcosis

Answer: B

Q. The given disorders are associated with dystonia and basal ganglia involvement. Which one requires a fundamentally different treatment approach than the others?

- A. PKAN (Pantothenate kinase-associated neurodegeneration)
- B. PLAN (PLA2G6-associated neurodegeneration)
- C. Dopa-responsive dystonia
- D. Wilson disease

Answer: D

Q. What causes the resting tremors in Parkinson's disease?

- A. Loss of inhibition of globus externa
- B. Loss of inhibition of globus interna
- C. Excitation of globus interna
- D. Excitation of globus externa

Answer: C

Q. A 25-year-old college student presents with progressive headache, vomiting, and double vision. Examination reveals bilateral 6th nerve palsy and papilledema. CT brain shows hydrocephalus. CSF analysis reveals lymphocytic dominance, markedly low glucose, and elevated protein. What is the most likely diagnosis?

- A. Viral meningitis
- B. Tubercular meningitis
- C. Fungal meningitis
- D. Bacterial meningitis

Answer: B

Q. A 28-year-old woman with severe anorexia is admitted for nutritional rehabilitation. Within 48 hours of initiating enteral feeding, she develops muscle weakness, cardiac arrhythmias, and respiratory distress. Which metabolic abnormality is most characteristically responsible?

- A. Hyponatremia
- B. Hypocalcemia
- C. Hypophosphatemia
- D. Hyperkalemia

Answer: C

Q. A 15-year-old boy presents with hypertension and salt-water retention. He is suspected to have 17-alpha hydroxylase deficiency. What is the expected serological profile?

- A. High mineralocorticoid, high cortisol, high androgen
- B. High mineralocorticoid, high cortisol, low androgen
- C. High mineralocorticoid, low cortisol, low androgen
- D. Low mineralocorticoid, low cortisol, low androgen

Answer: C

Q. A 10-year-old boy presents with excessive eating (hyperphagia) and obesity, with a BMI of 33. Genetic testing shows a deletion on chromosome 15. What is the most likely diagnosis?

- A. Angelman syndrome
- B. Prader-Willi syndrome
- C. Rett syndrome
- D. Down syndrome

Answer: B

Q. A 66-year-old female has normal calcium, elevated PTH, low phosphate, and raised ALP. What is the diagnosis?

- A. Primary hyperparathyroidism
- B. Vitamin D deficiency
- C. Hypoparathyroidism
- D. Chronic kidney disease

Answer: B

PEDIATRICS

Q. A neonate presents with prolonged neonatal jaundice, an umbilical hernia, and generalized hypotonia. Which of the following is the most likely underlying diagnosis?

- A. Galactosemia
- B. Down syndrome
- C. Biliary atresia
- D. Congenital hypothyroidism

Answer: D

Q. A child diagnosed with Dravet syndrome is receiving multi-drug anti-seizure therapy and is being considered for add-on treatment with fenfluramine. Which of the following monitoring strategies is most critical before initiating and during the course of this therapy, given the known pharmacological adverse-effect profile of fenfluramine?

- A. Monthly complete blood count to monitor for agranulocytosis and aplastic anemia
- B. Serial echocardiography to evaluate for cardiac valvular disease and pulmonary hypertension
- C. Baseline and periodic ophthalmic examinations to monitor for visual field defects
- D. Serial liver function tests and serum ammonia levels to monitor for hepatotoxicity

Answer: B

Q. A neonate presents with differential cyanosis, characterized by pink upper extremities and cyanosed lower extremities. Which of the following congenital heart diseases is most likely responsible for this clinical presentation?

- A. Atrioventricular septal defect
- B. Severe mitral stenosis
- C. Large patent ductus arteriosus (PDA)

D. Peripheral vascular disease

Answer: C

Q. A female child had normal developmental milestones until 6–8 months of age, after which she developed progressive regression in language, social interaction, and adaptive behavior. The regression was accompanied by loss of purposeful hand use replaced by stereotyped repetitive hand-wringing or clapping movements, and deceleration of head circumference growth. Which of the following is the most likely diagnosis?

- A. Childhood disintegrative disorder
- B. Down syndrome
- C. Asperger syndrome
- D. Rett syndrome

Answer: D

Q. A 6-week-old infant with prolonged NICU stay with presentation of fever, lethargy, poor feeding with CSF analysis showing features of bacterial meningitis. Which of the following are responsible?

- a. *Staphylococcus aureus*
- b. *Hemophilus influenzae*
- c. *Streptococcus pneumoniae*
- d. *Listeria*

Choose the correct answer:

- A. *Listeria*
- B. All of the above
- C. b and d
- D. a, b, d

Answer: B

Q. A pregnant woman with SLE delivers a neonate who is found to have a heart rate of 45 beats per minute. ECG confirms complete heart block. Which maternal antibody is most likely responsible?

- A. Anti-Ro antibody
- B. Anti-dsDNA antibody
- C. Anti-histone antibody
- D. Anti-Smith antibody

Answer: A

Q. Which of the following is NOT a recognized diagnostic feature of Kawasaki disease?

- A. Purulent conjunctivitis
- B. Non-purulent (bilateral) conjunctivitis
- C. Cervical lymphadenopathy

D. Fever lasting more than 5 days

Answer: A

Q. A child presents with fever, altered level of consciousness, and signs of meningeal irritation. Cerebrospinal fluid (CSF) analysis reveals the following findings:

- **Cell differential: Predominantly lymphocytes**
- **Protein: Elevated**
- **Glucose: Low**

Based on these CSF findings, what is the most likely diagnosis?

- A. Tuberculous meningitis
- B. Pyogenic (bacterial) meningitis
- C. Viral meningitis
- D. Fungal meningitis

Answer: A

Q. A 3-hour-old newborn is found to have a blood glucose level of 38 mg/dL on routine screening. The neonate is asymptomatic. What is the most appropriate next step in management?

- A. Initiate 5% dextrose infusion intravenously
- B. Leave as is and reassure the parents
- C. Administer a 5% dextrose bolus and reassess
- D. Continue breastfeeding and reassess blood glucose after the next feed

Answer: D

Q. A 20-month-old child walks independently without support, scribbles spontaneously, and appropriately follows and obeys simple commands. However, the child speaks only one meaningful word. What is the most appropriate next step in management?

- A. Reassure the parents and schedule a routine follow-up at 5 years of age
- B. Evaluate the child for autism spectrum disorder (ASD)
- C. Reassess in 3 months to allow for spontaneous improvement
- D. Suspect isolated speech delay and arrange a formal hearing assessment

Answer: D

SURGERY

Q. Which of the following electrolyte or metabolic abnormalities is NOT a component of the lethal triad associated with massive blood transfusion?

- A. Acidosis
- B. Hypothermia

- C. Coagulopathy
- D. Hyponatremia

Answer: D

Q. A patient with a thyroid nodule undergoes FNAC, which yields a result suggestive of follicular carcinoma. What is the most appropriate next step in management?

- A. Hemithyroidectomy
- B. Total thyroidectomy
- C. Radioactive iodine therapy
- D. Repeat FNAC

Answer: A

Q. Match each of the following clinical conditions with its most appropriate diagnostic investigation:

Clinical Condition	Investigation
A. Pancreatic pseudocyst	1. FNAC
B. Thyroid nodule	2. MRCP
C. Prostate cancer	3. PET scan
D. Obstructive jaundice	4. CT scan

Which of the following is the correct match?

- A. A-4, B-1, C-3, D-2
- B. A-3, B-1, C-4, D-2
- C. A-2, B-1, C-4, D-3
- D. A-4, B-2, C-3, D-1

Answer: A

Q. On defecography, a rectocele is considered clinically significant when there is anterior bulging of the rectal wall into the posterior vaginal wall measuring more than:

- A. 1 cm
- B. 2 cm
- C. 3 cm
- D. 4 cm

Answer: B

Q. During laparoscopic inguinal hernia repair, what is the minimum distance of dissection required below the inguinal ligament to adequately expose the myopectineal orifice?

- A. 0.5 cm
- B. 1 cm
- C. 2 cm
- D. 4 cm

Answer: C

Q. A trauma patient is evaluated using the GCS. The patient localizes to painful stimuli, produces incoherent sounds, and opens eyes only in response to pain. What is the total GCS score?

- A. 6
- B. 7
- C. 8
- D. 9

Answer: D

Q. According to the American Association for the Surgery of Trauma (AAST) colon injury grading scale, how is a colonic laceration involving more than 50% of the bowel wall circumference without complete transection classified?

- A. Grade II
- B. Grade III
- C. Grade IV
- D. Grade V

Answer: B

Q. A 60-year-old patient presents with pruritus and obstructive jaundice. Physical examination reveals a palpable, non-tender gallbladder. What is the most likely diagnosis?

- A. Choledocholithiasis
- B. Carcinoma of the head of the pancreas
- C. Cholangiocarcinoma
- D. Gallbladder carcinoma

Answer: B

Q. What is the fundamental surgical principle underlying TME in the operative management of rectal cancer?

- A. Excision of only the peritumoral fat surrounding the tumor
- B. Routine resection of the pelvic autonomic nerves
- C. Ligation of the internal iliac artery
- D. En bloc removal of the entire mesorectum as a single intact unit

Answer: D

Q. According to ATLS guidelines, which of the following represents the correct sequence of steps in primary trauma management?

Steps:

- a. Airway management with cervical spine protection**
- b. Circulation with hemorrhage control**
- c. Disability assessment**
- d. Catastrophic bleeding control**

Which sequence is correct?

- A. a → b → c → d
- B. b → a → d → c
- C. d → b → a → c
- D. d → a → b → c

Answer: D

Q. A prostatic biopsy report reveals a Gleason score of 8 (4 + 4). What is the corresponding Grade Group classification of this tumor?

- A. Grade Group 2
- B. Grade Group 3
- C. Grade Group 4
- D. Grade Group 5

Answer: C

Q. A 55-year-old patient presents to the emergency department with abdominal pain, distension, and vomiting. Imaging confirms a diagnosis of cecal volvulus. Which of the following risk factors is responsible for 50–70% of cecal volvulus cases?

- A. High-fiber diet
- B. Lactulose abuse
- C. Female sex
- D. Previous abdominal surgery

Answer: D

Q. A 65-year-old male with diabetes mellitus presents with purulent rectal discharge and is diagnosed with fistula-in-ano. Surgical management is planned. Which of the following procedures is considered internal anal sphincter-preserving?

- A. LIFT
- B. FiLaC
- C. Fistulectomy
- D. VAAFT

Answer: C

Q. Which of the following clinical features best distinguishes mechanical small bowel obstruction from paralytic ileus?

- A. Tachycardia

- B. Vomiting
- C. Abdominal distension
- D. Colicky abdominal pain

Answer: D

Q. A patient is planned for elective colon surgery. What is the ideal timing for administration of prophylactic parenteral antibiotics?

- A. 30 minutes before surgery
- B. 2 hours before surgery
- C. 4 hours before surgery
- D. 1 hour before skin incision

Answer: D

Q. A young patient presents with recurrent fever and constitutional symptoms. Evaluation reveals a mediastinal mass and biopsy confirms lymphoma. In the staging system, 'X' is mentioned. What does 'X' denote?

- A. Extranodal spread of disease
- B. Bulky or large tumor mass
- C. Presence of systemic symptoms
- D. Tumor present on both sides of the diaphragm

Answer: B

Q. In which type of constipation are stimulant laxatives contraindicated or should be avoided?

- A. Spastic constipation
- B. Habitual constipation
- C. Atonic constipation
- D. Post-operative constipation

Answer: A

Q. A 40-year-old female with progressive left flank pain, no mass or fever. What is the next best step?

- A. CECT followed by MRI
- B. Contrast-enhanced CT abdomen
- C. Ultrasound followed by non-contrast CT
- D. Non-contrast CT followed by contrast CT

Answer: C

Q. Assertion (A): In a patient with scrotal swelling, examination of the superficial inguinal lymph nodes should always be performed. Reason (R): Most lymphatic drainage from scrotal skin goes to the superficial inguinal lymph nodes. Choose the correct option:

- A. Both A and R are true, but R is not the correct explanation of A
- B. Both A and R are true, and R is the correct explanation of A

C. A is true, but R is false

D. A is false, but R is true

Answer: B

ORTHOPEDICS

Q. A 60-year-old man with treated TB 1 year ago presents with low back pain. MRI spine shows a lesion. What is the most appropriate next investigation?

- A. CECT spine
- B. Mantoux test
- C. CT chest
- D. Biopsy

Answer: B



Q. A 30-year-old female post-RTA has persistent pain uncontrolled by analgesics. Compartment pressure is 90 mmHg with absent pulse. What is the treatment?

- A. Emergency fasciotomy
- B. Observation
- C. Increase IV analgesics
- D. External fixation

Answer: A

Q. In femoral neck fracture management using Garden classification, which treatment is indicated for an elderly patient?

- A. Cannulated screws
- B. Total hip replacement (THR)
- C. Hemiarthroplasty
- D. Conservative management

Answer: C

Q. A proximal humerus fracture is classified using Neer's classification. Which surgical option is most appropriate for a 4-part fracture in a young patient?

- A. Humerus nailing
- B. Humerus plating
- C. Hanging cast/K-wires
- D. Shoulder hemiarthroplasty

Answer: B

Q. A child presents with a Gower sign. What does this finding indicate?

- A. Sensory neuropathy
- B. Proximal muscle weakness
- C. Joint laxity
- D. Distal muscle weakness

Answer: B

Q. A 2-year-old child with a history of old knee injury now has varus deformity of the left knee. Deformity persists on flexion; blood report is normal. X-ray shows unilateral genu varum and angulated tibia. What is the diagnosis?

- A. Malunion of tibial fracture
- B. Osteofibrous dysplasia
- C. Rickets
- D. Focal fibrocartilaginous dysplasia

Answer: A

Q. In neuropraxia, what is the pathological finding?

- A. Nerve trunk damage
- B. Perineurium damage
- C. Axon disruption
- D. Physiological conduction block with intact axon

Answer: D

Q. A 28-year-old male with bilateral femoral and tibial fractures and a chest wound presents with unstable blood pressure and tachycardia. After initial stabilization, what is the most appropriate initial management of his long bone fractures?

- A. Internal fixation of femur with screws and external fixation of tibia
- B. External fixation of femur and internal fixation of tibia with nailing
- C. External fixation of both femur and tibia
- D. External fixation, or screw/plating/nailing depending on surgical skill of the surgeon which saves time

Answer: C

Q. An MRI of the ankle shows a whitish, irregular abnormality in the Achilles tendon. What is the most likely finding and its corresponding management?

- A. Thompson test positive
- B. Steroid injection
- C. Plaster cast
- D. Surgical repair

Answer: A



RADIOLOGY

Q. A radiologist is reviewing requests for gadolinium-based contrast MRI (ACR Group II agent). In which of the following clinical scenarios is contrast-enhanced MRI CONTRAINDICATED or requires special caution?

- A. A child with a documented normal renal function test report
- B. A 50-year-old patient with eGFR of 30 mL/min/1.73 m²
- C. A 30-year-old healthy male without available renal function tests
- D. A 60-year-old diabetic male without available renal function tests

Answer: D

Q. An elderly female patient presents to the emergency department with acute onset left flank pain radiating to the groin. What is the most appropriate imaging protocol for initial evaluation?

- A. Direct MRI of the abdomen and pelvis
- B. Ultrasound of the abdomen followed by CT if inconclusive

- C. Plain X-ray of the abdomen followed by CT urogram
- D. Non-contrast CT (NCCT) followed by contrast-enhanced CT (CECT)

Answer: B

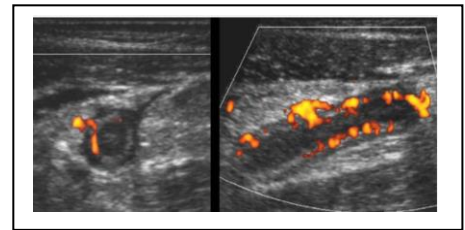
Q. A 12-year-old child presents with mild fever, runny nose, sore throat, and cough for 3 days. Clinical examination is consistent with an upper respiratory tract infection (URTI). There is no respiratory distress, oxygen desaturation, or focal chest findings. What is the most appropriate next step regarding imaging?

- A. No further radiological investigation is required
- B. Digital chest X-ray
- C. Plain CT chest
- D. HRCT chest

Answer: A

Q. A patient presents with right iliac fossa pain for 48 hours. USG image (shown with Doppler) demonstrates a hyperaemic appendix-region structure with surrounding inflammatory changes. There is no free fluid or evidence of perforation on USG. What is the most appropriate next step?

- A. Direct surgical management (emergency appendicectomy)
- B. Contrast-enhanced CT (CECT) of the abdomen and pelvis
- C. USG-guided biopsy of the lesion
- D. USG-guided percutaneous drainage



Answer: B

PSYCHIATRY

Q. Which statement correctly describes classical conditioning?

- A. Association between conditioned stimulus and conditioned response
- B. Association between unconditioned stimulus and unconditioned response
- C. Unconditioned stimulus produces conditioned response after learning
- D. Conditioned stimulus triggers a conditioned response after learning

Answer: D

Q. Which instruction is correct for a patient using nicotine replacement therapy?

- A. Gums are more effective than lozenges
- B. Patient should avoid liquids like tea or coffee 15 minutes before using gum or lozenge
- C. Correct timing of doses

D. Proper storage of nicotine products

Answer: B

Q. A 45-year-old recently divorced alcoholic expresses suicidal ideation. What is the next best step?

A. Cognitive Behavioral Therapy and weekly outpatient visits

B. Start antidepressant therapy

C. Hospitalization and safety measures

D. Monitor for recurrence

Answer: C

Q. Which of the following drugs is classified as a novel antidepressant?

A. Trazodone

B. Vilazodone

C. Blonanserin

D. Etizolam

Answer: B

Q. A patient with chronic alcoholism presents with severe memory problems. Which of the following features is most characteristic of Korsakoff syndrome?

A. Inability to form new memories (anterograde amnesia)

B. Loss of personal identity

C. Impairment of unconscious (implicit) memory

D. Confusion, unsteady gait, and eye movement paralysis

Answer: A

Q. An elderly patient dies, and autopsy reveals neuritic plaques in the brain. What is the most likely diagnosis?

A. Alzheimer's disease

B. Parkinson's disease

C. Creutzfeldt-Jakob disease

D. Huntington's disease

Answer: A

ANAESTHESIA

Q. A 40-year-old female is scheduled for parotid surgery and is administered general Anaesthesia. Approximately 10 minutes into the procedure, the following findings are noted:

- Rise in end-tidal CO₂ (EtCO₂)
- Temperature: 104°F (40°C)
- Heart rate: 150 bpm
- Blood pressure: 180/110 mmHg

What is the most likely diagnosis?

- A. Heat stroke
- B. Malignant hyperthermia
- C. Heat cramps
- D. Heat pyrexia

Answer: B

Q. During a lumbar puncture procedure, the spinal needle traverses several anatomical layers in a defined sequence before reaching the subarachnoid space. Given the structures listed below, which option correctly represents the order in which they are pierced?

1. Ligamentum flavum
2. Supraspinous ligament
3. Interspinous ligament
4. Dura mater
5. Subdural space
6. Arachnoid mater
7. Epidural space

Which option correctly represents the order in which they are pierced?

- A. 2 → 3 → 1 → 7 → 4 → 5 → 6
- B. 2 → 3 → 7 → 1 → 4 → 5 → 6
- C. 3 → 2 → 1 → 7 → 4 → 5 → 6
- D. 2 → 1 → 3 → 4 → 7 → 5 → 6

Answer: A

Q. Regarding the cardiovascular effects of halothane on blood pressure, the following statements are given:

1. A drop of 20–30 mmHg in blood pressure is commonly observed
2. The fall in blood pressure begins early and is proportional to the depth of Anaesthesia
3. The fall in blood pressure reduces as the depth of Anaesthesia

4. The baroreceptor reflex mechanism is activated in response to the fall in blood pressure

Which of the above statements are correct?

- A. 1, 2, and 3 only
- B. 2, 3, and 4 only
- C. 1, 2, and 4 only
- D. 1, 3, and 4 only

Answer: C

DERMATOLOGY

Q. A patient presents with focal hair loss accompanied by pruritus and scalp scaling. Which of the following treatments is most suitable?

- A. Methotrexate
- B. Topical corticosteroids
- C. Oral antibiotics
- D. Oral antifungals

Answer: D



Q. A patient is found to have a dark black lesion on the plantar surface of the foot. What is the most appropriate initial investigation?

- A. KOH mount
- B. Gram stain
- C. Skin biopsy
- D. Tzanck smear

Answer: C



Q. During tattooing, in which layer of the skin is the pigment/ink primarily deposited?

- A. Dermis
- B. Epidermis
- C. Subcutaneous tissue
- D. Muscle and vascular tissue

Answer: A



Q. Match each clinical sign in Column A with its corresponding dermatological condition in Column B:

Column A (Clinical Sign)	Column B (Condition)
Positive Nikolsky sign	Pemphigus vulgaris
Pseudo-Nikolsky sign	Stevens-Johnson syndrome
False Nikolsky sign	Bullous pemphigoid
Cerebriform tongue	Pemphigus vegetans

Which of the following is the correct match?

- A. A-2, B-1, C-3, D-4
- B. A-1, B-2, C-3, D-4
- C. A-1, B-3, C-2, D-4
- D. A-4, B-2, C-1, D-3

Answer: C

Q. An infant presents with pruritic lesions distributed over the hands, feet, and periumbilical region. Which of the following diagnoses best fits this clinical picture?

- A. Atopic dermatitis
- B. Bullous impetigo
- C. Scabies
- D. Eczema



Answer: C

Q. A female presents with greenish frothy discharge; whiff test and Amsel's criteria are negative. What microscopy feature is expected?

- A. Motile flagellates

- B. Pseudohyphae
- C. Clue cells
- D. Gram-negative diplococci

Answer: A

Q. A male patient reports painful vesicular eruptions on the penis. Based on this presentation, which of the following is the most likely causative agent?

- A. Haemophilus ducreyi
- B. Human papillomavirus
- C. Herpes simplex virus
- D. Treponema pallidum

Answer: C



Q. A newborn presents with a skin lesion as shown. The infant is feeding normally, has no fever, hypotension, or shock signs. Which diagnosis is most likely?

- A. Staphylococcal scalded skin syndrome
- B. Bullous pemphigoid
- C. Epidermolysis bullosa
- D. Neonatal pemphigus due to transplacental antibody transfer

Answer: D

