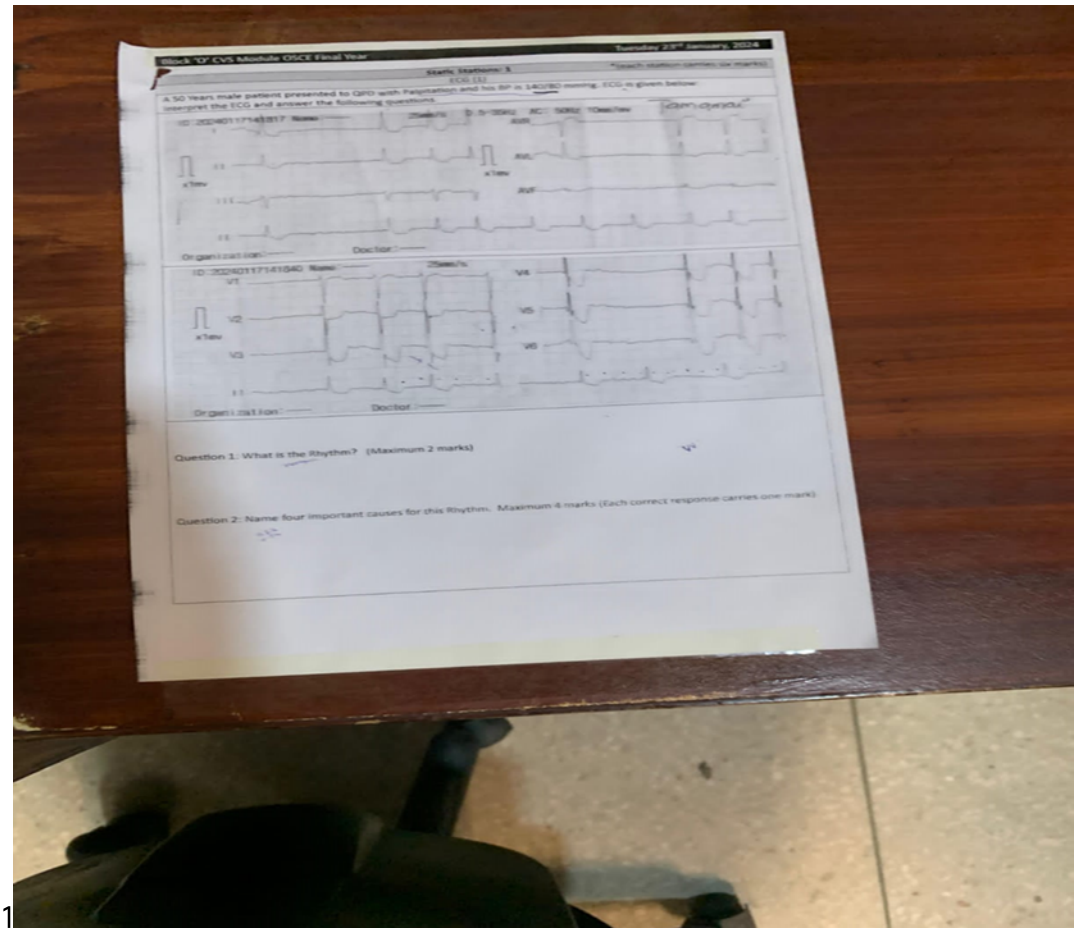
STATION 1



BLOCK-D

OSCE

(1) Rhythm?
irregular rhythm = No of peaks X 6
Causes of irregular rhythm:-
(1) AF
(2) Multifocal Atrial tachycardia
(3) PVC (Preventricular Contractions
(4) VF

STATION

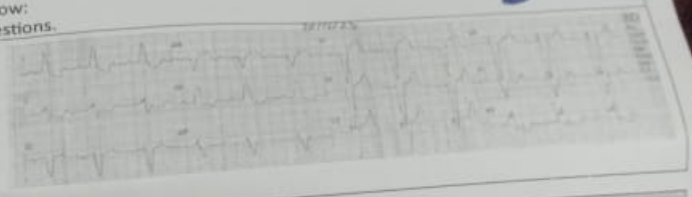
Block 'O' CVS Module OSCE Final Year — **Tuesday 23rd January, 2024**

Key

Static Stations: 3 — *(each station carries six marks)

ECG (3)

A 40 years female patient presented to OPD with vague history of chest pain and easy fatigue ability. She is normotensive and non-diabetic. Her ECG done in OPD as below:
Look at this ECG and answer the following questions.



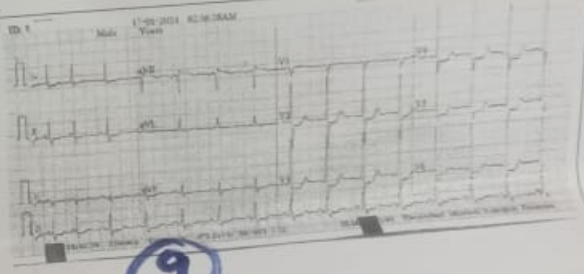
Question 1: What is your finding.
(Maximum 2 marks)
Answer: Broad QRS Complex / LBB

Question 2: Enlist two important causes of this ECG. (Maximum 4 marks)
Answer: Coronary Artery disease, Normal Variant

Static Stations: 4 — *(each station carries six marks)

ECG (4)

A 60 years male patient presented to CCU with one day history of severe central chest pain. He is a smoker, diabetic and having positive family history for coronary artery disease. His troponin level was high. ECG of the patient given below:
interpret the ECG and answer the following questions.



Question 1: What is the abnormal finding?
(Maximum 1 marks)
Answer: ST depression V2 – V6

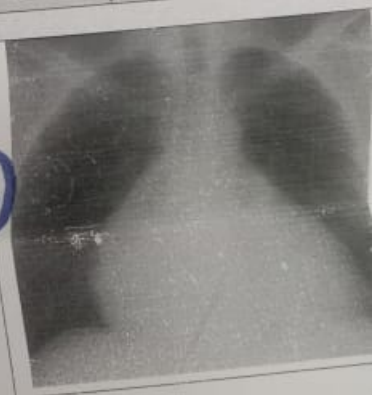
Question 2: Give two differential diagnoses? (Maximum 2 marks)
Answer: NSTEMI, Posterior Wall MI

Question 3: Enlist three important oral medications for this patient. (Maximum 3 marks)
Answer: Dual antiplatelet, Beta blocker, Lipid Lowering

Static Stations: 5 — *(each station carries six marks)

X-ray (5)

A 30 years old female patient with long history of low-grade fever, weight loss and night time sweating. The Xray of the patient is given: look at the Xray and answer the following questions



Question 1: Give two important findings? (Maximum 2 marks)
Answer: Cardiomegaly, Pencil drawn hard border

Question 2: Give two differentials diagnosis. (Maximum 2 marks)
Answer: Pericardial Effusion, Heart Failure (severe valvular heart diseases)

Question 3: What are the two best investigations to definitely diagnose the disease? (Maximum 2 marks)
Answer: ECHO, Pericardial fluid analysis

STATION

Block 'O' CVS Module OSCE Final Year — Tuesday 23rd January, 2024

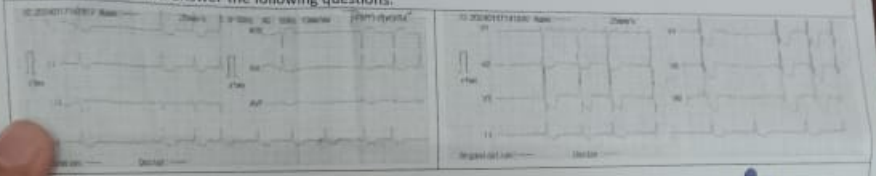
Key

QUESTIONS WITH ANSWERS

Static Stations: 1 — *(each station carries six marks)

ECG (1)

A 50 Years male patient presented to OPD with Palpitation and his BP is 140/80 mmHg. ECG is given below. Interpret the ECG and answer the following questions.



4

Question 1: What is the Rhythm? (Maximum 2 marks)
Answer: Atrial fibrillation

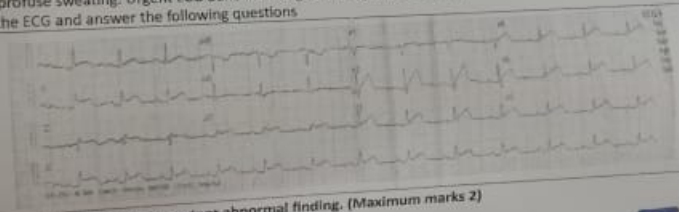
Question: Name four important causes for this Rhythm. Maximum 4 marks (Each correct response carries one mark)
Answer:

a. Rheumatic mitral valve disease
b. Hypertension
c. Heart failure
d. Hyperthyroidism
e. Obesity
f. pulmonary disease

Static Stations: 2 — *(each station carries six marks)*

ECG (2)

A 55 years old bank manager, presented to Emergency department HMC with two hours duration of Severe central chest pain with profuse sweating. Urgent ECG done in Emergency department as below:
Interpret the ECG and answer the following questions



7

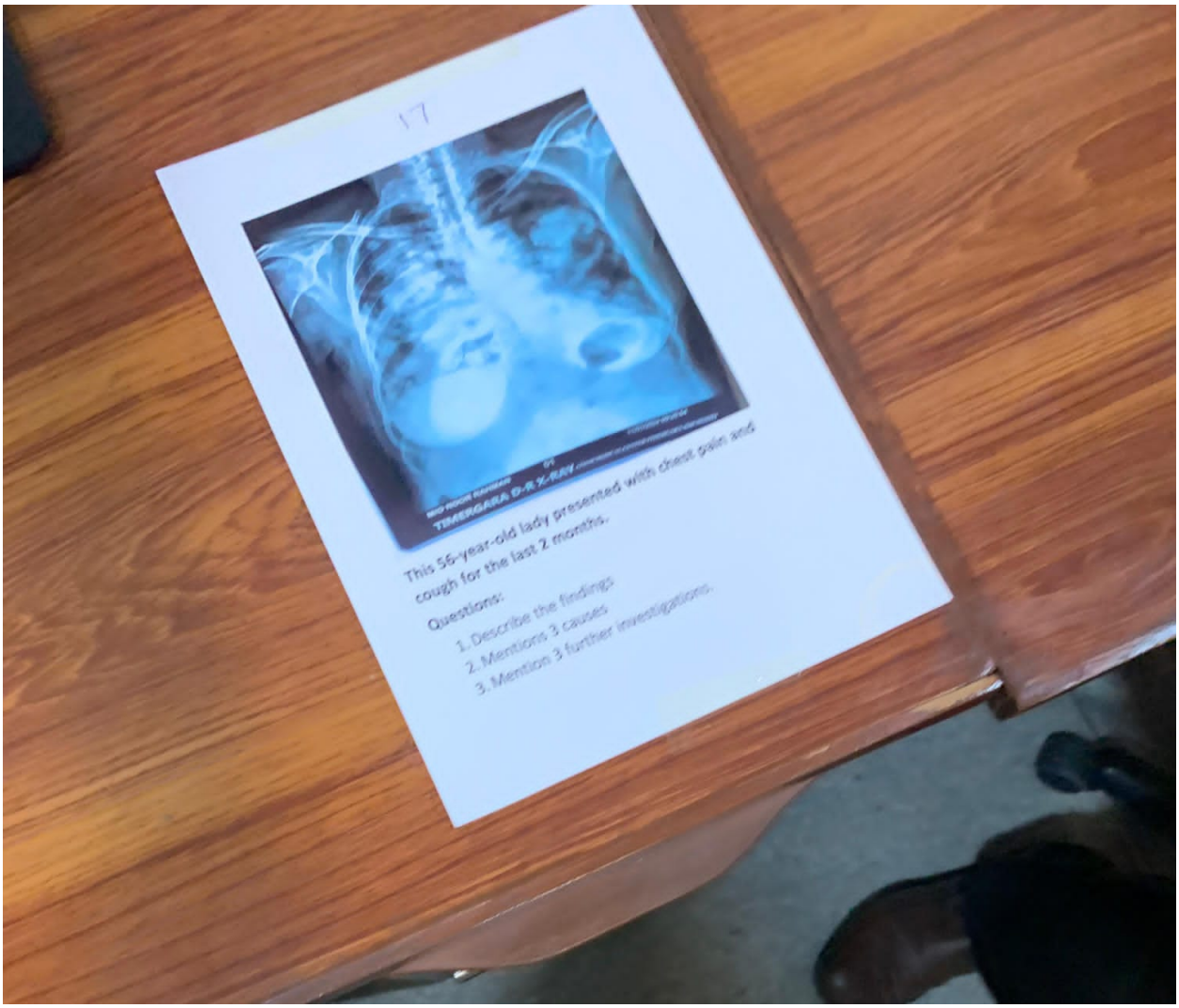
Question 1: what is the most important abnormal finding. (Maximum marks 2)
Answer: ST elevation, II, III, AVF, V1-V6

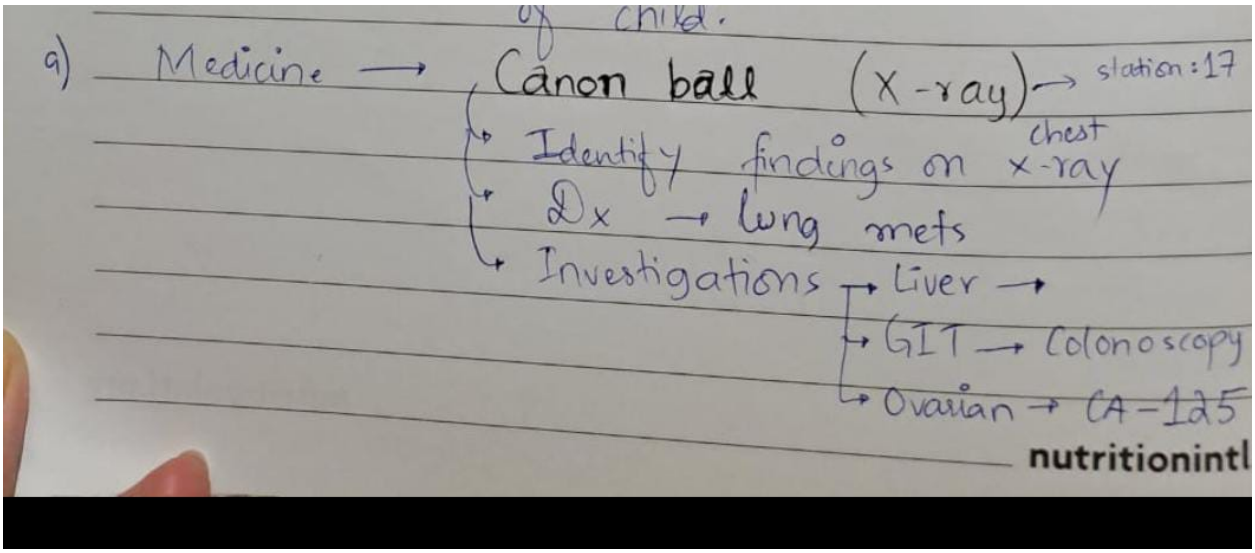
Question 2: What is your diagnosis? (Maximum marks 2)
Answer: STEMI – 2 marks (ACS - only 1 mark)

Question 3: What will be time tested, life-saving and most important oral medicine at this stage? (Maximum marks 2)
Answer: Aspirin 325mg

5

STATION





Case: 55-Year-Old Lady with Chest Pain and Cough for 2 Months

1) Describe the Findings (Based on the X-ray Image)

Bilateral pulmonary opacities/infiltrates

Possible cavitary lesions or consolidation

Presence of pleural effusion (if visible)

Hyperinflated lungs (if suggestive of COPD or emphysema)

2) Mention 3 Causes

Tuberculosis (TB) – Chronic cough, weight loss, night sweats, and cavitary lung lesions

Pneumonia – Community-acquired pneumonia (CAP) or atypical pneumonia

Lung Cancer – Especially in smokers or with unresolving pneumonia

Other Causes: Pulmonary embolism, interstitial lung disease, or heart failure

3) Mention 3 Further Investigations

Chest CT Scan – To assess lung pathology in detail

Sputum AFB Smear & Culture – To rule out tuberculosis

Bronchoscopy with Biopsy – If lung cancer is suspected

Other Tests: CBC, ESR, CRP, GeneXpert MTB/RIF, and blood cultures (if infection is suspected)

STATION

Pediatric Station 13:

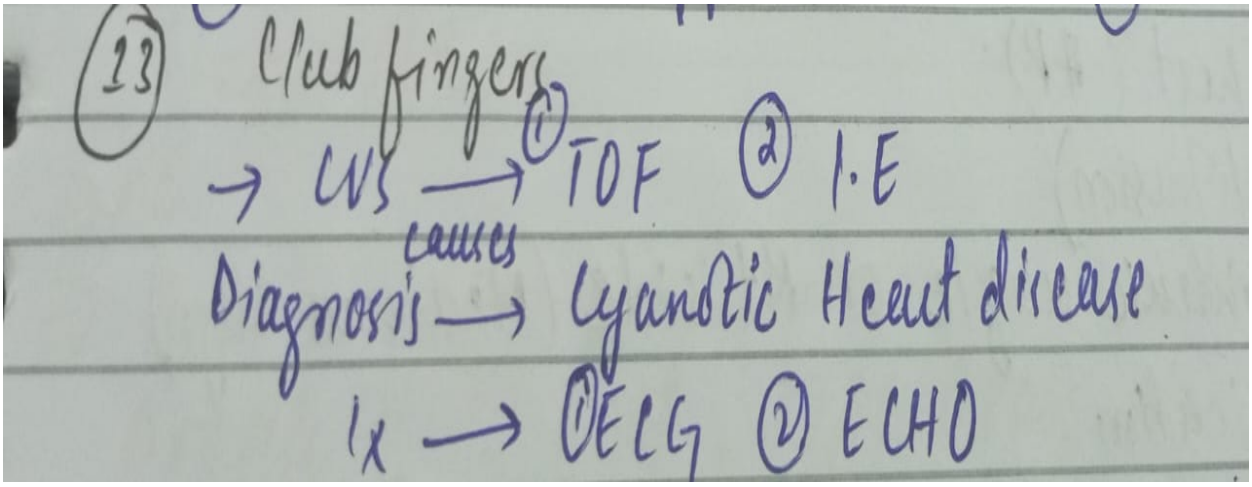
A 4 years old boy presents with blue discoloration of lips, fatigability on exertion and failure to thrive. Examination shows cyanosis of lips with ejection systolic murmur at pulmonary area.

Picture of his right hand is shown. Examine the picture and write down answers to the questions given below:

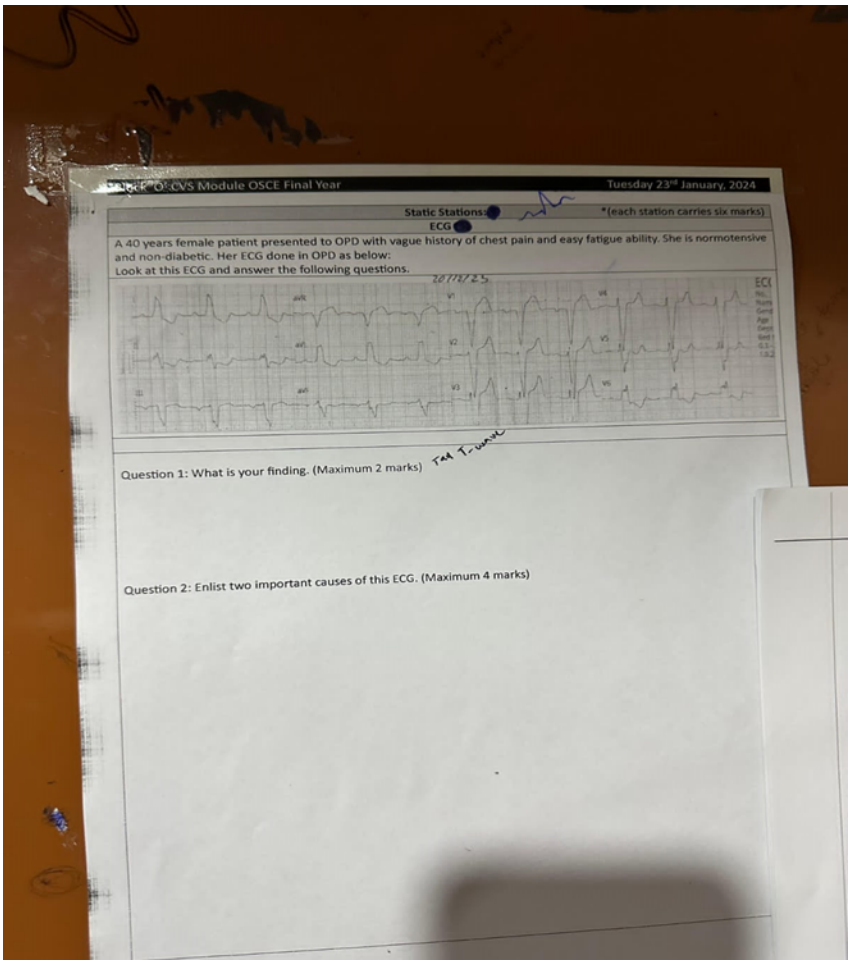
Questions

1. What sign is visible in this picture?
2. Write down 2 cardiovascular causes for this finding?
3. What is the likely diagnosis?
4. Write down 2 investigations to confirm the diagnosis?

ANSWER=



STATION=



OSCE 01: CVS Module OSCE Final Year — Tuesday 23rd January, 2024

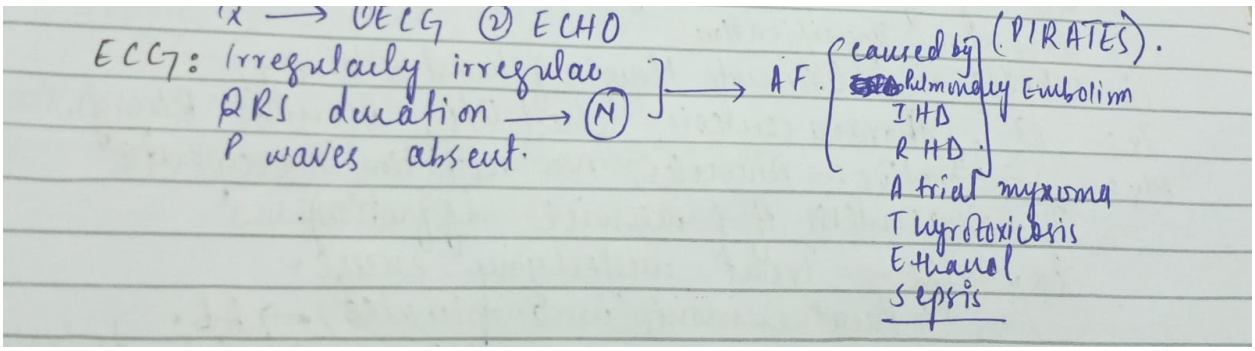
Static Stations:
ECG
*(each station carries six marks)

A 40 years female patient presented to OPD with vague history of chest pain and easy fatigue ability. She is normotensive and non-diabetic. Her ECG done in OPD as below:
Look at this ECG and answer the following questions.

Question 1: What is your finding. (Maximum 2 marks)

Question 2: Enlist two important causes of this ECG. (Maximum 4 marks)

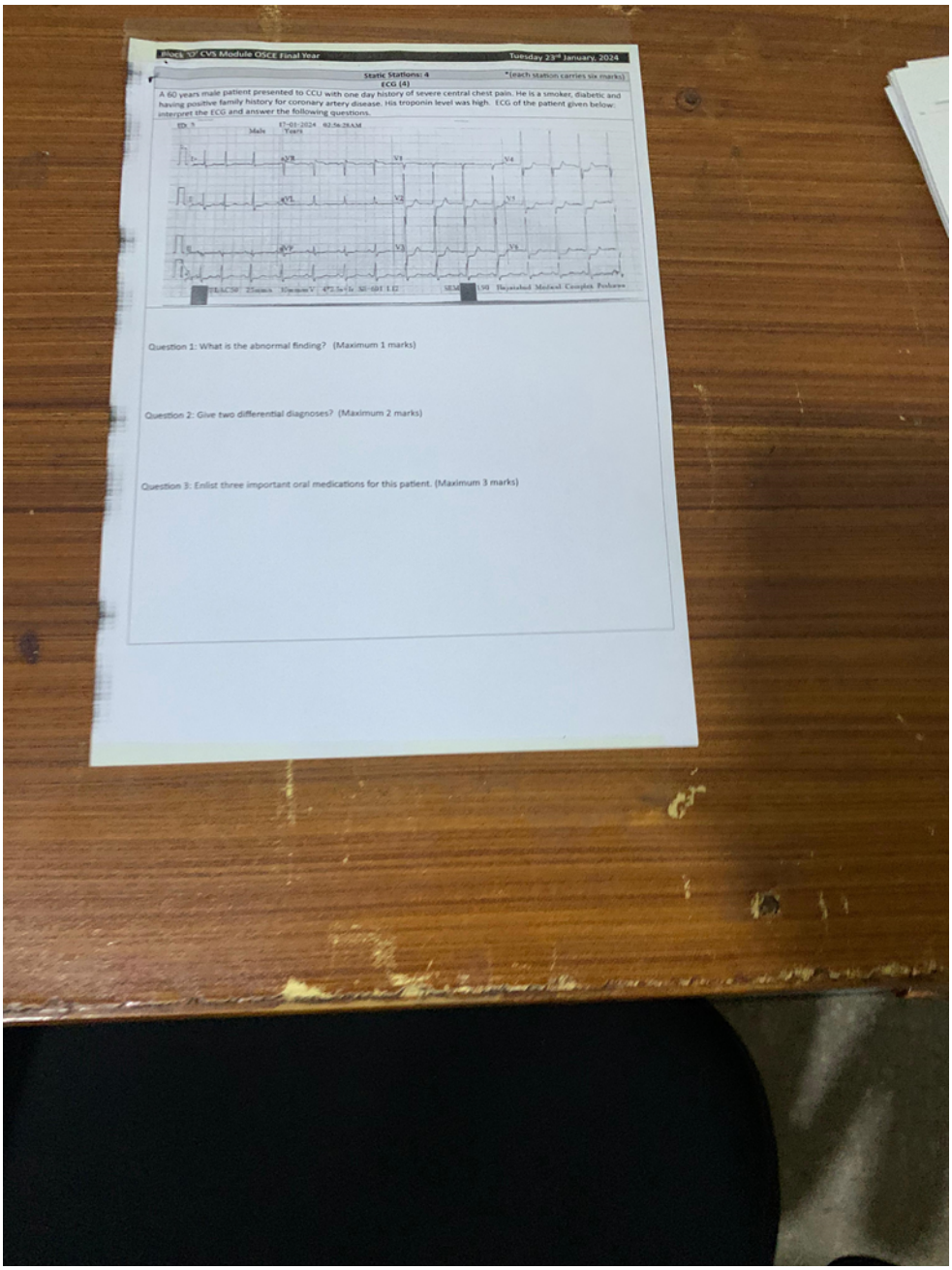
ANSWER=



X → ① ECG ② ECHO

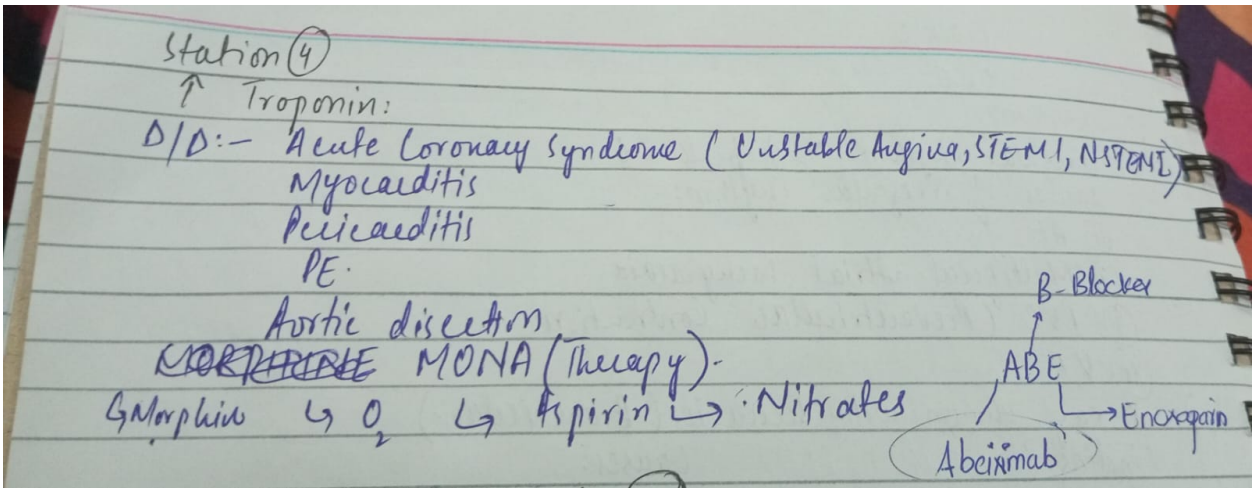
ECG: Irregularly irregular
QRS duration → (N)
P waves absent.

→ AF. { caused by (PIRATES).
Pulmonary Embolism
IHD
RHD.
Atrial myxoma
Thyrotoxicosis
Ethanol
Sepsis }

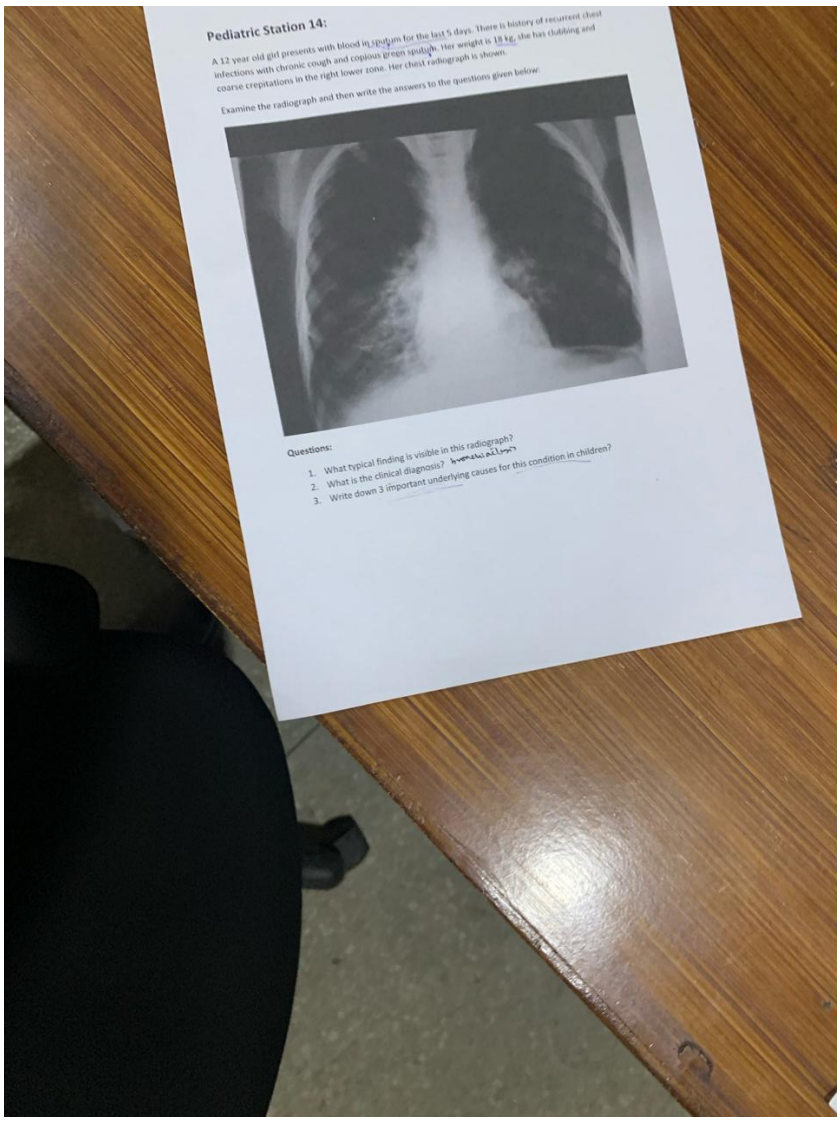


ANSWER=

S



STATION=



Pediatric Station 14:

A 12 year old girl presents with blood in sputum for the last 5 days. There is history of recurrent chest infections with chronic cough and copious green sputum. Her weight is 18 kg, she has clubbing and coarse crepitations in the right lower zone. Her chest radiograph is shown.

Examine the radiograph and then write the answers to the questions given below:

Questions:

1. What typical finding is visible in this radiograph?
2. What is the clinical diagnosis?
3. Write down 3 important underlying causes for this condition in children?

(24) X-ray shown with scenario (Bronchiectasis)

Findings?

1. Tram-track appearance
2. Hyperinflation
3. Signet Ring
4. Cystic spaces

Causes:

1. CF (MC)
2. Recurrent infection
3. Kartagener's syndrome

STATION

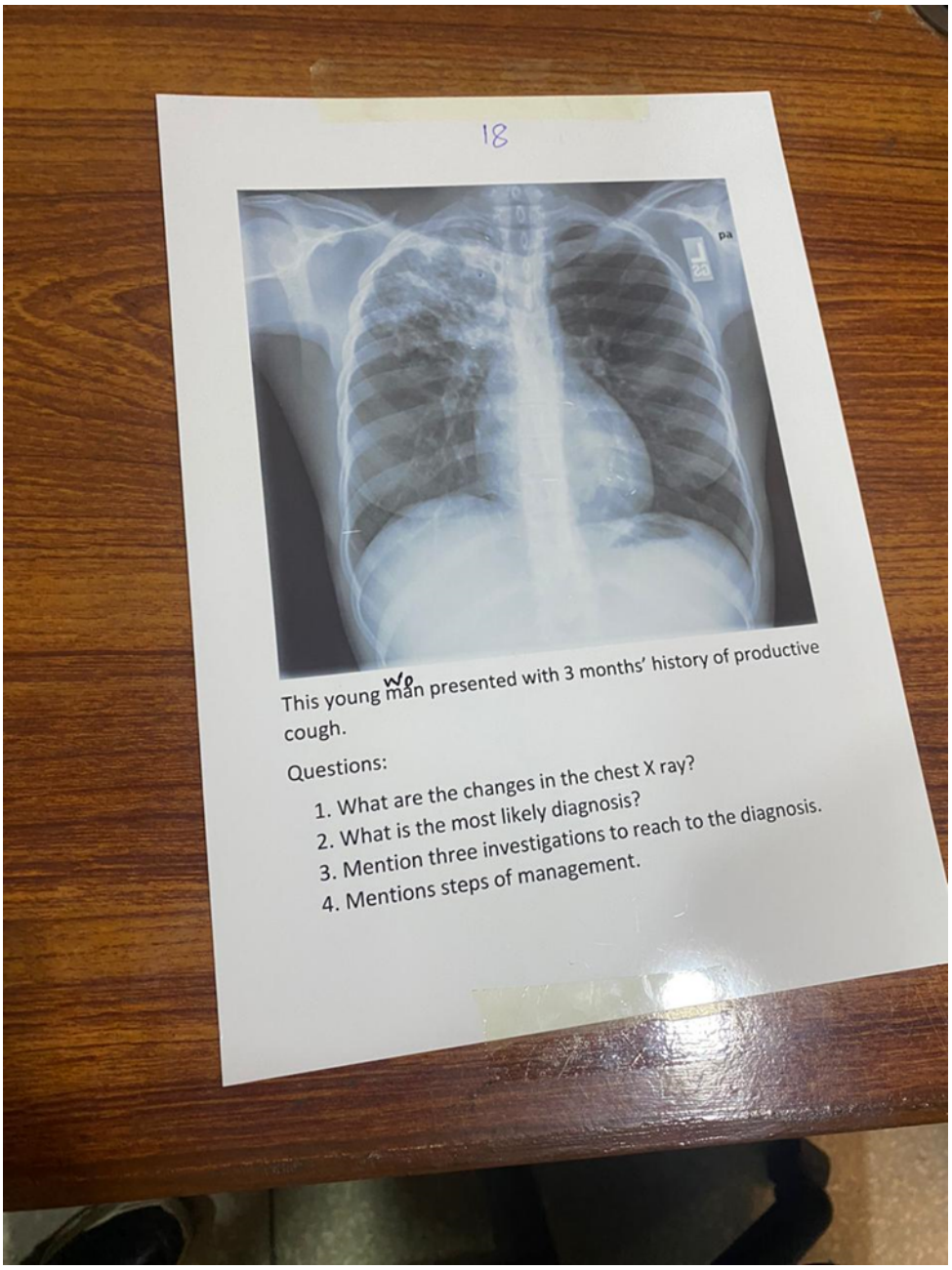
STATION

Station (10)

Abciximab

Asthma:- Acute Attack (Picture shows → Metre dose inhaler)

1. Admission
2. Inhaled β_2 agonist (Nebulization)
3. Corticosteroid
4. Magnesium.
5. Supplemental O_2 (100%.)
6. AB
7. Intubation (R.F) ↳ Respiratory failure



Case: Young Man with 3 Months of Productive Cough

1) Changes in the Chest X-ray

Presence of opacities/consolidation in one or both lungs

Cavitary lesions (if present, suggestive of tuberculosis or lung abscess)

Fibrotic changes or scarring

Possible pleural effusion

2) Most Likely Diagnosis

Pulmonary Tuberculosis (TB) – Given the chronic productive cough

Pneumonia – If symptoms are acute and associated with fever

Bronchiectasis – If there is a history of recurrent infections and large-volume sputum production

Lung Abscess – If cavitations are seen

3) Three Investigations to Confirm Diagnosis

Sputum AFB Smear & Culture – To detect Mycobacterium tuberculosis

Chest CT Scan – To assess lung pathology in detail

GeneXpert MTB/RIF – Rapid test for tuberculosis with rifampicin resistance detection

Other Tests: CBC, ESR, CRP, sputum Gram stain & culture, bronchoscopy (if needed)

4) Steps of Management

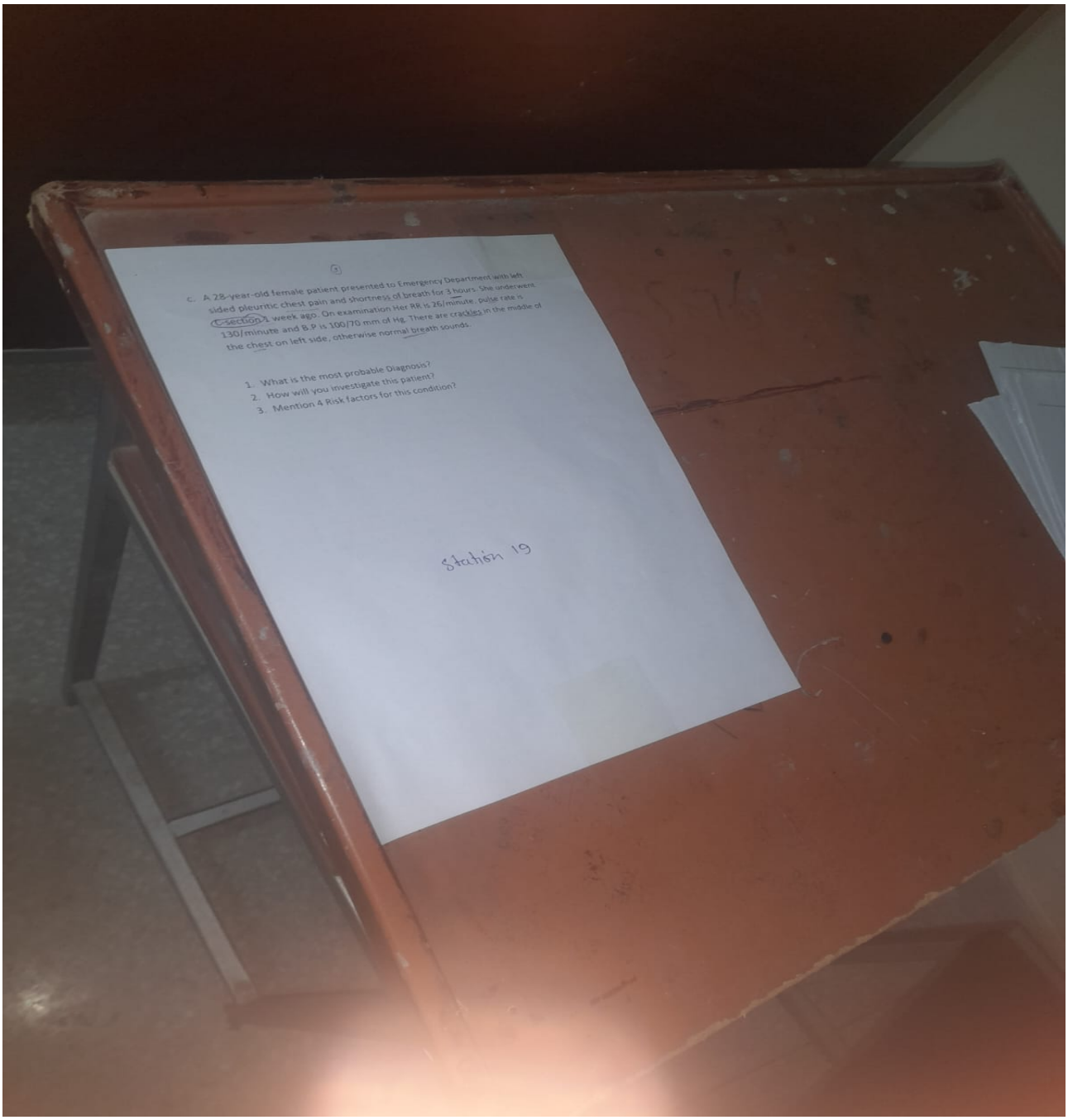
If TB: Start anti-tubercular therapy (ATT) as per national guidelines

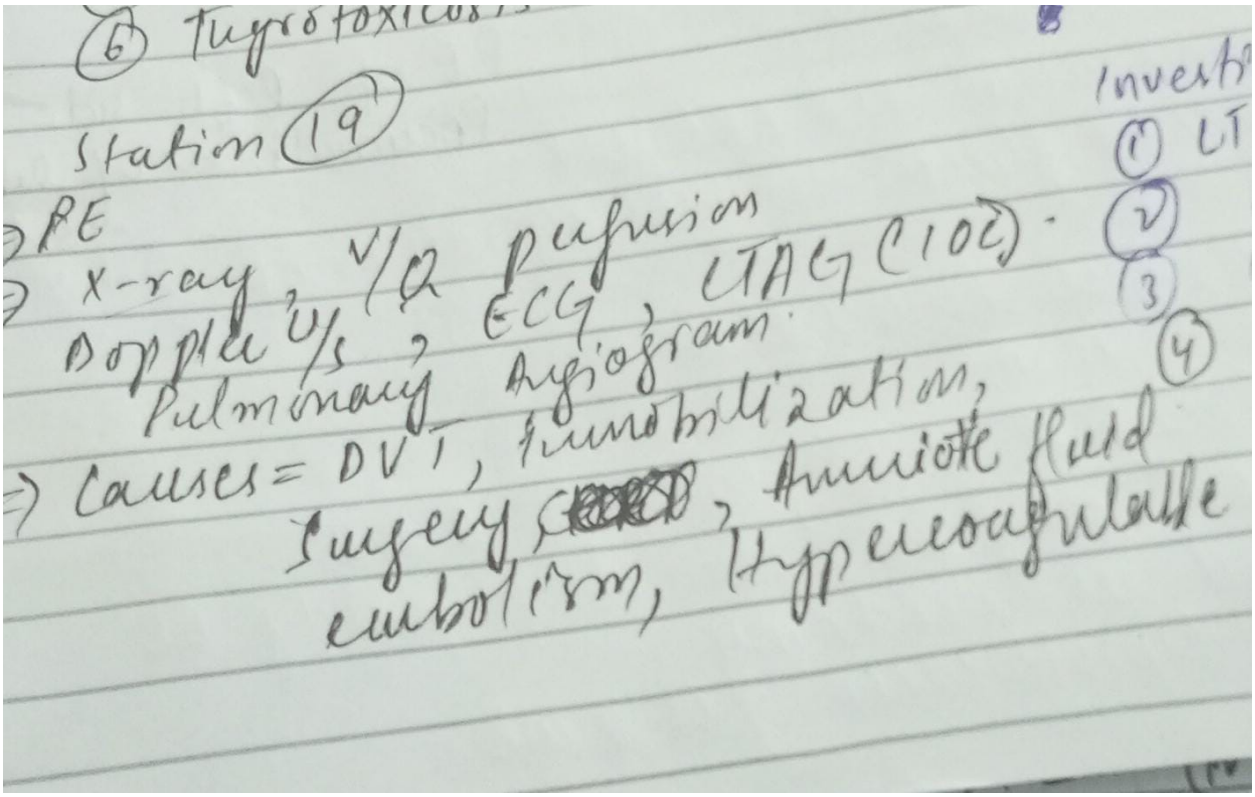
If Pneumonia: Empirical antibiotic therapy based on suspected organism

If Bronchiectasis: Airway clearance therapy, bronchodilators, and antibiotics

If Lung Abscess: IV antibiotics and possible drainage if indicated

STATION





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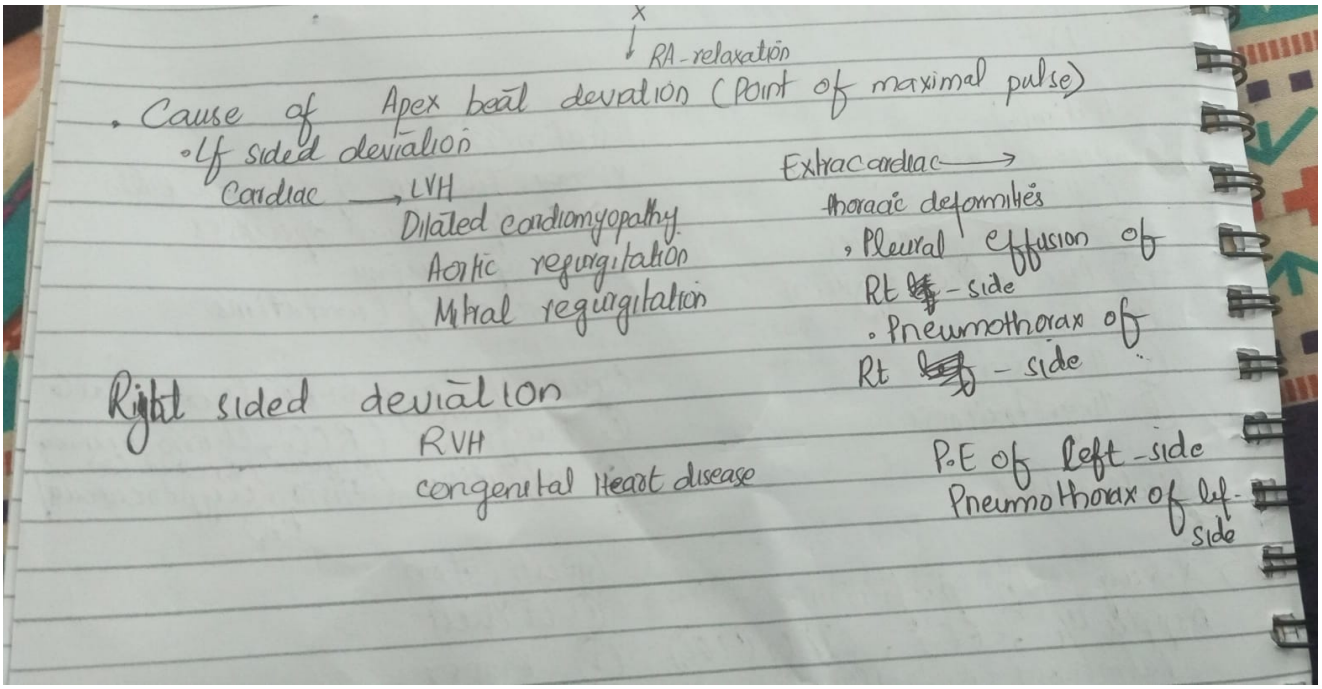

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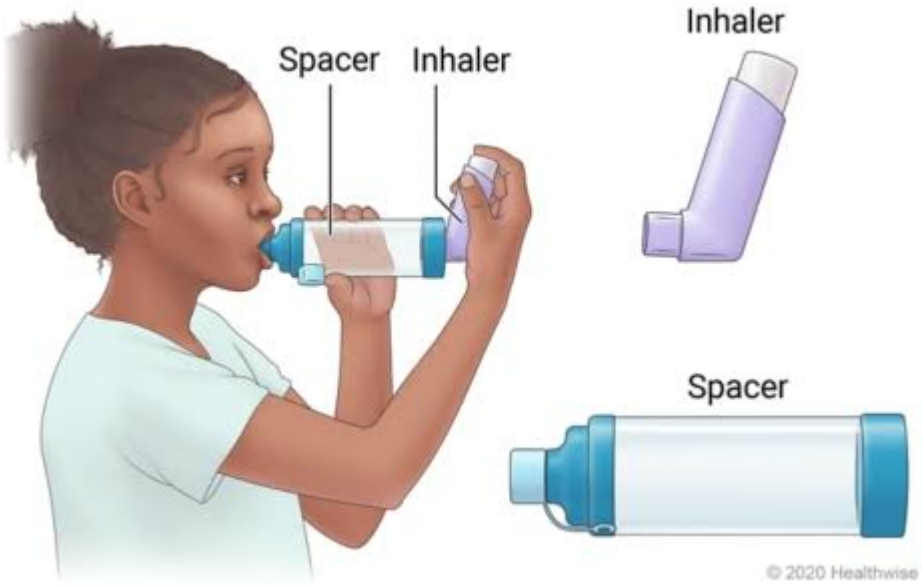
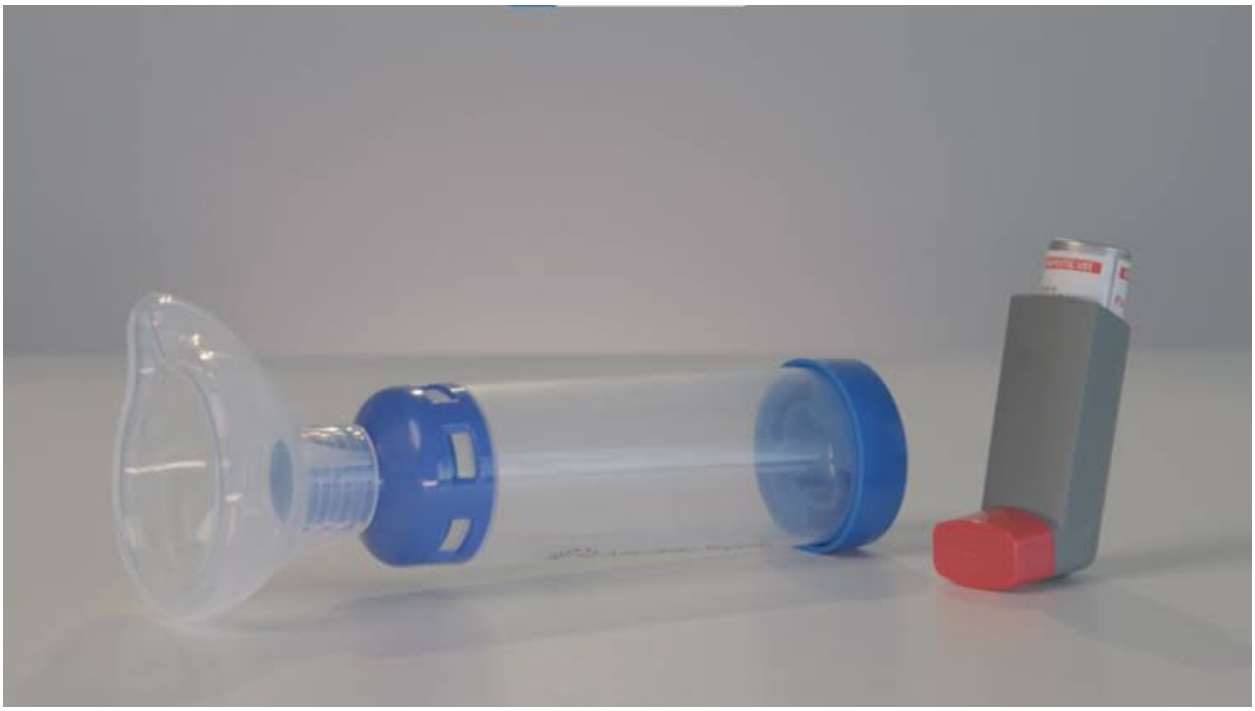
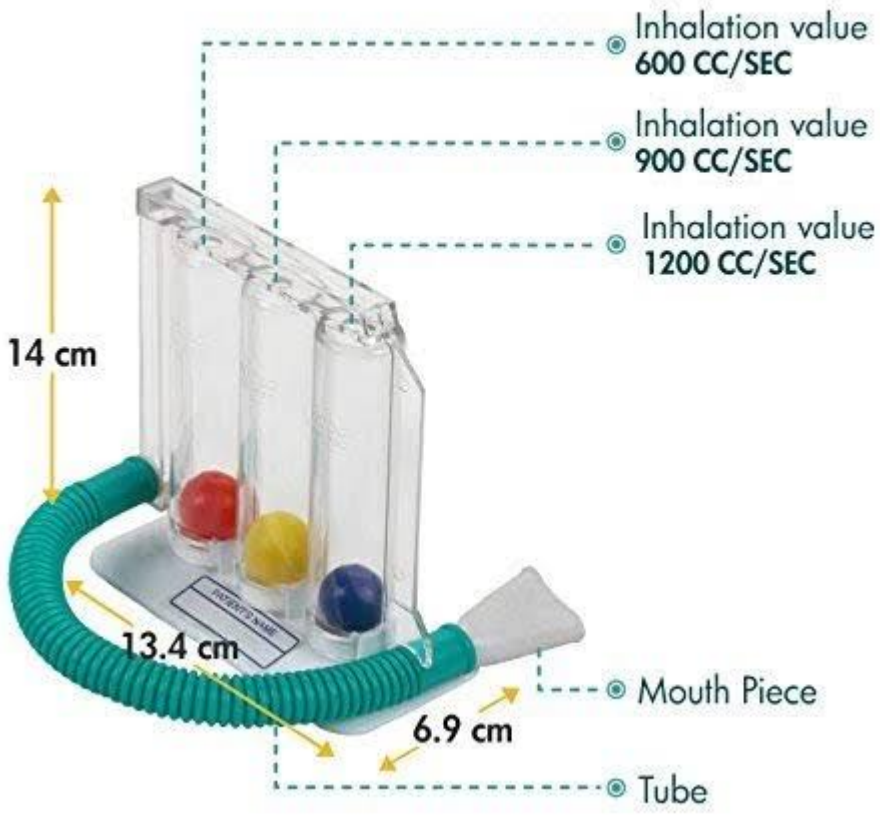
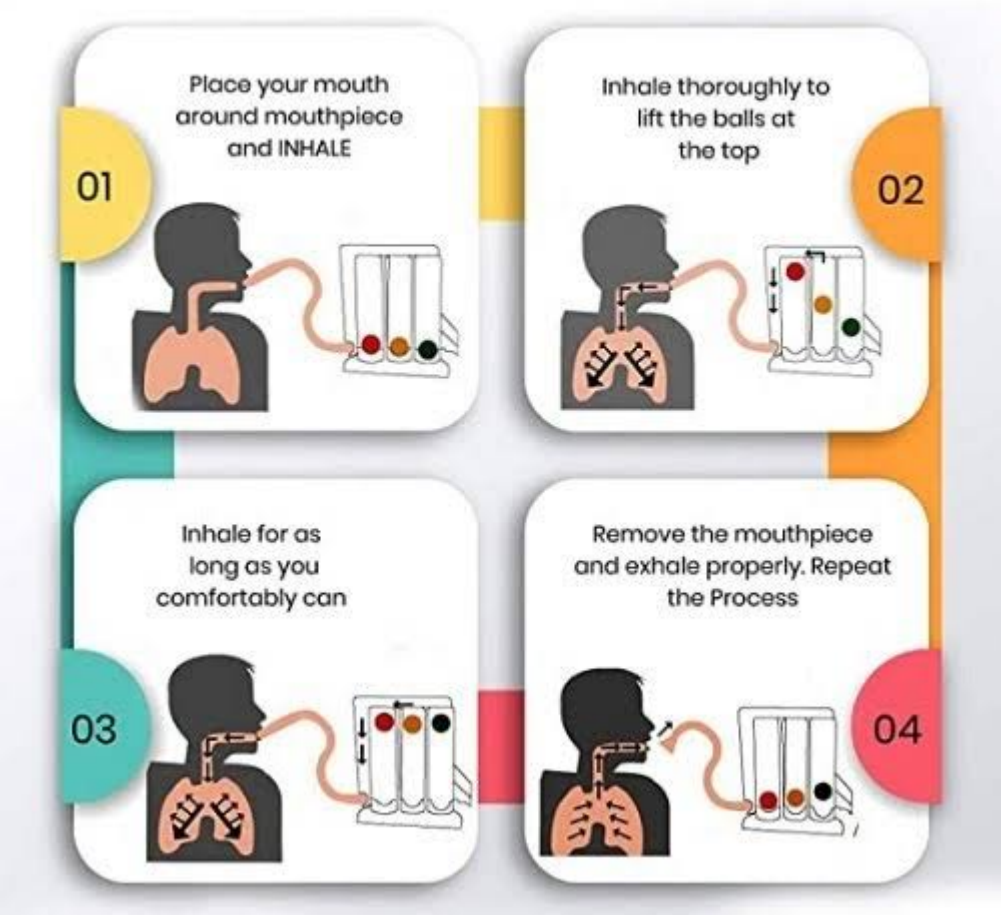




SPIROMETER

PRODUCT DESCRIPTION





Peak flow meter

Peak expiratory flow measurement

Zone	Meaning
Green	Asthma in good control
Yellow	Asthma not in good control / getting worse
Red	Asthma is severe