

م/س نظام  
ميدام

M/S System  
mid exam

26/2/2011

- Q1) all of the following antibiotics are used for treatment of acne except:-
- a - clindamycin.
  - b - erythromycin.
  - c - metronidazole.
  - d - sodium sulfacetamide.
  - e - neomycin.
- Q2) which of the following is restricted for severe cystic acne resistant to standard treatment:-  
⇒ Isotretinoin.
- Q3) which of the following is an extract of Mandragora officinarum, and is cytotoxic  
⇒ Podophyllum Resin.
- Q4) all of the following are true about tubercurarine except:-
- a - a poison extracted from south america.
  - b - used in hunting animals.
  - c - eating animals hunted by it. cause muscle weakness and paralysis.
  - d - it's an antagonist for nicotinic receptor.
  - e - its action can be reversed by anticholinesterase.
- Q5) all of the following are true about Osteoporosis except:
- a - increase bone fracture.
  - b - decrease bone mineralization.
  - c - decrease OPG activity.
  - d - estrogen loss result in increase production of TNF.

Q6) which of the following, the pathognomonic histologic feature of which is mosaic pattern of lamellar bone:

⇒ Paget disease.

Q7) The most common agent that cause acute Osteomyelitis is.

a- Staphylococcus aureus.

b- E. coli

c- Salmonella.

d- anaerobes.

e- group B streptococci.

Q8) a 15 year old boy with localized pain in the proximal tibia that is relieved by aspirin. microscopic examination revealed a trabeculae of woven bone surrounded by osteoblasts. and X-ray image showed a central radiolucent area.

Then the boy have...

⇒ Osteoid Osteomas.

Q9) a 15 year old boy with a soft tissue mass projecting in his proximal tibia. The mass have osteoid, cartilage, and fibrous tissue in varying amounts. Radiograph show a large destructive mixed lytic and blastic mass with indistinct infiltrating margins.

Then the boy have...

⇒ Osteosarcoma.

Q10) which of the following is misslinked :-

- a- Osteochondroma  $\rightarrow$  both EXT gene inactive.
- b- Maffucci syndrome  $\rightarrow$  multiple condromas.
- c- chondrosarcoma  $\rightarrow$  pelvis.
- d- chondroma  $\rightarrow$  head.
- e- .....

Q11) all about giant-cell tumor are true except :-

- a- for individual of 10-20 years.
- b- locally aggressive.
- c- rare metastasize.
- d- purely lytic.
- e- in the epiphysis of long bone.

Q12) metastatic disease that is blastic, is commonly from:

- a- lung
- b- melanoma.
- c- breast.
- d- prostate.
- e- kidney.

Q13) which ~~event~~ happen through firing stage of action potential :-

- a-  $\text{Na}^+$  diffusion is the lowest of all times.
- b-  $\text{K}^+$  diffusion is the highest of all times.
- c- represent absolute refractory period.
- d-  $\text{Na}^+$  channels are inactive.
- e- more than one of the above.

Q14) In a skeletal muscle, all happen as a result of binding of Ach to its receptor except:-

- a- activation of chemical gated  $\text{Na}^+$  channels.
- b- " " voltage "  $\text{Na}^+$  channels.
- c- " " chemical "  $\text{K}^+$  "
- d- " " voltage "  $\text{K}^+$  "
- e- depolarization of sarcomere.

Q15) about movement of AP through nerve fibers, which is true:-

- a- The velocity is the highest in myelinated large fibers.
- b- The velocity increase, as diameter decrease.
- c- continuous conduction is faster than saltatory conduction.
- d- generation of AP happens by  $\text{Na}^+$  channels covered by myelin sheath.
- e- more than one of the above.

Q16) All are true about muscle summation except:-

- a- tetanization is a wave summation.
- b- motor unit summation happens by increase number of muscle fibers involved.
- c- Treppe phenomena (staircase) is a wave summation.
- d- increase amplitude of contraction done by increase number of muscle fibers involved.
- e- wave summation happens as excitation happens while muscle is in simple muscle twitch.

Tuberculoïd  
Mild  
↓ AFB  
Lepromin +ve  
n. sens

Lepromatous  
Severe  
↑ AFB  
-ve  
X n. sens.

Q17) all are true about exfoliative toxin except

- a- produced by few strains of *stap. aureus*.
- b- " " *streptococcus pyogenes*.
- c- Scalded skin syndrom.
- d- blisters containing fluids.
- e- produce multi-system kidney failure

Q18) which of the following is associated with cutaneous black lesions:-

→ *Bacillus anthracis*

Q19) which of the following can infect nails:

- a- *Candida*.
- b- *Trichophyton*.
- c- ... coccus
- d- (a + b)
- e- all (a + b + c).

Q20) all are true about *Varicella* except:-

- a- primary viremia disseminate virus to RES.
- b- secondary " " " " target organs.
- c- antibodies are produced before appearance of skin rash.
- d- reach sensory ganglia by nerves or blood stream.
- e- ...

Q21) papilloma and molluscum contagiosum share which of the following.

- a- site of replication.
- b- Tissue Tropism.
- c- severity of infection.
- d- ...
- e- ...

Q22) which of the following is true:-

- a- HHV-6 cause mouth-foot-mouth disease.
- b- west nil virus result in epidemic. in the form of myoclonus.
- c- measles replicate locally in lymph nodes.
- d- epidermodysplasia Verruciformis infect immature erythrocytes
- e- ----

Q23). ---- micro-azni.  
about measles !!  
(

Q24) about anterior fontanel

- a- diamond shaped.
- b- close at 18 month age.
- c- located between metopic, coronal, and lambdoid suture.
- d- superior to <sup>superior</sup> sagittal sinus.
- e- ----

Q25). In relation to sternomastoid, which is wrong:-

- a- nerve supply, it pass deep to prevertebral fascia.
- b- rotation of face to opposite side.
- c- lesser occipital nerve move on its posterior border.
- d- invested in investing cervical fascia.
- e- external jugular vein is superficial to it.

Q26) about expression muscles, which is wrong:-

- a- corrugator supercilli cause transverse wrinkles.
- b- paralysis of Orbicularis Oculi cause narrowing palpebral fissure
- c- middle fibers of Buccinator attached to mollos.
- d- paralysis of Buccinator will cause food to accumulate in vestibule of mouth.

Q27) about cutaneous innervation, which is wrong:-

- a- prominence of cheek: maxillary nerve.
- b- upper lip: Frontal.
- c- angle of mandible: greater auricular.
- d- bridge of nose: ophthalmic nerve.

Q28) ulcer of median part of upper lip will cause enlargement of:

- a- Submandibular lymph nodes.
- b- Submental " "
- c- preauricular " "
- d- occipital " "
- e- all of the above.

Q29) the muscle that separate between carotid and maxillary triangle is  
⇒ omohyoid.

Q30) all enter through sphenoid bone except:-

- a- mandibular nerve.
- b- maxillary nerve.
- c- internal carotid artery.
- d- optic nerve.
- e- ophthalmic artery.

Q31) all are branch of first part of maxillary artery except:-

- a- middle meningeal.
- b- inferior alveolar.
- c- accessory meningeal.
- d- deep auricular.
- e- greater palatine.

Q32) about Cavernous sinus, which is wrong.

a- nerve supplying lateral rectus of eye found on its lateral wall.

b- receive anteriorly ophthalmic veins.

c- communicate with pterygoid plexus through oval and lacrum.

d- sphenoidal air sinus are found medial and inferior to it.

e- ---

Q33)

a- elevation of upper eyelid, due to stress condition.

b- ---

c- ---

d- ---

e- ---

Q34) adduction of eye ball is done by  
⇒ medial rectus.

Q35) about lateral pterygoid muscle, which is wrong:-

a- inserted into TMJ capsule and mandibular neck.

b- lingual and inferior alveolar appear from its lower border.

c- medial to mandibular nerve.

d- depress the mandible.

e- attached to greater wing of sphenoid.

Q36) about Vertebral Column, which is true:-

a- thoracic region can do rotation.

b- rib 4 articulate with vertebral 5 and 6.

c- ---

d- ---

e- ---



Q37 ... Q40 → which is mismatched.

i will mention what i remember and put if true or false :-

- Lumber puncture : Level of L3, L5 (✓).
- foramenium transversarium of G6 : vertebral artery (✓).
- posterior longitudinal ligament : inside vertebral canal (✓).
- infrahyoid muscle : C1, 2, 3 nerves (✓).
- common carotid bifurcate : C4, C5 (X).
- transverse cervical nerve : anterior aspect of neck (✓).
- Lacrimal gland : optic nerve (X).
- pterion : middle meningeal artery (✓).
- median atlantoaxial joint : plane synovial (X).
- pain in lower molars : maxillary nerve (X).
- chorda tympani : lingual nerve (✓).
- otic ganglia : behind neck of mandible (✓).

2009 2009

Musculoskeletal System  
Midterm 17

1) Max. simple muscle twitch:-

- a. Na<sup>+</sup> channels
- b. K<sup>+</sup> channels
- c. Cl<sup>-</sup> channels

\* 2 of them are correct

c. Sarcomere is shorter than its. on max state.

2) ~~PPV~~ & Papilloma. → similar to

a. Pathogenesis

b. Host range. ---

3) HSU. → not correct :-

- a. maculo papular
- b. Vesicles. ---

⊙ Billonary appearance of chromatin from cytoplasm <sup>in nucleus</sup>

4) Osteoblastic metastasis into lumbosacral. Caused from

a. ~~breast~~ <sup>uterine</sup> Ca.

b. Giant cell tumor.

c. Lung Cancer.

⊙ prostate Cancer

⑤ Gluta free :-

Dermatitis Herpetica

⑥ Morphine → Ketorolac.

⑦ Aspirin → ~~a~~ small dose - antiplatelet. 81g.

b. Ketosis.

c. selective COX-2

⑧ Colchicine → microtubule polymerization.

⑨ not suitable combination →

a. Gold —

b. — ↑ Blood pressure.

⑩ Not suitable →

~~Release of histamine~~ → Racemine.  
Autonomic ganglia

⑪ most common site of osteoma :-

a. Pelvic bone.

b. skull bone.

c. small bone in feet & hands

d. Femoral bone.

⑫ Urticaria → dermal edema.

⑬ Diffused Isthmia → <sup>bit</sup> can tolerate B.T

Prevalence cell mediated

immunity a. anelom?

(14) Varicella Virus.  $\rightarrow$  not correct

a. 2 phases to spread.

b. induce A.b's in late stage. (not on the onset of entry)

c.

(15) The prior way that occur in skeletal muscle contraction.  
Release of  $Ca^{2+}$  from ER.

(16) Saltatory summation:-

a. unmyelinated fibers

b.  $\uparrow$  velocity.

c. jumping between nodes of Ranvier

\* 2 of the above correct.

(17) Testosterone activation (convert to active form)-

Acyllic Acid

(18) not ~~related~~ related to <sup>gonad</sup> activity of PAPA.

~~a.~~  $\downarrow$  melanogenesis.

b. lymphoma.

(19) The highest Conc. of  $K^+$  is :-  
Falling state. ✓

(20) ~~COX-1~~ - COX-2 - COX-2 inhibitor.  
Cause Cardiovascular disease.

(21) Osteosarcoma - most common  
x (20-30) Yrs. old.  
(10-20) Yrs old. ✓

(22) Related to Denervation Atrophy

(23) not correct. ~~is a middle arm~~ Brachial A.

a. Cat. to median N.

X. Cat. to Biceps.

c. Good pulsation over the arm.

(24) Ins. of Coracobrachialis - not correct.

X. Muscularcutan pierce deep fascia

b. Median N. from Cat. to Brachial A. medial side

c. Ulnar N. pierce Deep fascia

d. Radial N. deep fascia

(25) Cut wound on the wrist → on median N. side. — 2 tendons. :-

a. Palmaris longus & Flexor Carpi Radialis

b. Flexor Carpi Radialis & Superficialis

c. Superficialis & profundus

~~d. (a + b)~~

e. All of the above.

(26) Damage of oculomotor N. → not correct:  
eye down & out.  $\angle \oplus$ .

(27) Candida Albicans :-

a. ~~Hair~~ Nails

b. Skin

c. Hair

~~d. (a + b)~~

e. All of the above.

(28) ~~is~~ — spiralis — is not correct,

a. Cause fever  $\rightarrow$  ~~is~~ <sup>is</sup> ~~is~~ <sup>is</sup> fever.

b. Phosphatase

? ~~c. Basophils~~

(29) Best of Propionibacterium Acne -

Tetracycline

(30) Group B. Hemolytic - not true

~~a.~~ Catalase +ve? or coagulase.

b. pyrogenic

c. necrotic vesicle

d. cellulitis

(31) Salmonella → SCD

(32) ↑ Alkaline phosphatase → ↑ osteoblastic Activity

(33) not correct in Referred to summation

a. ↑ muscle — ↑ contraction

~~b.~~ tetany — motor unit summation

c. stimuli — 2nd one must occur ~~to~~ with S<sub>1</sub>  
(S<sub>1</sub>) (S<sub>2</sub>)

d. Motor unit summation → ↑ Amplitude.

e. staircase

(34) St. basale - not correct

(7)

a. Basophilic.

b. Desmosomes & Hemidesmosomes

~~c. Phagocytic effect~~

d. Nerve ending.

(35) Not suitable combination.

Cervical Ppp — ~~C8~~ C8, T1 <sup>not</sup>

(36) Not suitable combination.

Flexor of elbow — C7,8.

(37) subacromial Bursitis not correct.

1. For test.

2.

(38) Trapezius — not correct.

a. test by abduction. & we compress against Pt.  
~~b. Rotation on shoulder joint~~

(39) Bicipital Groove → Not innervated by

a. Musculocutaneous N.

~~b. Upper subscapular.~~

c. Lower subscapular.

d. Thoracodorsal N.

e. Lat. Dorsal N.



40) Not Related to Head lice:

a. Fleas on U.U. light.

b. Can't transmit disease

c. Suck on blood.

41) Can transmit  $\mu$  between adult? ~~chance~~

c. school children

41) Outcropping muscle. <sup>lat. & post.</sup> — not correct:

3 muscle innervated from deep branch of radial

42) Embryo — cleft lip. — not correct

formed from connection between ecto-neural

& Maxillary

43) Sple —> not correct.

mober ?

44) ? Neural tube —>

~~48) st. basilar not correct~~  
~~Receptor U.~~

45) not correct —>

len - p. unca

47) Not correct →

~~Apocaine~~ — Cheliceres

47) Not correct — Combination

ulnar N. + inf. ulnar collateral A.

48) A laudens. — ~~not~~ B.B.B.

↑  
Atherosclerosis

49) Rubella →

Diagnosis is important as it's subclinical

50) Not correct →

Radial A. above Flexor Pollicaris

51) Dantrolene — Ryanodine R.

52) Staph. aureus → 6. 18 species on R. Vancomycin

History ~~4~~ Histo → 5

MED → 30 → 1  
NLPH → 30 → 2  
Giz →

Physio → 2

Pharma → 3

Patho → 2

Questions :-

1) One of the following statements about  $Na^+$  channels is not true :-

a. Voltage dependent channels are activated at a higher rate than  $K^+$  channel during AP.

b. Chemical gated channels can be activated by  $Na^+$ .

c. Voltage dependent channels are closed and not capable open during the falling phase.

d. They transform to the state of closed and open the rise of the potential stage.

e. Voltage dependent channels become closed at threshold potential.

Question

2) The highest conc. of  $K^+$  in plasma membrane during AP is during

a. Falling phase.

b. Threshold.

c. Before threshold.

d. During firing stage.

e. At the peak of AP.

3) One of the following regarding saltatory conduction in nerve fibre is correct

a. Take place in non-myelinated nerve fibre.

b. Higher velocity of conduction due to the fact we are skipping certain parts of membrane.

c. Involve jumping of signal from pre synaptic membrane to post synaptic membrane.

d. Refer to the speed of an AP from one Schwann cell to another Schwann cells.

4) At N-M junction the release of NT from axon terminal  
a. Results after the activation of ~~the~~ <sup>voltage</sup> dependent  $Ca^{2+}$  located at the terminal buttons. (~~stimulation~~)

b. Induce changes in the permeability of SK muscles membrane to  $K^+$  ions.

c. Activate the diffusion of  $Na^+$  at the ~~new~~ muscle membrane resulting in endplate potential.

d. Non of the above

e. Both a & c

5. Relaxation in smooth muscles:

a. Inactivation of phosphatase enzyme

b. Dephosphorylation of myosin

c. Formation of  $Ca^{2+}$ -calmodulin complex

d. Activation of Tyrosine Kinase

e. Non of the above

Answers: 1) e 2) a 3) b 4) c 5) b

Done By:

Omar Abu Su'ud

# Musculoskeletal Lab

## Exam

22 anatomy lab.  
3 physio lab  
3 skin lab  
2 patho lab.

### Patho Lab

Q1) a irregular dark red-black hemorrhagic mass in a bone  $\Rightarrow$  giant cell tumor

[Picture of hemorrhagic tumor in slides]

Q2) a microscopic picture, what is the tumor  $\Rightarrow$  Osteosarcoma

### Skin Lab

Q3) a picture of stratum granulosum, which of the following is incorrect:-

- a- high sulfur content.
- b- responsible for keratinization.
- c- important for skin color
- d- granules embedded in keratin.

Q4) a picture of stratum spinosum, which is incorrect:-

- a- have tight junctions.
- b- have keratin content less than stratum basale.
- c- lamellar bodies appear in its upper layers.
- d- ....

Q5) a picture of sebaceous gland, which is incorrect:-

- a- holocrine gland.
- b- function affected by sex hormones.
- c- empty on hair follicle.
- d- .. .. . epidermal surface.



# anatomy lab

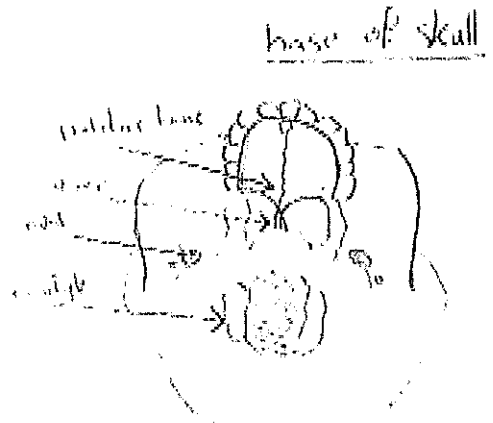
Q9) which is wrong:

- a- 1 is lacrimal bone
- b- 2 is greater wing of sphenoid.
- c- 3 foramen from which ophthalmic artery enter.
- d- 4 is foramen from which occipital nerve enter.



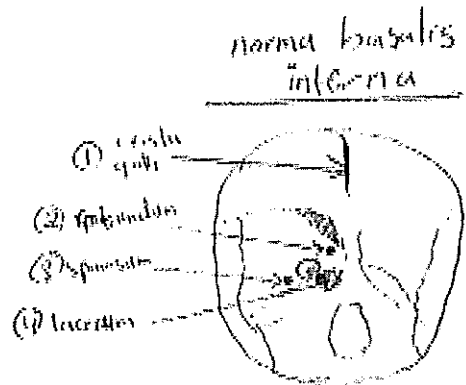
Q10) which of the following is not pointed in picture:-

- a- palatine bone
- b- vomer.
- c- foramen for exit of mandibular nerve
- d- area for articulation the eye of the skull



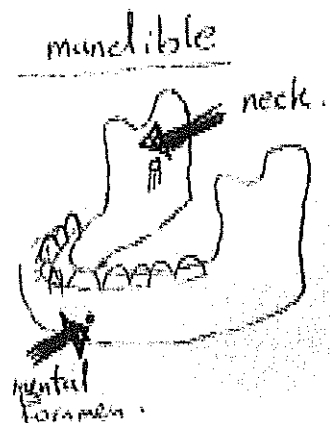
Q11) which is wrong:

- a- 1 is attachment of pulse cerebri
- b- 2 is exit of mandibular nerve
- c- 3 entry of middle meningeal artery
- d- 4 is entry of internal carotid artery.



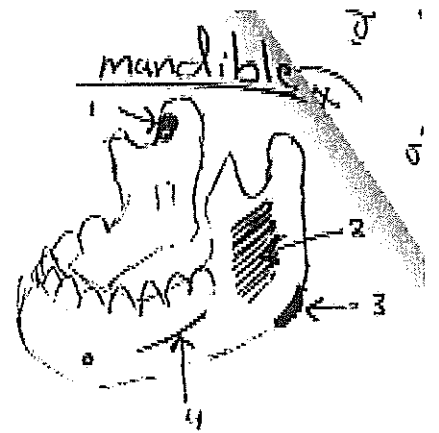
Q12) which is not related to the pointed structures:-

- a- auriculotemporal nerve.
- b- maxillary artery.
- c- mental artery.
- d- inferior alveolar artery.



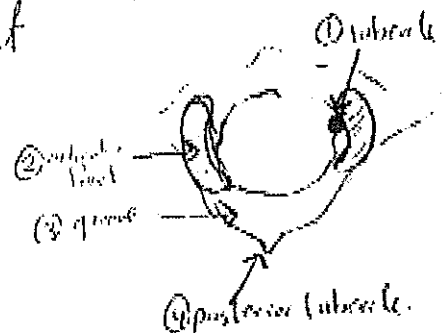


- Q13) which is wrongy
- a - 1 is attachment of medial pterygoid
  - b - 2 is " " " masseter.
  - c - 3 is stylo mandibular ligament.
  - d - 4 is buccinator.



- Q14) which is wrongy
- a - 1 is attachment of transverse ligament
  - b - 2 is related to synovial pivot joint
  - c - 3 is " " 2nd part of vertebral artery.
  - d - 4 is attached to ligamentum nuchae.

atlas superior view



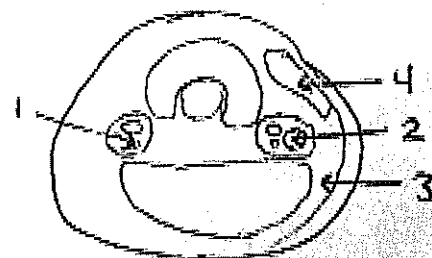
- Q15) which is not pointed in the picture
- a - sternomastoid muscle
  - b - masseter
  - c - anterior belly of digastric.
  - (d)** sternohyoid.

muscle of neck (lateral view)

netter plate 26

- Q16) which is wrongy
- a - 1 is vagus nerve.
  - (b)** 2 is carotid artery.
  - c - 3 is posterior triangle.
  - d - 4 is sternomastoid muscle.

cross section in neck



7) identify the following vertebrae

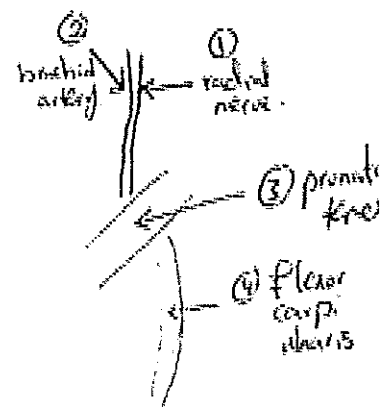
- a- ... lumbar
- b- ... cervical.
- c- typical thoracic
- d- first thoracic

netter  
plate 151

[T6 picture]

18) which is wrong.

- a- 1 is ulnar nerve.
- b- 2 is brachial artery.
- c- 3 is pronator teres.
- d- 4 is flexor carpi ulnaris.



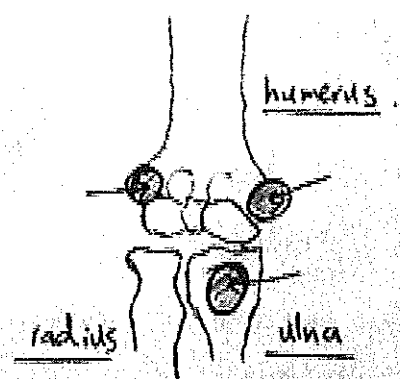
19) which is not pointed in the picture

- a- teres minor.
- b- axillary nerve.
- c- radial nerve.
- d- long head of triceps

netter plate 465

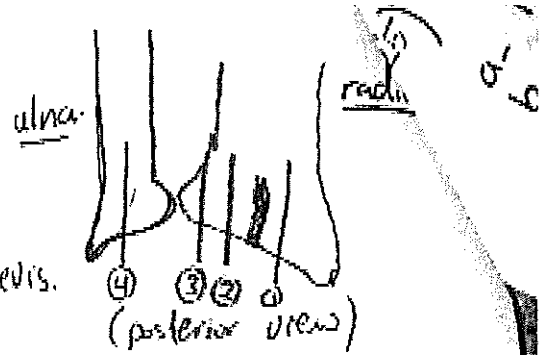
20) which is not attached to the pointed structures :-

- a- brachialis.
- b- flexor carpi ulnaris.
- c- extensor digitorum.
- d- supinator.



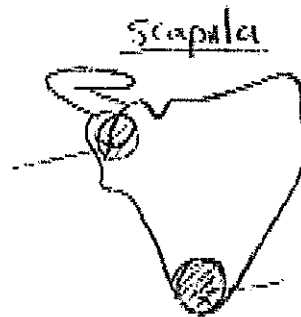
Q21) a question about structures in the compartments below extensor retinaculum :-  
which is wrongy :-

- a- 1 is extensor carpi radialis longus and brevis.
- b- 2 is extensor pollicis longus.
- c- 3 is extensor digiti minimi
- d- 4 is extensor carpi ulnaris.



Q22) which is not related to the pointed structures :-

- a- serratus anterior
- b- pectoralis minor
- c- coracobrachialis.
- d- deltoid



Q23) which is wrongy

- a- 1 is extensor indicis
- b- 2 is extensor pollicis brevis.
- c- 3 is extensor pollicis longus
- d- 4 is extensor carpi ulnaris

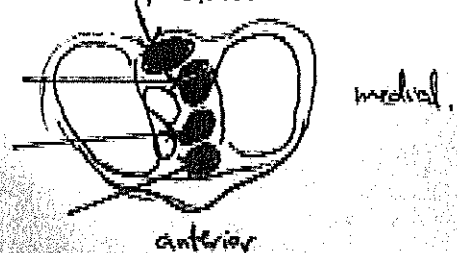
netter plate 429 (right) pic

→ it was pointed to abductor pollicis longus.

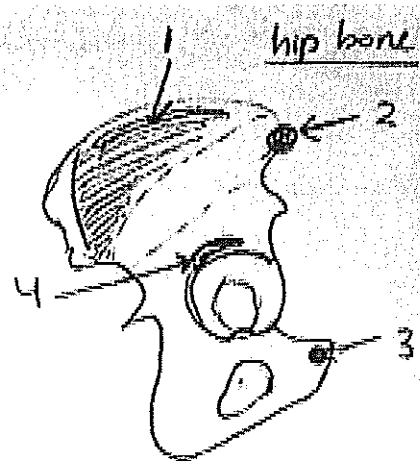
Q24) which is not pointed in the picture.

- a- anterior meniscus
- b- anterior horn of medial meniscus.
- c- posterior meniscus.
- d- posterior horn of lateral meniscus.

netter plate 496  
lower picture  
posterior.

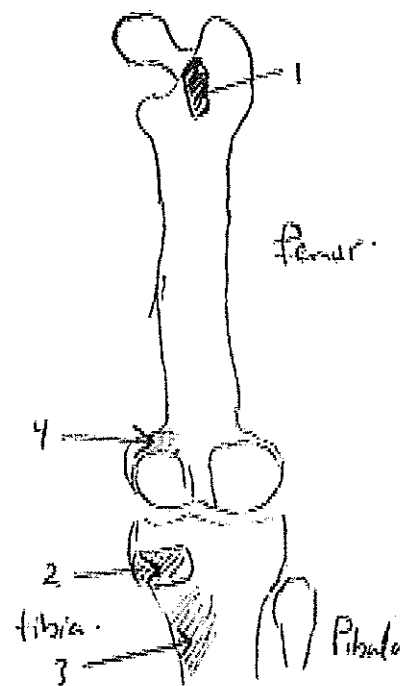


- Q25) which is wrong :-
- a- 1 is gluteus maximus
  - b- 2 is iliofemoral ligament
  - c- 3 is rectus femoris
  - d- 4 is adductor brevis



- Q26) which is wrong -
- a- 1 is quadratus femoris
  - b- 2 is semitendinosus.
  - c- 3 is popliteus.
  - d- 4 is medial head of gastrocnemius

[posterior view]



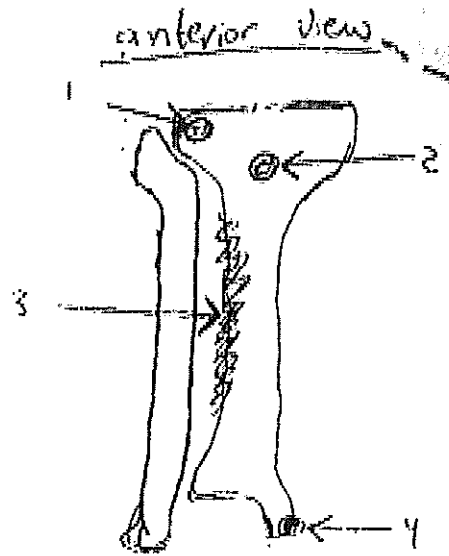
- Q27) which is wrong :-

- a- 1 is short head of biceps. → was pointed to long head.
- b- 2 is piriformis.
- c- 3 is gluteus minimus.
- d- 4 is popliteal artery.

netter plate 490

(28) which is wrong

- a- 1 is tibial collateral ligament
- b- 2 is ligamentum patellae
- c- 3 is tibialis anterior
- d- 4 is deltoideid ligament.



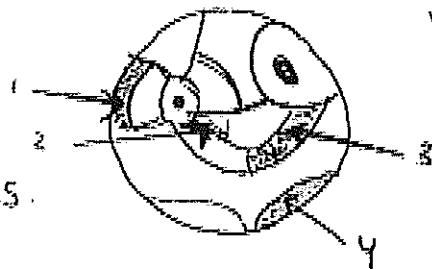
229) which is wrong

- a- 1 is superficial peroneal nerve
  - b- 2 is dorsalis pedis artery
  - c- 3 is tendon of extensor digitorum longus.
  - d- 4 is tendon of extensor hallucis longus
- netter plate 158  
→ was pointed to deep peroneal nerve.

230) which is wrong

- a- 1 is peroneus longus
- b- 2 is posterior tibial vessels.
- c- 3 is flexor digitorum longus.
- d- 4 is medial head of gastrocnemius.

netter plate 150  
cross section in leg.



Done

2009 2255