

PROVISIONAL ANSWER KEY

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Question1:-Which fissure is present in both the right and left lungs and separates the lower lobe from the upper lobe ?

A:-Horizontal fissure

B:-Minor fissure

C:-Oblique fissure

D:-Accessory fissure

Correct Answer:- Option-C

Question2:-During EBUS-TBNA, which lymph node station is located immediately below the carina and is accessible from either main bronchus ?

A:-Station 4R

B:-Station 7

C:-Station 10R

D:-Station 11L

Correct Answer:- Option-B

Question3:-Nerandomilast is a recently approved drug for the treatment of Idiopathic Pulmonary Fibrosis. What is the mechanism of action?

A:-Multitargeted tyrosine kinase inhibitor

B:-Phosphodiesterase 4B inhibitor

C:-Transforming growth factor- β (TGF- β) inhibition

D:-Soluble guanylate cyclase inhibitor

Correct Answer:- Option-B

Question4:-The antibiotic which should be avoided in Methicillin Resistant Staphylococcus aureus (MRSA) pneumonia is

A:-Vancomycin

B:-Teicoplanin

C:-Linezolid

D:-Daptomycin

Correct Answer:- Option-D

Question5:-Which type of lung malignancy is characterized by a rapid tumour doubling time, high growth fraction, early development of widespread metastases and a high initial response to chemotherapy ?

A:-Adenocarcinoma

B:-Squamous cell carcinoma

C:-Large cell carcinoma

D:-Small cell lung carcinoma

Correct Answer:- Option-D

Question6:-The presence of Curschmann spirals and Charcot-Leyden crystals in sputum is most suggestive of

A:-Neutrophilic airway inflammation

B:-Eosinophilic airway inflammation

C:-Granulomatous inflammation

D:-Alveolar haemorrhage

Correct Answer:- Option-B

Question7:-Which of the following biologics has been incorporated into GOLD 2026 as an add-on therapy for selected patients with eosinophilic COPD and recurrent exacerbations ?

A:-Omalizumab

B:-Benralizumab

C:-Dupilumab

D:-Tezepelumab

Correct Answer:- Option-C

Question8:-Pre-XDR TB is defined as MDR/RR-TB with additional resistance to

A:-Linezolid

B:-Bedaquiline

C:-Any Fluoroquinolone

D:-Delamanid

Correct Answer:- Option-C

Question9:-Pulmonary capillary wedge pressure (PCWP) most closely reflects :

A:-Right atrial pressure

B:-Pulmonary artery pressure

C:-Left atrial pressure

D:-Right ventricular end-diastolic pressure

Correct Answer:- Option-C

Question10:-A study follows a group of smokers and non-smokers over 10 years to determine the incidence of lung cancer. This is an example of

A:-Cohort study

B:-Cross-sectional study

C:-Case-control study

D:-Ecological study

Correct Answer:- Option-A

Question11:-Which of the following represents the preferred "Track 1" reliever therapy for adults with asthma, according to Global Initiative for Asthma (GINA) strategy ?

A:-As-needed short-acting beta2-agonist (SABA) alone

B:-As-needed low-dose inhaled corticosteroid (ICS)-formoterol

C:-Scheduled low-dose ICS with as-needed SABA

D:-As-needed short-acting muscarinic antagonist (SAMA)

Correct Answer:- Option-B

Question12:-According to the Global Initiative for Chronic Obstructive Lung Disease (GOLD), spirometric criterion is mandatory to confirm the presence of persistent airflow limitation indicative of COPD is

A:-Pre-bronchodilator $FEV_1/FVC < 0.70$

B:-Post-bronchodilator $FEV_1/FVC < 0.70$

C:-Post-bronchodilator $FEV_1 < 80\%$ predicted

D:-Reversibility of FEV_1 by $> 12\%$ and 200mL following bronchodilator administration

Correct Answer:- Option-B

Question13:-Which investigation serves as the "gold standard" for the definitive diagnosis of bronchiectasis ?

A:-Gene testing for cystic fibrosis and CVID

B:-High-Resolution Computed Tomography (HRCT) of the thorax

C:-Contrast-enhanced Computed Tomography (CECT) pulmonary angiography

D:-Sputum cs and history

Correct Answer:- Option-B

Question14:-A 24-year-old female presents with acute dyspnea and inspiratory wheeze. Her flow-volume loop demonstrates truncation of the inspiratory limb with a preserved expiratory loop. What is the most likely diagnosis ?

A:-Tracheomalacia

B:-Severe acute asthma exacerbation

C:-Vocal cord dysfunction (Inducible laryngeal obstruction)

D:-Fixed tracheal stenosis

Correct Answer:- Option-C

Question15:-A 48 year-old female patient with severe, uncontrolled asthma despite adherence to high-dose ICS-LABA therapy undergoes further testing. Laboratory tests reveal

a blood eosinophil count (BEC) of 450 cells/ μ L. Which of the following monoclonal antibodies directly binds to and neutralizes Interleukin-5 (IL-5) ?

A:-Omalizumab

B:-Dupilumab

C:-Mepolizumab

D:-Tezepelumab

Correct Answer:- Option-C

Question16:-In the pharmacological follow-up algorithm for COPD, the latest GOLD updates strongly advise against the withdrawal of Inhaled Corticosteroids (ICS) in patients receiving triple therapy if their Blood Eosinophil Count (BEC) exceeds which of the following thresholds ?

A:-100 cells/ μ L

B:-150 cells/ μ L

C:-300 cells/ μ L

D:-500 cells/ μ L

Correct Answer:- Option-C

Question17:-In pulmonary rehabilitation program for patients with advanced COPD, which component possesses the highest level of evidence for improving dyspnea, exercise tolerance and health-related quality of life ?

A:-Supervised aerobic and resistance exercise training

B:-Routine respiratory muscle pacing

C:-Prophylactic administration of systemic corticosteroids

D:-Unsupervised, home-based breathing exercises alone

Correct Answer:- Option-A

Question18:-According to the GINA assessment of adult patients presenting with “difficult-to-treat” asthma (those uncontrolled on high-dose ICS-LABA), what approximate percentage of the total asthma population is found to have true “severe asthma” after addressing non-adherence, poor inhaler technique and comorbidities ?

A:-24.0%

B:-17.0%

C:-10.0%

D:-3.7%

Correct Answer:- Option-D

Question19:-The 2025 GOLD report emphasizes early diagnostic concepts to identify individuals at risk of developing overt COPD. Which of the following spirometric patterns accurately defines the condition termed “PRISm” (Preserved Ratio Impaired Spirometry) ?

A:-FEV1/FVC < 0.70 with FEV1 $\geq$ 80% predicted

B:-Post-bronchodilator FEV1/FVC $\geq$ 0.70 with FEV1 < 80% predicted

C:-Pre-bronchodilator FEV1/FVC < 0.70 that completely normalizes after bronchodilator

D:-Post-bronchodilator FEV1/FVC $\geq$ 0.70 with a Total Lung Capacity (TLC) < 80% predicted

Correct Answer:- Option-B

Question20:-A 38-year-old male non-smoker with a long-standing history of Rheumatoid Arthritis presents with progressive, irreversible airflow obstruction on spirometry (FEV1/FVC 0.55, FEV1 45% predicted). HRCT of the thorax reveals a prominent mosaic attenuation pattern on inspiratory images with nodules, with no evidence of traction bronchiectasis or honeycombing. Which histopathological lesion is most consistent with this clinical and radiological presentation ?

A:-Non-specific interstitial pneumonia (NSIP)

B:-Respiratory bronchiolitis (RB)

C:-Constrictive bronchiolitis (Bronchiolitis obliterans)

D:-Cryptogenic organizing pneumonia (COP)

Correct Answer:- Option-C

Question21:-Targeted therapy used in ALK fusion positive non-small cell lung cancer is

A:-Alectinib

B:-Afatinib

C:-Nivolumab

D:-Gefitinib

Correct Answer:- Option-A

Question22:-LENT score is used to predict survival in patients with

A:-Lung cancer

B:-Chronic obstructive pulmonary disease

C:-Hypersensitivity pneumonitis

D:-Malignant pleural effusion

Correct Answer:- Option-D

Question23:-As part of lung cancer screening in a 55 year old male, low dose CT thorax was taken. It showed subsolid nodule of 7 mm size in right upper lobe. What is the optimal duration for which the nodule should be followed up with serial CT imaging ?

A:-2 years

B:-3 years

C:-4 years

D:-5 years

Correct Answer:- Option-D

Question24:-The most common cause of paraneoplastic syndrome in lung malignancy characterised by hypercalcaemia is due to

A:-Ectopic secretion of parathyroid hormone

B:-Ectopic secretion of parathyroid hormone related protein

C:-Direct osteolysis due to bone metastasis

D:-Ectopic secretion of calcitonin

Correct Answer:- Option-B

Question25:-64 year old male smoker with lung cancer T4N2M1 was prescribed immune checkpoint inhibitors. Histologic subtype that responds to immune checkpoint inhibitors

A:-Adenocarcinoma

B:-Squamous cell carcinoma

C:-Small cell lung cancer

D:-All of the above

Correct Answer:- Option-D

Question26:-EBUS-TBNA can be used for mediastinal staging in the following lymph node stations as per International Association for the Study of Lung Cancer (IASLC) except

A:-LN station-2

B:-LN station-4

C:-LN station-7

D:-LN station-9

Correct Answer:- Option-D

Question27:-Recommended initial therapy for advanced non-small cell lung cancer lacking a driver mutation and PD-L1 expression <50% is

A:-Platinum based doublet chemotherapy

B:-Osimertinib with platinum based doublet chemotherapy

C:-PD-1/PD-L1 check point inhibitor with platinum based doublet chemotherapy

D:-Radiation with platinum based doublet chemotherapy

Correct Answer:- Option-C

Question28:-40 year old female presented with cough and hemoptysis of 1 month duration – Bronchoscopy revealed intraluminal lesion left main bronchus-histopathologic examination showed neuroendocrine tumor with following features – mitotic rate of 8 per 2 mm² and Ki 67 index of 10%. Most probable diagnosis is

A:-Typical carcinoid

B:-Atypical carcinoid

C:-Large cell neuroendocrine tumor

D:-Small cell lung cancer

Correct Answer:- Option-B

Question29:-Pattern of calcification in lung nodule suggestive of malignancy is

A:-Diffuse

B:-Central

C:-Eccentric

D:-Laminated

Correct Answer:- Option-C

Question30:-As per TNM classification of lung cancer, presence of a tumor nodule in the same lobe as primary tumour is considered as

A:-T3 tumour

B:-T4 tumour

C:-M1a

D:-M1b

Correct Answer:- Option-A

Question31:-All are true regarding procalcitonin, except

A:-Released into blood following bacterial inflammation

B:-IFN- γ trigger release of procalcitonin

C:-Mycoplasma spp infection is not associated with elevated levels

D:-Viral infections are not associated with elevated levels

Correct Answer:- Option-B

Question32:-'Round pneumonia' is associated with all, except

A:-S. pneumoniae

B:-H. influenzae

C:-C. burnetii

D:-M. pneumoniae

Correct Answer:- Option-D

Question33:-Quellung reaction was used to diagnose infection with

A:-S. pneumoniae

B:-S. aureus

C:-Legionella

D:-Mycoplasma pneumoniae

Correct Answer:- Option-A

Question34:-Quinolones are well suited to treat respiratory infections, because

i. It has good oral bioavailability

ii. Good tissue penetration

iii. No post antibiotic effect

iv. Tissue level better than serum level

Choose most appropriate response.

A:-i and ii

B:-iii and iv

C:-i, ii and iv

D:-iii and iv

Correct Answer:- Option-C

Question35:-All are true regarding S. pneumoniae urinary antigen testing, except

A:-Not affected by recent pneumococcal vaccination

B:-Highly specific

C:-Unaffected by recent antibiotic administration

D:-Recommended for patients with severe CAP

Correct Answer:- Option-A

Question36:-Most common pathogen associated with atypical pneumonia

A:-L. pneumophila

B:-M. pneumoniae

C:-Chlamydia pneumoniae

D:-Coxiella burnetii

Correct Answer:- Option-B

Question37:-All are true about Telavancin, except

- A:-Bactericidal action against Gram-positives including VRE and MRSA
- B:-More effective than vancomycin for MRSA
- C:-Safe in those with renal impairment
- D:-Lipoglycopeptide with rapid, concentration dependent killing activity

Correct Answer:- Option-C

Question38:-“Steeple” sign is associated with

- A:-Croup
- B:-Epiglottitis
- C:-All of the above
- D:-None of the above

Correct Answer:- Option-A

Question39:-Hantavirus pulmonary syndrome is associated with all, except

- A:-Transmission from an animal reservoir, to humans via contaminated rodent feces
- B:-Person-to-person transmission reported in certain species of Hantavirus
- C:-Upper respiratory symptoms are usually present
- D:-Dyspnea resulting from leakage of high-protein edema fluid into the alveoli

Correct Answer:- Option-C

Question40:-Which of the following is most effective prophylactic drug for pneumocystis jirovecii infection ?

- A:-Trimethoprim-Sulfamethoxazole
- B:-Atovaquone
- C:-Dapsone
- D:-Pentamidine

Correct Answer:- Option-A

Question41:-Under the INDEX-TB guidelines (Guidelines on Extrapulmonary Tuberculosis for India endorsed by NTEP), which of the following clinical scenarios correctly applies the diagnostic standards, interpretations of Cerebrospinal Fluid (CSF) panels, corticosteroid dosing or treatment durations for Central Nervous System Tuberculosis (CNS TB) ?

A:-A 24-year lady presents with clinical features and CSF study favouring TB meningitis. Because the upfront molecular test (Xpert MTB/RIF) on the CSF sample is Negative, the diagnosis of Tuberculous Meningitis (TBM) is effectively ruled out and anti-tubercular therapy should be withheld until a liquid culture (MGIT) confirms growth.

B:-A 35-year-old male is diagnosed with TBM based on clinical presentation and characteristic CSF biochemistry. The patient is initiated on standard weight-band-based ATT along with adjunctive corticosteroid therapy; the total planned duration of his ATT is 6 months.

C:-Contrast MRI reveals a multilocular ring-enhancing lesion in the parietal lobe of a 29-year patient with focal neurological deficits. Stereotactic biopsy confirms a CNS tuberculoma. As per guidelines intensive phase must consist of standard HRZE and total duration of ATT must be extended to a minimum of 9 to 12 months initially, with repeat neuroimaging used to dynamically guide the endpoint.

D:-A 40-year-old PLHIV is diagnosed with severe TBM complicated by early hydrocephalus. Because corticosteroids are strictly contraindicated in immunocompromised individuals due to the risk of fungal infections, adjunctive corticosteroid therapy must be withheld and treatment should focus solely on first-line ATT and immediate antiretroviral therapy.

Correct Answer:- Option-C

Question42:-A 28-year-old male was diagnosed with Pulmonary Tuberculosis and found to have INH mono-resistance. He was initiated on the standard 6-month regimen consisting of Levofloxacin, Rifampicin, Ethambutol and Pyrazinamide (Lfx-R-E-Z). At the end of month 4, his sputum smear was positive and no clinical or radiological improvement, marking a treatment failure. An immediate molecular re-evaluation (CBNAAT/Xpert) is ordered. While awaiting the detailed Second-Line Line Probe Assay results, the CBNAAT confirms that the M tuberculosis strain remains Rifampicin Sensitive. As per the latest Indian guidelines, what is the next most appropriate programmatic management step for this patient ?

A:-Extend the current Lfx-R-E-Z regimen for another 3 months while awaiting liquid culture and drug susceptibility results

B:-Declare him a “probable MDR-TB case” and immediately initiate the 6-month, all-oral BPaLM regimen (Bedaquiline, Pretomanid, Linezolid, Moxifloxacin)

C:-Declare him a “probable MDR-TB case” and start the 9-month Shorter Oral MDR/RR-TB regimen because he has already been exposed to a Fluoroquinolone for 4 months

D:-Discontinue the current regimen and place him on an individualized longer oral regimen consisting of Bedaquiline, Linezolid, Clofazimine and Cycloserine considering risk of Fluoroquinolone resistance

Correct Answer:- Option-B

Question43:-A 34-year-old lady is diagnosed with Pulmonary Tuberculosis. Baseline LPA reveals INH mono-resistance with confirmed sensitivity to Rifampicin and Fluoroquinolones. She was initiated on the standard 6-month daily H-mono/poly-resistance regimen consisting of Levofloxacin, Rifampicin, Ethambutol and Pyrazinamide (Lfx-R-E-Z)

Three weeks into treatment, she presents to the clinic with palpitation. ECG reveals a QTc prolongation of 520 ms. A repeat ECG confirms the finding. Her serum electrolytes are within normal limits. The clinical team decides to permanently discontinue Levofloxacin due to cardiotoxicity.

As per the latest Indian NTEP guidelines, what is the most appropriate modification to her treatment regimen ?

A:-Replace Levofloxacin with Clofazimine and continue the regimen for a fixed duration of 9 months

B:-Replace Levofloxacin with Linezolid and the total treatment duration is 6 months

C:-Replace Levofloxacin with a combined daily dose of Clofazimine and Cycloserine, keeping the total duration at 6 months

D:-Replace Levofloxacin with Linezolid and extend duration to 9 months

Correct Answer:- Option-D

Question44:-A 36-year-old male with pulmonary tuberculosis is being evaluated for suspected drug resistance after failing an initial treatment course. A First-Line Line Probe Assay (FL-LPA) is performed on his sputum sample. The microbiology laboratory returns the following precise band hybridization readout for the strip :

- Control Bands : Conjugate Control (Con), Amplification Control (Amp) and MTB Complex Control (TUB) are all Present (+)
- *rpoB* Region : All Wild-Type bands Absent (-); all Mutation bands absent (-)
- *katG* Region : All Wild-Type bands present (+); Mutation band is Absent (-)
- *inhA* Region : Wild-Type band is Absent (-); Mutation band 1 is Present (+)

Based on this specific LPA readout and the latest NTEP diagnostic algorithms, how should this patient's resistance profile be classified and what is the immediate therapeutic implication ?

A:-The test is invalid because the absolute absence of both WT and MUT bands in the *rpoB* region indicates a hybridization failure; a fresh sputum sample must be collected for a

repeat FL-LPA

B:-There is INH mono-resistance with preserved Rifampicin sensitivity, because resistance to Rifampicin can only be declared if a specific mutant band (MUT1-MUT3) develops; she should start the Lfx-R-E-Z regimen

C:-He has Multidrug-Resistant TB (MDR-TB); the absence of all *rpoB* WT bands infers Rifampicin resistance, while the *inhA* mutation confirms isoniazid resistance, requiring immediate transition to an MDR-TB treatment pathway (preferably the BPaLM regimen)

D:-He has XDR-TB because the simultaneous absence of all *rpoB* wild-type bands indicates a highly virulent “mega-deletion” mutation and start him on all oral longer regimen

Correct Answer:- Option-C

Question45:-A 55-year-old male with underlying bronchiectasis is diagnosed with *Mycobacterium abscessus* pulmonary disease. The microbiological report identifies the isolate as *M. abscessus* subspecies *abscessus*. Drug Susceptibility Testing (DST) and molecular sequencing reveal a point mutation in the 23S *rRNA* gene conferring resistance to macrolides.

According to the 2020 ATS/ERS/IDSA guidelines for the treatment of non-tuberculous mycobacterial pulmonary disease, what is the specific recommendation for the multidrug treatment regimen for this patient ?

A:-Initiate an all-oral regimen consisting of Clarithromycin, Clofazimine and Linezolid continuing treatment for at least 12 months post-culture conversion

B:-Initiate a multidrug regimen that includes at least 4 active drugs with proven in vitro susceptibility (e.g. Amikacin and Imipenem/Cefoxitin) in the initial phase and omit the macrolide as an active drug, continuing treatment for at least 12 months post-culture conversion

C:-Treat the patient with 3-drug regimen of Rifampicin, Ethambutol and Moxifloxacin, continuing treatment for at least 12 months post-culture conversion

D:-Initiate a regimen containing standard-dose Azithromycin with Linezolid, relying on a delayed *erm(41)* induction mechanism to clear the infection over 12 months

Correct Answer:- Option-B

Question46:-A 34-year-old male PLHIV is found to have biopsy-confirmed, drug-susceptible cervical lymph node tuberculosis. His baseline CD4 count is 320 cells/mm³. He has not yet been started on antiretroviral therapy.

According to the current Indian national guidelines (NTEP/NACO), which of the following is the most appropriate management plan for this patient ?

A:-Initiate a 6-month daily ATT regimen (2HRZE + 4HRE); start a Dolutegravir based ART regimen immediately

B:-Initiate a 6-month daily ATT regimen (2HRZE + 4HRE); defer ART initiation for 2 to 8 weeks and add an additional standalone dose of Dolutegravir 50 mg twelve hours apart from the regular fixed-dose combination of TLD

C:-Defer ATT until a Dolutegravir based ART regimen is well established for 4 weeks; then start a 9-month course of daily ATT due to extrapulmonary involvement

D:-Initiate a 6-month daily ATT regimen (2HRZE + 4HRE); start standard once-daily Tenofovir + Lamivudine + Dolutegravir (TLD) fixed-dose combination in 2-6 weeks without modifying the doses

Correct Answer:- Option-B

Question47:-A 29-year-old female living with HIV (baseline CD4 count : 32 cells/mm³) was initiated on a standard daily 6-month ATT (2HRZE + 4HRE) for microbiologically confirmed, drug-susceptible right cervical lymph node tuberculosis. Two weeks later, she was started on a Dolutegravir based antiretroviral therapy regimen with appropriate double-dose DTG correction. Three weeks after starting ART, she returns to the clinic reporting a painful, rapidly expanding swelling on the right side of her neck and a new low-grade fever. On clinical examination, the right cervical lymph node has increased from 2 cm to 5 cm, is exquisitely tender, fluctuant, and the overlying skin is erythematous. Her systemic evaluation is otherwise unremarkable, and a repeat sputum smear is negative for acid-fast bacilli. Which of the following represents the most appropriate next step in the clinical management of this patient ?

A:-Discontinue the current ART immediately to arrest the hyper-inflammatory response ; continue ATT and initiate high-dose systemic corticosteroids

B:-Perform a therapeutic wide local excision or surgical drainage of the fluctuant lymph node ; temporarily stop the Rifampicin to minimize overlapping hepatotoxicity

C:-Continue both ATT and ART unchanged ; perform a needle aspiration of the fluctuant lymph node to prevent skin necrosis, and offer reassurance with symptomatic NSAIDs

D:-Upgrade the ATT regimen to a drug-resistant TB protocol (e.g., adding an injectable or later-generation fluoroquinolone) assuming a secondary development of drug resistance

Correct Answer:- Option-C

Question48:-

A 45-year-old male with bilateral extensive microbiologically confirmed drug-sensitive pulmonary tuberculosis is on treatment with daily FDC regimen 2HRZE/4HRE. At the end of week 3 of the Intensive Phase, he presents to the clinic with progressive nausea, anorexia, and mild icterus. His baseline Liver Function Tests (LFT) were entirely normal. Current laboratory investigation reveal

- Total Bilirubin : 3.2 mg/dL
- Aspartate Aminotransferase (AST) : 165 U/L
- Alanine Aminotransferase (ALT) : 150 U/L
- Alkaline Phosphatase (ALP) : 110 U/L

According to the NTEP guidelines for the management of anti-TB drug-induced hepatotoxicity, which of the following is the most appropriate next step in clinical management ?

A:-Stop the entire FDC regimen immediately. Start a non-hepatotoxic modified regimen containing Ethambutol, Levofloxacin, and Streptomycin/Amikacin, and monitor LFT weekly.

B:-Stop the entire FDC regimen immediately and monitor LFT weekly. Restart drugs one by one monitoring LFT after LFT values normalise.

C:-Stop the entire FDC regimen immediately and monitor LFTs weekly. Restart drugs one by one monitoring LFT after bilirubin level is normal.

D:-Stop the entire FDC regimen immediately and monitor LFTs weekly. Restart drugs one by one monitoring LFT after the transaminases level reaches below two times upper limit of normal.

Correct Answer:- Option-A

Question49:-A 35-year-old male is diagnosed with extensive pulmonary MDR-TB. His pre-treatment baseline evaluation reveals a Hemoglobin level of 7.0 g/dL and severe renal impairment (Creatinine 3.5 mg). According to the latest NTEP DRTB guidelines, which of the following is the most appropriate treatment strategy for this patient ?

A:-Initiate the standard 6-month all-oral BPaLM regimen with close monitoring of complete blood counts and dose adjustment based on creatinine clearance

B:-Initiate the 9-11 month Shorter Oral Bedaquiline-containing regimen, substituting Ethionamide for Linezolid and dose adjustment based on creatinine clearance

C:-Initiate an individualized 18-20 month Longer Oral Regimen, completely avoiding Linezolid and adjusting companion drug dosages based on renal function

D:-Delay all anti-TB treatment until the Hemoglobin is corrected above 10 g/dL via blood transfusions and renal function improve

Correct Answer:- Option-C

Question50:-A 68-year-old lady presents with chronic cough, fatigue and low-grade fever over the last 8 months. High-resolution chest CT reveals bilateral bronchiectasis with multiple small, tree-in-bud nodular infiltrates in the middle lobe and lingula, but no evidence of pulmonary cavities. Sputum AFB smears and cultures are positive for macrolide-susceptible *Mycobacterium avium complex*. According to the latest ATS/IDSA guidelines, which of the following is the most appropriate initial management strategy ?

A:-Initiate a daily 3-drug regimen consisting of Azithromycin, Rifampin, and Ethambutol for 12 months

B:-Initiate a three-times weekly (intermittent) 3-drug regimen consisting of Azithromycin Rifampin, and Ethambutol and continue treatment for at least 12 months post-sputum culture conversion

C:-Initiate a daily 4-drug regimen of Azithromycin, Rifampin, Ethambutol and Pyrazinamide and continue treatment for at least 12 months post-sputum culture conversion

D:-Initiate a three-times-weekly (intermittent 3-drug regimen consisting of Azithromycin Rifampin, and Ethambutol for 12 months

Correct Answer:- Option-B

Question51:-Under the current NTEP guidelines of India, which of the following clinical scenarios accurately depicts the appropriate deployment, interpretation, or subsequent management sequence of the Cy-TB skin test ?

A:-A 28-year-old healthcare worker with a history of childhood BCG vaccination presents with a 6 mm in duration 48 hours after Cy-TB administration ; the test should be discounted as a false-positive due to prior BCG cross-reactivity

B:-A 45-year-old household contact of a pulmonary TB patient presents with an in duration of 3 mm at 72 hours after administration. The result is negative and hence not eligible for 3HP regimen. So should immediately be started on a 6-month Isoniazid preventive regimen

C:-A 32-year-old person exhibits a 7 mm in duration 48 hours after injection. Clinical and radiological evaluation completely rules out active pulmonary and extra-pulmonary TB. He is classified as an eligible candidate for Tuberculosis Preventive Treatment

D:-A 39-year-old female with Systemic sclerosis on Mycophenolate undergoes Cy-TB testing prior to initiation of Rituximab and records 3 mm in duration at 72 hours. Even though the test is negative, as she is already immunosuppressed and considering the high risk on starting Rituximab, should initiate TPT

Correct Answer:- Option-C

Question52:-Under the INDEX-TB guidelines, which of the following statements correctly evaluates the diagnostic workup, interpretation of pleural biomarkers, molecular testing or treatment protocols for Tuberculous Pleural Effusion (TPE) ?

A:-CBNAAT(Xpert MTB/RIF) have high sensitivity on pleural fluid specimens and a negative result reliably rules out TPE

B:-A pleural fluid Adenosine Deaminase (ADA) level of >40 U/L, when found in isolation, is highly specific for TPE and shall initiate ATT without further evaluation

C:-Routine adjunctive corticosteroid therapy is strongly recommended for all confirmed cases of TPE under the guidelines to speed up fluid clearance and definitively prevent long-term pleural thickening or fibrothorax

D:-Xpert MTB/RIF should not be routinely used as a standalone diagnostic tool for pleural TB due to its modest sensitivity on pleural fluid ; instead, an integrated approach combining exudative fluid characteristics, a Lymphocyte-to-Neutrophil Ratio (LNR) >.075, and elevated ADA (>40 U/L) should guide the diagnosis, followed by a standard 6-month ATT regimen

Correct Answer:- Option-D

Question53:-Which of the following statements accurately describes the molecular detection capabilities of the Xpert MTB/XDR assay compared to the Second-Line Line Probe Assay (SL-LPA/Genotype MTBDRsl v2)

A:-SL-LPA detects mutations in the *katG* gene and *inhA* promoter region, whereas Xpert MTB/XDR does not

B:-Xpert MTB/XDR detects mutations conferring resistance to Isoniazid, Fluoroquinolones, Second-line Injectables, and Ethionamide, whereas SL-LPA only detects resistance to Fluoroquinolones and Second-line Injectables

C:-Both assays primarily target the *rpoB* gene to rule out Rifampicin resistance before screening for second-line drugs

D:-SL-LPA utilizes nested real-time PCR in a cartridge-based system, whereas Xpert MTB/XDR utilizes reverse hybridization on a nitrocellulose strip

Correct Answer:- Option-B

Question54:-Which of the following genetic configurations identified via rapid molecular testing strictly contra indicates the deployment of the newly WHO-approved and FDA-recommended 4-month shortened regimen (Rifapentine-Moxifloxacin-Isoniazid-Pyrazinamide [HPMZ]) for a patient with pulmonary tuberculosis ?

A:-A mutation detected within the *rps*/region

B:-A mutation detected within the *gyrA* gene

C:-A mutation detected within the *rpoB* cluster II region outside the core rifampicin resistance-determining region

D:-A mutation detected within the *rrs* gene regions

Correct Answer:- Option-B

Question55:-Which of the following is not a major criterion to diagnose fat embolism syndrome ?

A:-Long bone fracture

B:-Petechial rash

C:-Respiratory symptoms with radiographic changes

D:-Central nervous system signs

Correct Answer:- Option-A

Question56:-Which of the following is a feature of ocular sarcoidosis ?

i) Uveitis is more commonly posterior

ii) Mutton-fat keratic precipitates

iii) May present dramatically with blindness

A:-i and ii

B:-ii and iii

C:-i and iii

D:-Only i

Correct Answer:- Option-B

Question57:-Which of the following is the most common inherited risk factor for venous thromboembolism ?

A:-Antithrombin III deficiency

B:-Factor V Leiden mutation

C:-Protein C deficiency

D:-Protein S deficiency

Correct Answer:- Option-B

Question58:-Which of the following cellular mechanisms best describes the primary defect in the pathogenesis of pulmonary alveolar proteinosis ?

A:-Hyperplasia of type II alveolar cells leading to uncontrolled surfactant production

B:-Defective transport of surfactant across the alveolar-capillary membrane

C:-Impaired terminal differentiation of alveolar macrophages resulting in a failure to catabolize surfactant lipids and proteins

D:-Clonal proliferation of alveolar macrophages resulting in excess surfactant production

Correct Answer:- Option-C

Question59:-A 48-year-old female with a history of Non-Specific Interstitial Pneumonia (NSIP) secondary to Rheumatoid Arthritis presents with an increase in exertional dyspnea for the past one year. Her spirometry shows a decline in Forced Vital Capacity (FVC) from 50% predicted to 45% predicted, while her Diffusing Capacity of the Lung for Carbon Monoxide (DLCO) has dropped from 60% to 45% of the predicted value. Which of the following statement is correct regarding her lung function test ?

A:-10% absolute decline in FVC

B:-10% relative decline in DLCO

C:-15% relative decline in FVC

D:-25% relative decline in DLCO

Correct Answer:- Option-D

Question60:-Which of the following is not a feature of Pulmonary Langerhans Cell Histiocytosis ?

A:-The disease may resolve after smoking cessation

B:-Increased risk of hematologic malignancies

C:-Predilection for male sex

D:-Peak incidence in second to fourth decades

Correct Answer:- Option-C

Question61:-A 30-year-old female presents with progressive exertional dyspnea. Transthoracic echocardiography demonstrates a peak tricuspid regurgitation velocity of 3.0 m/s with flattened interventricular septum. Right heart catheterization reveals a mean Pulmonary Artery Pressure (mPAP) of 24 mmHg, a Pulmonary Artery Wedge Pressure (PAWP) of 12 mmHg and a Pulmonary Vascular Resistance (PVR) of 2.6 Wood Units (WU). How should this patient's hemodynamic profile be classified ?

A:-Normal hemodynamic profile (No Pulmonary Hypertension)

B:-Pre-capillary Pulmonary Hypertension

C:-Isolated Post-capillary Pulmonary Hypertension

D:-Combined Pre and Post capillary Pulmonary Hypertension

Correct Answer:- Option-B

Question62:-Which of the following is considered the earliest radiological sign of congestive heart failure and hydrostatic pulmonary edema in a chest X-ray PA view ?

A:-Kerley B lines

B:-Perihilar opacities

C:-Bilateral pleural effusion

D:-Cephalization

Correct Answer:- Option-D

Question63:-Which is the oral anticoagulant that is recommended in established thrombotic antiphospholipid antibody syndrome with acute pulmonary embolism ?

A:-Warfarin

B:-Dabigatran

C:-Rivaroxaban

D:-Apixaban

Correct Answer:- Option-A

Question64:-Which of the following histopathological features on a lung biopsy would be most characteristic of Granulomatosis with Polyangiitis ?

A:-Necrotizing vasculitis affecting small-to-medium vessels, geographic necrosis and poorly-formed granulomas with giant cells

B:-Prominent eosinophilic infiltration within the interstitium, necrotizing vasculitis and extravascular granulomas

C:-Extensive intra-alveolar hemorrhage with linear deposition of IgG along the glomerular and alveolar basement membranes

D:-Well-formed, non-necrotizing granulomas along bronchovascular bundles

Correct Answer:- Option-A

Question65:-Which of the following physiological changes is PRIMARILY responsible for the 'right shift' of the Oxygen-Haemoglobin dissociation curve during initial acclimatization to high altitude ?

A:-Decreased 2,3-DPG levels

B:-Respiratory alkalosis due to hyperventilation

C:-Increased 2,3-DPG levels

D:-Polycythemia

Correct Answer:- Option-C

Question66:-Bronchopulmonary sequestration (BPS) is a congenital lung malformation where the anomalous arterial supply typically arises from

A:-Pulmonary artery

B:-Bronchial artery

C:-Descending aorta

D:-Internal mammary artery

Correct Answer:- Option-C

Question67:-The mechanism of action of Omalizumab in severe asthma is

A:-Blocking IL-5 receptor on eosinophils

B:-Binding to IgE preventing it from attaching to FcεRI

C:-Inhibiting leukotriene synthesis via 5-lipoxygenase

D:-Antagonising H1 receptors on bronchial smooth muscle

Correct Answer:- Option-B

Question68:-Primary ciliary dyskinesia (PCD) classically presents with situs inversus, bronchiectasis and male infertility. The most commonly mutated gene encoding dynein heavy chain is

A:-DNAI1

B:-DNAH5

C:-CCDC40

D:-RSPH4A

Correct Answer:- Option-B

Question69:-According to the 5 A's model of smoking cessation counselling, what is the correct sequential order of the steps ?

A:-Ask – Advise – Assess – Assist – Arrange

B:-Assess – Ask – Advise – Arrange – Assist

C:-Ask – Assess – Advise – Assist – Arrange

D:-Advise – Ask – Assess – Assist – Arrange

Correct Answer:- Option-A

Question70:-Which outdoor air pollutant is formed as a SECONDARY pollutant in the lower atmosphere via photochemical reactions involving nitrogen oxides (NO_x) and volatile organic compounds (VOCs) ?

A:-Carbon monoxide (CO)

B:-Sulphur dioxide (SO₂)

C:-Ground-level Ozone (O₃)

D:-Particulate Matter PM₁₀

Correct Answer:- Option-C

Question71:-All of the following statements are correct regarding drug induced lung diseases except

A:-Bleomycin is known to cause proliferation of fibroblasts

B:-Penicillamine may enhance collagen formation

C:-Amiodarone may cause alveolitis

D:-Hydralazine may induce SLE

Correct Answer:- Option-B

Question72:-The 'photographic negative of pulmonary oedema' pattern on chest X-ray is CHARACTERISTIC of which condition ?

A:-Acute Eosinophilic Pneumonia

B:-Allergic Bronchopulmonary Aspergillosis (ABPA)

C:-Chronic Eosinophilic Pneumonia (CEP)

D:-Hypereosinophilic Syndrome

Correct Answer:- Option-C

Question73:-A 55-year-old former textile worker is referred for medicolegal respiratory impairment evaluation. Spirometry : FVC 72% pred, FEV1 61% pred, FEV1/FVC 0.65. Post-bronchodilator : FEV1 65% pred. DLCO : 62% pred. 6-minute walk test : 385 meters with SpO2 nadir 88% on room air. According to ATS 2022 guidelines for respiratory impairment classification, which category best describes this patient's impairment ?

A:-Mild impairment – FEV1 60-LLN% predicted, no supplemental oxygen required

B:-Moderate impairment – FEV1 41 – 60% predicted with DLCO reduction and exertional desaturation indicating clinically significant physiological limitation

C:-Severe impairment – FEV1 < 40% predicted; the patient cannot perform sedentary work

D:-No impairment

Correct Answer:- Option-B

Question74:-A 38-year-old mushroom farmer presents with recurrent episodes of fever, myalgia and dyspnea 4 – 6 hours after working in the mushroom-growing sheds, with spontaneous improvement over 24 – 48 hours on leaving the environment. HRCT shows diffuse bilateral ground-glass opacities with centrilobular nodules and areas of mosaic attenuation. Lung biopsy would MOST likely show

A:-Diffuse alveolar damage with hyaline membrane formation and type II pneumocyte hyperplasia

B:-Poorly formed, non-necrotizing peribronchiolar granulomas

C:-Dense collagenous nodules with whorled fibroblasts

D:-Eosinophilic pneumonia with numerous eosinophils filling alveolar spaces and pleural effusion

Correct Answer:- Option-B

Question75:-Formula for calculating Predicted Body Weight (PBW) for males is

A:- $45 + \{2.3 \times (\text{height in inches} - 60)\}$

B:- $50 + \{2.3 \times (\text{height in inches} - 60)\}$

C:- $50 + \{4.3 \times (\text{height in inches} - 60)\}$

D:- $45 + \{4.3 \times (\text{height in inches} - 60)\}$

Correct Answer:- Option-B

Question76:-Post cardiac surgery pleural effusion is characterized by all of the following except

A:-Around 40% of CABG patients develop pleural effusion

B:-Usually left sided and massive effusion

C:-Early effusion are bloody and neutrophilic

D:-Late effusion are non-bloody and lymphocytic

Correct Answer:- Option-B

Question77:-According to the Berlin definition, ARDS must develop within

A:-24 hours of symptom onset

B:-3 days of hospitalization

C:-1 week of a known clinical insult or worsening respiratory symptoms

D:-1 month of lung injury

Correct Answer:- Option-C

Question78:-All of the following are correct regarding HFNC except

A:-Eliminate interface deadspace

B:-Wash out carbondioxide from the nasopharynx

C:-Improve thoraco abdominal synchrony

D:-Decreases PEEP

Correct Answer:- Option-D

Question79:-Non breathing mask for oxygen therapy has got which one of the following ?

A:-Expired gas one – way valve alone

B:-Inspired gas one – way valve alone

C:-Both inspired gas and expired gas one – way valve

D:-No inspiratory and expiratory gas one – way valve

Correct Answer:- Option-C

Question80:-Regarding catheter use, FACTT Trial showed that pulmonary artery catheters

- A:-Improved survival
- B:-Reduced organ failure
- C:-Were superior to central venous catheters
- D:-Did not improve outcomes and had more complications

Correct Answer:- Option-D

Question81:-A patient with severe ARDS is ventilated with tidal volume 6 mL/kg predicted body weight. Which ventilatory parameter is specifically targeted to reduce alveolar overdistension ?

- A:-Respiratory rate
- B:-Plateau pressure
- C:-Inspiration flow rate
- D:-Inspiratory trigger sensitivity

Correct Answer:- Option-B

Question82:-Complicated parapneumonic effusion is most likely associated with

- A:-Pleural fluid pH > 7.40
- B:-Pleural fluid glucose > 100 mg/dL
- C:-Pleural fluid pH < 7.20
- D:-Pleural fluid protein < 2 g/dL

Correct Answer:- Option-C

Question83:-Which procedure carries the highest risk of iatrogenic pneumothorax ?

- A:-Transbronchial biopsy
- B:-Thoracocentesis
- C:-Transbronchial cryobiopsy
- D:-Central line insertion

Correct Answer:- Option-C

Question84:-The Nuss procedure is used to treat

A:-Scoliosis

B:-Kyphosis

C:-Pectus excavatum

D:-Pectus carinatum

Correct Answer:- Option-C

Question85:-A 34-year-old male with a history of persistent, dry cough is evaluated. Irritation of the external auditory canal with a cotton swab accidentally triggers a vigorous cough fit (Arnold's nerve reflex). Which cranial nerve serves as the afferent pathway for this specific cough reflex loop ?

A:-Cranial Nerve V (Trigeminal Nerve)

B:-Cranial Nerve VII (Facial Nerve)

C:-Cranial Nerve IX (Glossopharyngeal Nerve)

D:-Cranial Nerve X (Vagus Nerve)

Correct Answer:- Option-D

Question86:-A patient with severe bronchiectasis produce copious, foul-smelling, layered purulent sputum. The profound recruitment and activation of neutrophils within the airway lumina, responsible for this thick sputum, is primarily driven by which chemotactic factor found in high concentration ?

A:-Interleukin-6 (IL-6)

B:-Interleukin-8 (IL-8)

C:-Transforming Growth Factor-beta (TGF- β)

D:-Interferon-gamma (IFN- γ)

Correct Answer:- Option-B

Question87:-A 38-year-old patient reports severe excessive daytime somnolence despite 8 hours of bed partner-verified quiet sleep. A lumbar puncture reveals low cerebrospinal fluid (CSF) levels of Hypocretin-1 (Orexin-A). This specific biomarker deficiency directly localizes the patient's somnolence to pathology in which area of brain ?

A:-Ventrolateral preoptic nucleus (VLPO) of the anterior hypothalamus

B:-Lateral hypothalamic area (LHA) neurons

C:-Locus coeruleus noradrenergic projections

D:-Median raphe nucleus serotonergic systems

Correct Answer:- Option-B

Question88:-What does the curtain sign in thoracic ultrasound indicate ?

A:-Accumulation of free fluid in the costophernic angle

B:-Normal lung sliding during respiration

C:-Basal consolidation of lung parenchyma

D:-Air in the pleural space causing separation of pleural layers

Correct Answer:- Option-B

Question89:-The most common DNA modification is

A:-Acetylation of guanine residues

B:-Methylation of adenine residues

C:-Acetylation of thymine residues

D:-Methylation of cytosine residues

Correct Answer:- Option-D

Question90:-Which of the following is the most common genetic mutation responsible for cystic fibrosis ?

A:-A deletion of three base pair leading to the loss of phenylalanine

B:-A point mutation causing a substitution of glutamic acid with valine

C:-A trinucleotide repeat expansion on the X-chromosome

D:-A chromosomal translocation between chromosome 7 and 9

Correct Answer:- Option-D

Question91:-Which of the following represents the primary biological challenge in delivering gene therapy to the lungs for the treatment of cystic fibrosis ?

A:-Rapid degradation of the vector by pulmonary macrophages

B:-The impermeability of alveolar blood vessels to viral vectors

C:-Thick mucus blocking vector access to epithelial cells

D:-Unpredictable immune rejection of the target CFTR gene

Correct Answer:- Option-C

Question92:-A 58-year-old male with severe chronic obstructive pulmonary disease (COPD) presents with central cyanosis. Which of the following statements best describes the physiological basis of cyanosis ?

A:-Central cyanosis becomes visually apparent when the absolute concentration of oxyhaemoglobin exceeds 5 g/dL in the capillaries

B:-Patients with severe anaemia ($Hb < 7$ g/dL) develop cyanosis more readily than patients with polycythaemia

C:-Central cyanosis typically reflects an arterial oxygen saturation (SaO_2) below 85% in a patient with normal haemoglobin

D:-Peripheral cyanosis is primarily caused by an increased cardiac output and rapid capillary blood flow

Correct Answer:- Option-C

Question93:-A 34-year old nurse is brought to the emergency department after an accidental overdose of a topical benzocaine spray used for an endoscopic procedure. She is deeply cyanotic but her arterial oxygen tension (PaO_2) on a room air arterial blood gas (ABG) is normal at 95 mmHg. Which of the following best explains this clinical presentation ?

A:-The patient has developed carboxy-hemoglobinemia, shifting the oxygen-haemoglobin dissociation curve to the right

B:-Oxidation of ferrous iron (Fe^{2+}) to ferric iron (Fe^{3+}) within haemoglobin has produced met-haemoglobin, which cannot bind oxygen

C:-Benzocaine causes severe acute peripheral vasoconstriction, resulting in isolated pseudocyanosis

D:-Sulf-haemoglobinemia has occurred, which artificially falsely elevates the calculated arterial oxygen saturation (SaO_2)

Correct Answer:- Option-B

Question94:-A 71-year-old female with severe pulmonary arterial hypertension (PAH) and cor pulmonale is admitted with refractory peripheral oedema. Despite high-dose intravenous loop diuretic therapy (furosemide), her 24-hour urine output remains low. Lab results show a

serum sodium of 131 mEq/L and a rising serum creatinine. Which physiological mechanism explains this “diuretic resistance” in advanced right heart failure ?

A:-High right atrial pressure elevates renal venous pressure, increasing intracapsular hydrostatic pressure and directly blunting the glomerular filtration rate (GFR)

B:-Excessive loop diuretic use induces a profound up-regulation of sodium-potassium-2chloride (NKCC2) cotransporters in the collecting duct

C:-Forward right ventricular failure leads to pulmonary venous congestion, triggering a reflex intrarenal vasodilation

D:-Severe hypoxemia directly deactivates the epithelial sodium channels (EnaC) in the distal convoluted tubule

Correct Answer:- Option-B

Question95:-A 64-year-old female presents with progressive dyspnoea. Her spirometry shows a restrictive pattern with a reduced FVC. Body plethysmography is performed to determine absolute lung volumes. To calculate the thoracic gas volume (VTG) at functional residual capacity (FRC) using Boyle’s law, at which point in the respiratory cycle is the airway shutter typically closed ?

A:-At the end of a normal, unforced expiration

B:-At the end of a maximal forced expiration

C:-At the peak of a maximal forced inspiration

D:-At the midpoint of a normal tidal inspiration

Correct Answer:- Option-A

Question96:-A 48-year-old female with systemic sclerosis undergoes pulmonary function testing. Her DLCO is significantly reduced at 42% of predicted, while her alveolar volume (VA) measured during the single-breath manoeuvre is only mildly reduced. Which of the following biological or technical factors would artificially elevate a single-breath DLCO measurement ?

A:-Increased levels of carboxyhaemoglobin from recent cigarette smoking

B:-Severe alveolar-capillary membrane thickening from pulmonary fibrosis

C:-An undiagnosed left-to-right intracardiac shunt

D:-A significant reduction in the patient’s haemoglobin concentration

Correct Answer:- Option-C

Question97:-An 8-year-old child with suspected asthma is unable to perform acceptable spirometry manoeuvres. The clinician opts for Impulse Oscillometry (IOS) during quiet breathing. The results show an elevated total respiratory resistance at 5 Hz (R5) and a normal resistance at 20 Hz (R20), leading to a high R5-R20 difference. What is the anatomical localization and pathophysiological meaning of this finding ?

- A:-Fixed large upper airway obstruction
- B:-Small airway resistance and peripheral airway dysfunction
- C:-Severe chest wall restriction and decreased compliance
- D:-Extrathoracic airway collapse during inspiration

Correct Answer:- Option-B

Question98:-A 32-year-old female with difficult-to-control asthma is being evaluated for biological therapy. Her FENO level is measured at 48 parts per billion (ppb). Which of the following statements correctly pairs the interpretation of this FENO value with a factor that can falsely lower it ?

- A:-Indicates severe neutrophilic airway inflammation ; falsely lowered by a recent viral upper respiratory infection
- B:-Indicates significant Type 2 (eosinophilic) airway inflammation ; falsely lowered by recent cigarette smoking
- C:-Indicates fixed airway remodelling ; falsely lowered by consuming nitrate-rich foods prior to testing
- D:-Indicates excellent adherence to high-dose inhaled corticosteroids ; falsely lowered by performing spirometry manoeuvres immediately before the FENO test

Correct Answer:- Option-B

Question99:-During a large-volume therapeutic thoracentesis, a clinician utilizes manometry to monitor pleural pressure. Which of the following pressure changes or patterns indicates that the patient is at high risk for re-expansion pulmonary edema (RPE) or trapped lung, necessitating immediate termination of the procedure ?

- A:-A steady, predictable drop in pleural pressure of less than 5 cm H₂O per liter of fluid removed
- B:-A sudden rise in pleural pressure above atmospheric pressure during fluid extraction
- C:-A precipitous drop in pleural pressure to below -20 cm H₂O accompanied by chest discomfort

D:-A pressure reading that remains fixed at exactly 0 cm H₂O throughout the entire procedure

Correct Answer:- Option-D

Question100:-Under the INDEX-TB guidelines, which of the following is true regarding the diagnostic approach, differentiation from Crohn's disease, or treatment duration for Gastrointestinal Tuberculosis ?

A:-NAAT/Xpert MTB/RIF performed on mucosal biopsy specimens have high sensitivity and a negative result effectively rules out intestinal TB, shifting focus entirely to Crohn's disease

B:-If a mucosal biopsy reveals caseating granulomas or Acid-Fast Bacilli are isolated on culture, the diagnostic algorithm mandates a full 9 to 12 months of ATT to reduce the risk of structural bowel strictures

C:-Routine clinical practice dictates that empiric ATT can be safely initiated for any patient with non-specific mucosal ulcerations and mild mesenteric lymphadenopathy (<1 cm) on abdominal ultrasound, without attempting tissue or microbiological confirmation

D:-Colonoscopy with biopsy is critical for differentiating Crohn's disease from Intestinal TB ; finding confluent, large, multiple transverse ulcers predominantly in the ileocecal region, combined with multiple caseating granulomas on histology, strongly establishes a diagnosis of Intestinal TB

Correct Answer:- Option-D