1. General Physical Exam: (lymph nodes included)

RIPE WIPE ABC LOOKS Unique Vitals Face Hands Neck

A) RIPE WIPE:

R: request a chaperone I: introduce yourself P: permission E: explanation

W: wash your hands I: check interior (light, temperature, privacy) P: position

E: exposure (from neck to umbilicus)

B) ABC:

A: alert, conscious, oriented towards 1) person 2) place 3) time

B: breathing effortlessly, not in respiratory distress (shallow breathing), no audible breathing sounds like wheezes or stridor *for audible breathing sounds: come closer to the patient and tell him to take a deep breath (wheezes → expiratory, stridor → inspiratory)

C: color (normal color, no jaundice or pallor)

C) LOOKS:

L: lines (IV lines, cannula, foleys catheter...)

O: oxygen (oxygen masks, inhalers, nebulizers...)

O: odour (no abnormal odour)

K: body habitus and gait * for body habitus and posture: ask the patient to stand (measure height, weight, BMI), then tell the patient to move a few steps to assess posture and gait

- (assess height, weight, BMI) → patient is of normal weight/obese/underweight (cachectic)
- (assess gait and posture) → normal posture, normal gait...

S: Symmetry of the body (and no deformities)

D) Unique:

patient is engaged in conversation, no signs of apathy or withdrawal, speech is of normal tone and pace

E) Vitals:

- Blood pressure was tested at brachial artery of the right arm, with arm at resting position at the level of the chest, and repeated 1 time for confirmation: ..... mmHg
- Heart rate was measured using radial pulse of left arm and was found to be of regular rhythm and is ..... beats/min
- Respiratory rate was measured: ..... breaths/min * measure radial pulse for 15 seconds, keep your hands there, measure respiratory rate for 15 sec. as well
- Temperature was measured using infrared thermometer under the armpit and was seen to be normal: .....°C
- BMI: ..... (normal weight/obese—) * if not calculated previously
- Oxygen saturation was measured using pulse oxymeter on index finger with arm on level of chest: ...%
- Pain score: (e.g., 0/10 patient looks comfortable)

put the device on index, wait a minute until the reading is stable..

F) Face:

- generally: no deformities, no deviation (Bell's palsy), no masses, no scars, symmetrical bilateral no frontal hair loss, eye brows are normal * ask the patient if he is in pain, check
- eyes: conjunctiva is pink with no signs of pallor for conjunctival pallor by asking patient to no jaundice look upwards, and sclera for jaundice by asking patient to look downwards
- lips: are not cracked, no angular stomatis, no peripheral cyanosis
- tongue: bilateral symmetrical, normal size, no masses, no fasiculations, no central cyanosis, no deviation
- no cracked or dry mucous membranes (for hydration)

* for central cyanosis ask patient to raise his tongue to look at the floor of the mouth
* for deviation ask the patient to protrude his tongue

G) Hands:

- no deformities like ulnar deviation, swan neck deformity, arachnodactyly (Marfan's), Dupuytren's contracture * make sure to be checking the palm when mentioning Dupuytren's cont.
- no peripheral cyanosis, tar staining, skin creases pigmentation, palmar erythema, course skin, tight skin (scleroderma), calcium deposits or ulcers
- normal shape and color of nails, no pitting, koilonychia...
- palpation: temperature, tenderness of masses and joints, capillary refill (normal: < 2 sec), clubbing, pulses (if not done before), turgor (for dehydration; normal: quickly return to normal)

* before palpation ask if there is any pain
* for temp.: use dorsum of both hands together to palpate both sides of both patient's hands
* for tenderness: mention that you want to maintain eye to eye contact
* for clubbing: at the end, palpate for tenderness of wrists (hypertrophic osteoarthropathy)

H) Neck:

- no scars, no visible pulsations, no visible lymphadenopathy, I should examine JVP, and auscultate for carotid bruits, thyroid examination

I) Lymph nodes:

Cervical: 7 lymph nodes are assessed from behind: submental, submandibular, tonsillar, pre-auricular, supraclavicular, deep cervical and scalene

4 lymph nodes are assessed from anterior: occipital, posterior auricular, posterior cervical and base of the neck lymph nodes.

Axillary: anterior and posterior folds, lateral, medial (central) and apical lymph nodes.

Epitrochlear lymph nodes

Examination should be concluded with the examination of the inguinal lymph nodes.

All lymph nodes had normal site, size, consistency with no tenderness.

(For any palpable mass: use SPACESPIT)

* for the scalene lymph nodes: ask the patient if there is any pain first, then put your finger in the right site, then ask the patient to look at your finger, then apply pressure
* for axillary lymph nodes: with your right hand hold patient's right hand and examine with your left hand
* for epitrochlear nodes: with your right hand examine right epitrochlear nodes

J) Hydration Assessment:

1) Signs of dehydration:
   - loss of skin turgor
   - dry mucous membranes
   - decreased urine output
   - tachypnea or hypotensive

2) Edema:
   - localized or generalized

2. Respiratory Exam (General RS + focused RS):

General: RIPE WIPE ABC LOOKS Unique Vitals Face Hands Neck

focused: Inspection, palpation, percussion, auscultation

A) RIPE WIPE:

RIPE WI
- P: position (reclining on a bed 45° degrees)
- E: exposure (from neck to umbilicus)

* I have all my equipment

B) ABC:

A: alert, conscious, oriented towards 1) person 2) place 3) time

B: breathing effortlessly, not in respiratory distress (shallow breathing), no audible breathing sounds like wheezes or stridor

* for audible breathing sounds: come closer to the patient and tell him to take a deep breath (wheezes → expiratory, stridor → inspiratory)

C: color (normal color, no jaundice or pallor)

C) LOOKS:

L: lines (IV lines, cannula, folleys catheter...)

O: oxygen (oxygen masks, inhalers, nebulizers...)

O: odour (no abnormal odour)

K: body habitus (weight only)

S: symmetry of the body

* no need for K: (body habitus) except for weight: patient is obese, normal weight,.....

D) Unique:

patient is engaged in conversation, speech is of normal tone and pace, no pursed lips, no tripod position

E) Vitals:

BP, Heart rate, RR, Oxygen saturation, Pain score, Temperature, BMI

F) Face:

- generally: no plethora or facial swelling, no deformities
- eyes: no jaundice, pallor, conjunctival edema, ptosis, myosis
- no anhydrosis * feel both sides of the patient's face to check for anhydrosis
- nose: no saddle nose deformity * nasal flaring is very rare to be seen in adults (don't mention it)
- lips: no peripheral cyanosis
- mouth: good dental hygiene, no oral ulcers, no signs of tonsillitis or post nasal drip
- tongue: no central cyanosis, masses or fasiculations * ask the patient to raise his tongue for central cyanosis

G) Hands:

- no peripheral cyanosis, tar staining, nail discoloration
- no muscle wasting of thenar or hypothenar muscles
- no small muscle wasting on dorsum of the hand * for coarse tremor ask the patient to outstretch their hands and spread their fingers apart
- tremors: - fine tremor - coarse tremor
- palpation: - temperature - tenderness - sweating - clubbing (+wrists) - capillary refill

* before palpation ask if there is any pain

H) Neck:

- no scars, masses, visible lymphadenopathy, dilated veins, I should examine cervical lymph nodes and JVP

- the OSCE station would be either:
  1) anterior: examine anterior, lateral, lung apex, trachea, apex beat
  2) posterior: examine posterior, lateral, lung apex, trachea, apex beat
  3) everything

Focused RS: anterior chest, posterior chest, lateral chest, trachea, lung apex, apex beat

Inspection, Palpation, Percussion, Auscultation

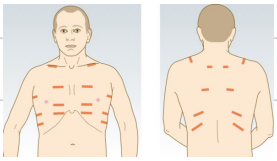
A) Inspection:

i) at the foot of the bed: i. first ask the patient to take a deep breath ii. normal elliptical shaped chest with nipples in line iii. no deformities like barrel chest, pectus carinatum.. iv. symmetrical bilateral breathing movements v. abdominothoracic pattern of breathing with inspiration longer than expiration vi. no use of accessory muscles like trapezius,... vii. not tachypneic and not in respiratory distress viii. no attached lines...

2) at the right side of the patient: i. no scars (look under pectoral fold as well) ii. no masses
iii. normal hair distribution iv. no dilated veins v. pulsations (look closely)
vi. no use of accessory muscles or muscle retraction so patient isn't in respiratory distress
* don't forget to ask the patient to raise his hands to inspect lateral chest
* when inspecting posterior chest don't mention pulsations
* if you're examining posterior chest, ask the patient to hug a pillow (يحتضن) → during all 4 parts of the posterior chest examination

inspec. palp. perc. auscul.

B) Palpation:
* before palpation ask if there is any pain, warm your hands
1) general continuous palpation for: masses, tenderness, subcutaneous emphysema * maintain eye to eye contact
2) trachea: i) deviation * by index finger, tell the patient it is painful
ii) cricosternal distance * (normally: 5 cm or 3 fingers)
iii) tracheal tug * feel carotid pulse to inspect the tug with systole
3) apex beat: * use the torch first to check if its pulse is visible
* localize apex beat and its character (e.g., 5th intercostal, mid clavicular, gently tapping)
* you can ask the patient to tilt onto his left, if you can't feel the apex beat
4) right ventricular heave: * check the heave by your hand's heel (on lower left sternal border)
no right ventricular heave * ask the patient to hold his breath on end of expiration
* by the tip of your fingers, you can comment if there is palpable P_2 or not (not necessary)
5) tactile vocal fremitus: * ask the patient to say "ييي, تيتي" as you feel
normal symmetrical bilateral tactile vocal fremitus * don't forget lung apex (supraclavicular) and lateral chest
* anteriorly: lung apex and 3 other locations
lateral chest: 3 locations on mid-axillary line
posteriorly: lung apex and 4 other locations



6) Chest expansion: * anteriorly, 2 levels are needed
normal symmetrical bilateral chest expansion posteriorly, 1 level of measurement is needed
* you can ask the patient to do expiration, then you can place your hands, then ask him to take a breath

C) Percussion:

normal resonant percussion note

* don't forget to percuss the apex and lateral chest
* when percussing the clavicle, tell the patient it is painful
* percussion on the clavicle is done with your finger directly
* locations of percussion are in the intercostal spaces, in the same positions mentioned previously + clavicle in anterior chest
* remember: when palpating, percussing or auscultating posterior chest ask the patient to hug a pillow or ...

D) Auscultation:

1) General:

i. warm the diaphragm of the stethoscope
ii. ask the patient to take a deep slow breath from his mouth as you auscultate
iii. don't forget to auscultate the lung apex and lateral chest wall
iv. auscultation locations are the same as tactile vocal fremitus locations

1) symmetrical bilateral good air entry
2) normal symmetrical bilateral vesicular breathing
3) inspiratory phase is longer than expiratory phase
4) no added sounds like wheezes, crackles or pleural rubs

2) Vocal Resonance:

symmetrical bilateral normal vocal resonance

* ask the patient to say "ييء, ثلاثة" as you auscultate
* don't forget lung apex (supraclavicular) and lateral chest

3) Whispering Pectoriloquy:

absent whispering pectoriloquy

* ask the patient to whisper "ييء, ثلاثة" as you auscultate
* don't forget lung apex (supraclavicular) and lateral chest

4) Aegophony:

absent aegophony

* ask the patient to say "E" as you auscultate
* don't forget lung apex (supraclavicular) and lateral chest

I should conclude my examination with examining for pitting edema, signs of DVT (unilateral edema, erythema), erythema nodusom (sarcoidosis), sacral edema, hepatosplenomegaly and ascites

3. Cardiovascular Exam (General CVS + focused CVS + lower limb):

General: RIPE WIPE ABC LOOKS Unique Vitals Face Hands Neck Pulses JVP

focused: Inspection, palpation, auscultation

lower limb: Inspection, palpation

A) RIPE WIPE:

RIPE WI

P: position (reclining on a bed 45° degrees)

E: exposure (from neck to umbilicus)

* I have all my equipment

B) ABC:

A: alert, conscious, oriented towards 1) person 2) place 3) time

B: breathing effortlessly, not in respiratory distress (shallow breathing)

C: color (normal color, no jaundice, pallor)

C) LOOKS:

L: lines (IV lines, cannula, foleys catheter...)

O: oxygen (oxygen masks, inhalers, nebulizers...)

O: odour (no abnormal odour)

K: body habitus (weight only)

S: symmetry of the body

* no need for K: (body habitus) except for weight: patient is obese, normal weight,..... patient is not cachectic

D) Unique:

patient is engaged in conversation, speech is of normal tone and pace, no petechial rash, no signs of Marfan, turner, ankylosing spondylitis or cyanosis

E) Vitals:

BP, Heart rate, RR, Oxygen saturation, Pain score, Temperature, BMI + urine analysis

F) Face:

- eyes: no xanthelsmata, no corneal arcus (use torch), no pallor or petechiae in conjunctiva, no jaundice
  fundoscopy: roth spots (infective endocarditis), proliferative diabetic neuropathy (new vessels), HTN complications..
- no malar rash
- mouth: no lip cyanosis, no angular stomatitis
  good oral hygeine, no central cyanosis (check floor of mouth), no high-arched palate, glossitis or beefy tongue

G) Hands:

- no Osler's nodes, no Janeway lesions, no xanthomata
- no peripheral cyanosis, no tar-staining, no splinter hemmorhages
- no palmar erythema, petechial rash or skin crease pallor
- tremor: - fine tremor - coarse tremor
- palpation: *before palpation ask if there is any pain
  temperature, sweating, capillary refill, clubbing

* Osler's nodes appear distally in fingers
* Janeway lesions appear on palm
* Xanthomata appears on dorsum of hand

H) Neck:

- no scars, masses, or dilated veins, just mention: I want to examine JVP and lymph nodes

I) Pulses: comment on rate, rythm, volume, character, normally compressable *bilaterally

i) Radial pulse: a. rate, regular rythm, normally compressable *bilaterally
b. radio-radial delay not present
c. radio-femoral delay not present
d. no collapsing pulse *ask the patient if they're in pain before raising their arm
e. no pulse deficit *auscultate for heart rate from apex for 1 min, then measure radial pulse for 1 min., <10 bpm difference is normal

ii) Brachial pulse: a. rate, regular rythm, normal volume, normal charcter, normally compressable + bilateraly

iii) Carotid pulse: a. rate, regular rythm, normal volume, normal charcter, normally compressable + bilateraly

b. auscultate for carotid bruits + ask the patient to hold on inspiration

- mention that you should examine: femoral pulse, popliteal pulse, posterior tibial pulse and dorsalis pedis pulse

J) JVP:

i. from the right side of the bed, ask the patient to look to his left

ii. using the torch, locate JVP pulses between the 2 heads of sternocleidomastoid

1) inspection: 2 visible inward waves

2) palpation: upon palpation, it was impalpable + ask the patient if he is in pain

3) special manouvres:

a. upon applying pressure at the root of the neck, JVP was unseen + tell the patient it might be painful

b. hepatojugular reflex positive (JVP should increase) + apply pressure for 10 seconds, tell the patient it might be painful

c JVP decreases with inspiration and increases with expiration + tell the patient to take a deep breath

d. ask the patient to change posture; JVP increases when lying supine and decreases when sitting

+ ask the patient to change his posture, keep your finger on JVP to localize it as he changes his posture

4) measure and comment:

a. measurement: your finding +5 (e.g., 3+5= 8 cmH_2O)

b. JVP is normal 8 cmH_2O with normal character

+ when measuring JVP it is better to put a pillow under patient's head

+ if the OSCE station was for JVP alone, end your examination with:

I want to end my exam by checking for other signs of fluid overload like limb edema, sacral edema, ascites, base of the lung crackles

Focused CVS:

A) Inspection:

1. from foot of the bed: i. ask the patient to take a deep breath ii) normal elliptical shape with no deformities like pectus carneatum
iii) symmetrical
iv) moves symmetricaly with respiration and not in respiratory distress
v) Lines

2. from right of the bed: i) normal hair distribution ii) no masses or skin lesions
iii) no scars like infraclavicular scar, . . .
*ask the patient to raise his hands to look for thoracotomy scars
iv) no dilated veins v) no visible bulges for implanted devices
vi) visible pulsations and apex beat
* using the torch, search for any visible pulsations, then at the area of the apex beat just try to localize it with the torch, then comment: apex beat pulse was seen at 5rt intercostal midclavicular

B) Palpation:

* before palpation ask if there is any pain, warm your hands

1. general quick palpation: no masses, tenderness, surgical emphysema
2. Go to the area of the apex beat and comment: this is the general area of the apex beat then localize it with 2 fingers, then comment: apex beat area + character (gently tapping)
3. Heaves:
no right or left ventricular heaves * 3 places: at apex, right and left lower parasternal
* ask the patient to hold his breath on expiration
4. Thrills:
no palpable thrills * palpate for thrills on the 4 valvular areas + right lower parasternal area

C) Auscultation:

i. feel the carotid pulse as long as you're auscultating

ii. with the diaphragm auscultate the aortic area (right 2nd intercostal)

iii. with the diaphragm auscultate the carotid for aortic stenosis radiation

↳ for this step, ask patient to hold their breath on expiration

iv. auscultate pulmonic area (left 2nd intercostal) with diaphragm

↳ for this step, ask patient to take a deep breath, to hear splitting

v. auscultate tricuspid area (left 4th intercostal) with diaphragm

vi. auscultate mitral area (left 5th intercostal, mid-clavicular) with diaphragm

vii. auscultate mid-axillary area with diaphragm for mitral regurgitation radiation

viii. with the bell auscultate mitral area for S_3, S_4, mitral stenosis

ix. ask the patient to tilt to their left, and hold their breath on expiration

x. auscultate with the bell, the mitral area again

xi. return the patient to normal position

xii. auscultate the tricuspid area with the bell as well

xiii. ask the patient to lean forward, and hold their breath on expiration

xiv. auscultate Erb's area (left 3rd intercostal) with the diaphragm for aortic regurgitation

xv. auscultate aortic area again for aortic regurgitation

xvi. Comment:

normal S_1 and S_2, normal physiologic splitting of S_2, no added sounds like S_2, S_3 or opening click, no murmurs

I should conclude my examination with auscultation of lung bases for crackles, bruits, ascites, hepatosplenomegaly, sacral edema, lower limb swelling, ulcers and pulses

Lower Limb Examination:

RIPE WIPE

position: 45° on a bed supine, dependent

exposure: abdomen + lower limb

A) Inspection:

1. Face and Neck:

- eyes: no xanthelsmata, no corneal arcus (use torch), no conjunctival pallor, no ptosis, myosis
- no anhydrosis *feel both sides of the patient's face to check for anhydrosis
- Hoarseness of voice, bovine cough
- lip cyanosis, angular stomatitis, floor of mouth (central) cyanosis, glossitis
- dilated veins in neck, shoulders, anterior chest
- abnormal pulsations in neck
- examine carotid pulse

2. Hands:

- tar staining, Peripheral cyanosis, koilonychia, purple discoloration of the fingertips, pits and healed scars in the finger pulps
- calcinosis, visible capillary loops at nailfold
- wasting of the small muscles of the hand
- examine radial and brachial pulses
- measure blood pressure in both arms

3. Lower limb:

i. color changes ii. hair distribution iii. swelling iv. dilated veins
v. thin shiny skin vi. nails (thick, brittle, onychomycosis) vii. ulcers
viii. between toes for fungal infection ix. heel for ulcers x. mottling xi. eczema
xii. pressure socks (present or not) xiii. cardiac scars (CABG)

xiv. hemosiderin and lipodermatosclerosis (non-pitting edema)

xv. venous guttering xvi. muscle wasting

+ for ulcers: site, size, shape, margin, depth, base, surrounding skin

* for venous guttering, perform Buerger's test (raise foot 45°: guttering, then hang foot out of bed: reactive hyperemia) 2 min.

* for muscle waisting, measure both legs (move 10 cm from tibial tuberosity, then measure diameter and compare)

B) Palpation:

* before palpation ask if there is any pain, maintain eye to eye contact (for tenderness)

- temperature, tenderness (especially calf), capillary refill
- edema (level of pitting)

* press against a bone to see level of pitting + compare circumference of the legs by moving 10 cm from tibial tuberosity, then measuring circumference and comparing

- mention that you should measure ABPI and do Homans' sign (Homans' sign: pain in the calf upon dorsiflexion)
- pulses:
  a. femoral pulse: at mid-inguinal point + auscultation for bruits
  b. popliteal pulse: normally faint (Knee at 30° degrees)
  c. posterior tibial pulse
  d. dorsalis pedis pulse

* rate, rythm, normally compressable

End your examination with examining the abdomen:

1 inspection for visible pulses, mottling

2. palpation: * ask the patient if they are in pain
   - palpate over the area of the abdominal aorta at the level of the umbilicus for palpable AAA
   - if you feel a pulse: place the fingers of each hand on either side of it and if the fingers move apart with each pulsation, the pulse is expansile

3. auscultation:
   - auscultate at the level of T12 (above umbilicus) for a bruit due to stenosis
   - auscultate at the level of L2 bilaterally for renal arteries bruits

*** DVT *** ⟶ * can be a station alone, or with the lower limb examination

- General look
- patient is stable
- breathing (breathless or not)
- vitals
- DVT risk factors (leg casts, pregnancy...)
- inspection: * ask the patient to stand
    1. skin color
    2. swelling (and its level)
    3. venous dilation
- palpation: * before palpation ask if there is any pain, maintain eye to eye contact
    1. tenderness
    2. temperature
    3. edema (pitting or non-pitting, level, comparison...)