



PAST PAPERS FOR MSS
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PATHO

1- An anaemic patient is present with severe hip joint pain. He has been on steroids for 30 years and Xray imaging showed a wedged shaped translucency in the head of femur. What would you tell the patient?

- a. It's a complication of chronic steroid usage
- b. There is nothing to worry about, he can just take some pain killers
- c. It's an acute condition and he must be admitted right now
- d. He should rest up and get medication to resolve his anaemia

Ans : a

2-A patient is present with impaired hearing and blue sclera.

Which of the following is right regarding his disease?

- a. Bone denser than usual is another symptom
- b. It is caused by a defected synthesis of collagen type III
- c. Some forms of this disease do not affect normal life span
- d. It is the most common X-linked disease

ans:c

3- A 71-year-old patient came to the clinic and was physically diagnosed with severe kyphosis. An X-ray was done, and it was noticed that she has compression fractures in her vertebrae.

Which of the following is true regarding her case?

- a. Post-menopausal women and senile people are generally more susceptible to this condition
- b. A blood test has to be done to confirm her condition
- c. Lifestyle has nothing to do with this disease
- d. This condition can be treated completely

Ans : a

4- Which of the following is true regarding paget disease?

- a. There is an activation of OPG protein leading to lower osteoclast activity
- b. Mosaic pattern of lamellar bone is pathognomonic
- c. The first phase is called the sclerotic phase
- d. Serum levels calcium and phosphate are abnormal

Ans : b

5- The brown tumor, osteoporosis and osteitis fibrosa are related to:

- a. Osteogenesis Imperfecta
- b. Untreated primary HPT
- c. Marble bone disease
- d. Osteomalacia

Ans : b

6- Most common causes of morbidity and mortality from osteopetrosis are:

- a. Immunologic reactions
- b. Respiratory insufficiency
- c. Leukopenia
- d. Bone fractures and their complications

Ans : d

7- What is the function of OPG?

- a. Blocks NFκB receptor
- b. Blocks M-CSF receptor
- c. Blocks RANK-L, stimulating osteoclast differentiation
- d. Blocks RANK-L, inhibiting osteoclast differentiation

ans : d

8- Which of the following is true regarding lamellar bone?

- a. It is found in the fetus
- b. Fibers are disorganized
- c. Has stronger structural integrity than woven bone
- d. Its formation is rapid

ans :c

9-A 60 years old female patient came to the clinic and was physically Diagnosed with bone weakness .AnX-ray was done ,and it was noticed that she has compression fractures in her vertebrae .Which of the following tests should be done?

- a. Blood test looking for certain enzymes.
- b. Taking a biopsy
- c. MRI
- d. DEXA

ans : d

10--Supernumerary is caused by:

- a. Abnormal fusion between two bones
- b. Abnormalities in homeobox genes, cytokines and its receptors

- c. Abnormal formation of sutures
- d. A single specific gene mutation

Ans :b

11-Which of the following is true about osteocytes?

- a. They are large and multinucleated
- b. They have high metabolic activity
- c. They are mature bone cells
- d. They are essential for bone resorption

Ans:c

12-Which of the following is FALSE regarding bone?

- a. Lamellar bone is the mature bone
- b. Formation of woven bone is much faster than lamellar bone
- c. Both types have similar composition in general
- d. The presence of woven bone in adults is normal

Ans : d

13-Osteogenesis imperfecta can be best described as:

- a. X-linked mutation in collagen I synthesis
- b. Autosomal dominant mutation in collagen I synthesis
- c. Mutation in collagen III synthesis
- d. None of the above

ans: b

14-The most common cause of dwarfism is:

- a. Thanatophoric dysplasia

- b. Dysostosis
- c. Achondroplasia
- d. Osteopetrosis

ans :c

15--A patient was diagnosed with renal failure in early stage. Parathyroid glands are noticed to be stimulated with no hyperplasia. Which if the following may be found in serum?

- a. High levels of Alkaline phosphatase
- b. Low levels of Phosphate
- c. Low levels of Calcium
- d. Low levels of parathyroid hormone(PTH)

Ans : c

16-Which of the following is true regarding paget disease?

- a. Measles virus is the only suspected cause
- b. More than one bone is involved in most cases
- c. Osteoprotegerin (OPG)is stimulated, inhibiting osteoclast's differentiation
- d. A radiograph showing mosaic appearance is pathognomonic for paget disease

Ans: b

17-In contrast to lamellar bone ,woven bone is characterized by being?

- a. More seen in elderly people than younger groups
- b. Seen after complete healing of fractures
- c. More cellular and less linear/parallel than lamellar

- d. Harder in consistency than lamellar
- e. Stronger than lamellar

Ans :c

18- The most common cause of inherited disorders of connective tissue is ?

- a. Achondroplasia
- b. Thanataophoric dysplasia
- c. Osteogenesis imperfecta
- d. Osteopetrosis
- e. Bone dysostosis

Ans: c

19-21-Pott disease of the spine is characterized by ?

- a. Multiple osteophytes
- b. Necrotizing granulomas
- c. Crystals in the lesion aspirate
- d. Involuted subchondral cysts
- e. Pannus formation

Ans: b

20_Which one of the following statements best describe bone structure and its histophysiology?

- a. The osteoid constitutes 85% of the matrix.
- b. Type II collagen is the main protein in matrix
- c. Lamellar bone is less cellular than woven bone
- d. Osteocytes are large multinucleated cells

e. Osteoclasts are small bone forming cells

ans : c

21-Which one of the following statements best describes bone fractures?

- a. Non-displaced fractures are always compound
- b. Simple fractures always communicate with skin
- c. Greenstick fractures occur mainly in mature flat bones
- d. Pathologic fractures are very common in young adults
- e. Compound fractures are most likely displaced

ans:e

22-Which of the following statements best describes acute pyogenic osteomyelitis?

- a. Most cases can be managed by oral antibiotics at home
- b. Sequestrum is the fistula seen in severe forms of acute osteomyelitis
- c. Mycobacteria is the most common cause in adults
- d. Sickle cell disease patients are more likely to have gram negative cocci osteomyelitis
- e. Staphylococcus aureus is the most frequent causative agent

ans : e

23-Congenital dysplasia of bone is characterized by?

- a. Dysostosis such as syndactyly syndromes
- b. Disorganized bone and cartilage due to gene mutation
- c. Abnormal condensation and migration of bone mesenchyme

- d. Disorders of homeobox genes
- e. involves cytokines abnormalities such as bone aplasia

ans: b

24-You evaluated a 3-year-old child who came with history of multiple recurrent bone fractures and hearing difficulty. Examination showed triangular face, broad forehead and blue sclera. This disease is characterized by?

- a. Deficiency of type I collagen synthesis (autosomal dominant)
- b. Fibroblast growth factor receptor abnormalities
- c. Impaired endochondral and intramembranous ossification
- d. Impaired osteoclast activity
- e. "Marble bone" on X-ray

ans: a

25-Which one of the following statements best describes bone tumors?

- a. Chondrosarcoma is the most common malignant primary sarcoma of bone
- b. Primary bone tumors are very common
- c. Benign tumors are more common than their malignant counterparts
- d. Giant cell tumor of bone is an aggressive malignancy with frequent lung metastasis
- e. Codman triangle is a specific radiological feature of osteosarcoma

ans: c

26-A 71-year-old woman presents with sudden severe low back pain.

Physical examination revealed severe kyphosis, while an x-ray of her back reveals a compression fracture of a vertebral body in the lumbar area along with marked thinning of her bones. Serum calcium, phosphorous, and alkaline phosphatase levels are all within normal range. Identify the best statement that describes this disease?

- a. Bone densitometry (DEXA scan) is needed to confirm the diagnosis
- b. Secondary forms are the most common form of this disease
- c. Bone biopsy is indicated to confirm the diagnosis
- d. Uncommon disorder due to enhanced osteoblastic activity
- e. Decreased osteoclast activity is a major etiology

ans :a

27-A 55-year-old male patient came with pathologic fracture of his femoral neck. The surgeon describes the bone as abnormal and similar features are seen radiologically in the whole femur. The histological examination of the fractured bone revealed an abnormal lamellar bone with a characteristic "mosaic pattern". Identify the best statement describing this disease?

- a. Increased badly formed bone due to genetic and environmental factors
- b. Autosomal dominant disorder of collagen type I synthesis

- c. X-linked disorder of collagen type III synthesis
 - d. The osteosclerotic phase is the initial phase of the disease
 - e. Congenital disorder of increased osteoprotegerin (OPG) activity
- ans : a

MICRO

1-Which of the following statements is wrong regarding impetigo?

- a. It is the most superficial infection, so it is not related to any renal problems
- b. It is a highly contagious disease
- c. It is the most common bacterial skin infection in children
- d. It is caused mainly by skin flora

ans : a

2-Which of the following is a real difference between mupirocin and retapamulin?

- a. Retapamulin is effective against group A streptococci while mupirocin isn't
- b. Retapamulin can be associated with local irritation while mupirocin can't
- c. Methicillin-resistant *S. aureus* is sensitive to mupirocin but not to retapamulin
- d. Mupirocin is used systemically while retapamulin is used topically

ans:c

3- What is the most common bacterial skin infection in children?

- a. Cutaneous TB
- b. Nocardiosis
- c. Impetigo
- d. Necrotizing fasciitis

ans:c

4- What makes MRSA infections more serious than other infections?

- a. They are hospital acquired
- b. Their resistance to many antimicrobials
- c. They are more virulent than other strains
- d. None of the above

ans: b

5-Which of the following is FALSE?

- a. Reduced blood flow to the lower limb seen in diabetes or peripheral vascular disease promote type 1 necrotizing fasciitis
- b. Fournier's gangrene is more likely to be polymicrobial
- c. Majority of necrotizing fasciitis occur in extremities and perineum
- d. Group A strep cause a more fatal type of necrotizing fasciitis
- e. An alcoholic patient is more likely to have necrotizing skin infections

ans: a

6- .Which of the following is TRUE?

- a. First presented, none infected diabetic foot ulcers are antibiotic naïve
- b. Peripheral neuropathy causes overflow of blood sugar to the limbs in diabetic foot infection
which increases likelihood of infection
- c. Diabetic foot either can have any of musculoskeletal system infections (cellulitis or fasciitis or osteomyelitis) but usually not together

d. Cellulitis alone is usually not part of diabetic foot presentation as there is no ulceration

e. When necrosis in diabetic foot, obligate anaerobes are unlikely to be present

ans : a

7-Which of the following is correct treatment for gas gangrene?

a. Clindamycin + Penicillin

b. Vancomycin

c. Ampicillin/Sulbactam

d. Oxacillin

e. Amoxicillin

ans:a

8-Retapamulin can be used to treat the following infections;EXCEPT:

a.Infection caused by group A β -hemolyticstreptococci

b.Infection caused by Staphylococcus aureus

c. Infection caused by Methicillin resistant Staphylococcus aureus

d.Impetigo

e. None of the above

ans: c

9-Which of the following is correct? (OM=Osteomyelitis)

a. The presence of a prosthetic joint will less likely aid hematogenous spreading organisms to cause OM

b. MRSA and MSSA are shown to be equally aggressive (virulent)

- c. Countries with better healthcare and access to orthopedics, have less OM than countries with limited healthcare
- d. Direct bone contamination yields hematogenous seeding of the bone causing OM
- e. A patient with vertebral OM from Africa is likely to reveal mycobacterial OM

ans : e

10-Which of the following is the gold standard in diagnosis Pyomyositi?

- a. MRI
- b. X Ray
- c. Blood Culture
- d. CT
- e. PCR

ans: a

11-Which of the following is correct? (OM=Osteomyelitis)

- a. There is no way for us to detect antimicrobial resistance using PCR
- b. X- ray features can be seen within a few days of OM
- c. Normal White cell count Excludes the diagnosis of OM
- d. High ESR or CRP confirms the diagnosis of OM in presence of clinical suspicion
- e. Blood cultures can be negative in the setting of OM

ans : e

12-Which of the following is correct?

- a. Blood sugar control after developing diabetes will have little effect on preventing diabetic foot
- b. Diabetic foot is a single pathology disorder, that can be either cellulitis, osteomyelitis or fasciitis
- c. Blood sugar control after developing diabetes will have no effect on preventing diabetic foot
- d. Gram negative enteric bacteria become an issue in diabetic foot in chronic presentation
- e. Naïve diabetic foot ulcers require broad spectrum antimicrobial therapy

ans : d

13-Which of the following is correct? (OM=Osteomyelitis)

- a. Pseudomonas is becoming increasingly more sensitive to antimicrobials in OM setting
- b. Viruses almost never infect bone
- c. S. pyogenes is most associated with implants or foreign material
- d. K. pneumoniae may be resistant to antimicrobials before or after therapy, but not during
- e. The most common and most aggressive pathogen is S. aureus

ans: e

HISTO

1--Mismatched pair:

- a. Stratum spinosum / Langerhans cells are abundant
- b. Stratum Lucidum / not found in all skin types
- c. Stratum corneum / Dead cells
- d. Stratum granulosum / non-membranous bound lamellar granule

ans : d

2-Apocrine sweat glands and sebaceous glands are similar to Each other in which of the following features?

- a. Location in the body
- b. Association with hair follicles
- c. Their mode of secretion
- d. The produced material

ans: b

3-Which of the following statements is wrong regarding thick skin?

- a. It is found in palms and soles
- b. Its epidermis consists of five layers
- c. Its dermis is thicker than the dermis of thin skin
- d. It has no hair or sebaceous glands

ans:c

4-Which of the following is true about melanocytes?

- a. They store the melanin pigment, so they appear brown in color

- b. They are located in stratum spinosum
- c. They transfer melanosomes to near by keratinocytes
- d. Their proliferation is stimulated by exposure to sun light

ans:c

5-Merkel cells and melanocytes are located in:

- a. Stratum corneum
- b. Stratum granulosum
- c. Stratum spinosum
- d.Stratum basale

ans: d

6-. Thin skin, choose the CORRECT statement:

- a. Contains one type of sweat glands
- b. Usually has a thicker dermis than thick skin
- c. Found on palms and soles
- d. Has prominent epidermal-dermal ridges
- e. Composed of 5 epidermal layers

ans:b

7 Integumentary system, choose the WRONG match:

- a. Arrector pili: supplied by sympathetic fibers
- b. Inner root sheath: continuous with epidermis
- c. Stratum germinativum: stratum basale along with the deepest part of stratum spinosum

- d. Merkel cell: found in stratum basale
- e. Stratum granulosum: contains two types of granules

ans :b

8--Thick skin, choose the WRONG statement:

- a. Composed of 5 epidermal layers
- b. Found on palms and soles
- c. Usually has a thicker dermis than thin skin
- d. Contains one type of sweat glands
- e. Has prominent epidermal-dermal ridges

ans :c

10-Which type of encapsulated nerve ending is located in dermal papillae?

- a. Free nerve endings
- b. Ruffini corpuscle
- c. Merkel's disc
- d. Meissner's corpuscle
- e. Pacinian corpuscle

ans :d

PHYSIO

1)- What happens in the peak of a simple muscle twitch?

- a. Highest concentration of calcium is reached in the cytosol
- b. The permeability of K⁺ is higher than in any other moment
- c. The sarcolemma is in depolarization
- d. neurotransmitters are getting out of vesicles

ans: a

2)- 33-Use these statements to answer the following question.

- 1. Calcium is released from intracellular stores
- 3. End-plate potentials are generated
- 2. Neurotransmitters are released to the synaptic cleft
- 4. T tubules are depolarized

Which of the following represents the first and last steps in excitation-contraction coupling?

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

ans: a

3) Which of the following is true about relative refractory period?

- a. Na channels cannot open under any condition
- b. It precedes the absolute refractory period
- c. Na/K pump contributes to the relative refractory period
- d. Na channels are closed and not capable for opening

ans: d

4)- Which of the following doesn't occur after activation of nicotinic receptors at neuromuscular junction?

- a. Interaction between thick and thick filaments
- b. Action potential at the sarcoplasmic reticulum
- c. Activation of ligand-gated sodium channel
- d. Activation of voltage-gated sodium channel

ans : b

5)- The function of T-tubules is:

- a. Transmission of action potential to the interior of the muscle fiber
- b. Serving as calcium channels
- c. Generation of end-plate potentials
- d. Increasing the surface area for synapses

ans: a

6)- Which of the following does not occur in skeletal muscle contraction?

- a. Phosphorylation of troponin
- b. Generation of end-plate potentials
- c. Splitting of ATP into ADP and Pi
- d. Interaction between thin filaments and cross bridge

ans: a

7)- One of the following channels isn't included in the excitation contraction coupling:

- a. Na⁺ voltage-gated channel
- b. Na⁺ chemical-gated channel
- c. K⁺ voltage-gated channel
- d. K⁺ chemical-gated channel

ans: d

8)- Which of the following is wrong regarding skeletal muscles?

- a. They are striated
- b. They are the only cells which have thick filaments
- c. They act voluntarily
- d. The striation is found due to the presence of sarcomeres

ans: b

9) Which of the following is a true difference between fast and slow fibers?

- a. Slow fibers are smaller than fast fibers
- b. Unlike fast fibers, slow fibers have large amounts of myoglobin which allow them to utilize O₂ and depend on glycolysis
- c. Fast fibers appear more reddish than slow fibers
- d. There is no difference between them in color and composition

ans: a

10) Which of the following is the correct order according to sliding theory?

- a. Detachment, binding, power stroke
- b. power stroke, bending, detachment
- c. Binding, bending, detachment
- d. Binding, detachment, power stroke

ans: c

11)- Which of the following statements is false?

- a. As the overlap between thin and thick filaments located in the same half of sarcomere increases, more tension is induced
- b. The velocity of contraction decreases as the load left by the muscle increases
- c. The sarcomere length in which the muscle produces its maximum tension is called optimal length
- d. By stretching the muscle we decrease passive tension, but stimulation would produce higher active tension

ans:d

12)- Rigormortis is caused by the depletion of which of the following?

- a. Ca^{+2}
- b. ATP
- c. Na^{+}
- d. Thin filaments.

Ans: b

13)—A muscle was studied ,and It was found out that each muscle fiber is innervated by a different nerve fiber. Which of the following is correct?

- a. This is most probably a muscle involved in fine movements
- b. A single motor unit contains many muscle fibers
- c. This muscle is most likely found in the back
- d. None of the above is correct

ans: a

14)- The relative refractory period of an action potential:

- a. precedes the absolute refractory period of an action potential.
- b. refers to the membrane potential at resting state.
- c. is mostly when Na^+ channels are closed and not capable for opening.
- d. coincides (at the same time) with the lowest activity of K^+ channels.
- e. coincides with the firing stage of an action potential.

Ans: c

15)- Which of the following pairs of events are NOT related to each other in skeletal muscle contractile mechanisms:

- a. c-AMP and detachment of myosin heads.
- b. T tubules and transmission of action potentials.
- c. rigor mortis and decreased ATP in sarcoplasm.
- d. exocytosis and increased ACh concentration in cleft.
- e. tetanization and frequency summation.

Ans: a

16)- Decreased generation of motor end plate potentials can result in one of the followings conditions:

- a. activation of chemical gate Na^+ channels at motor end plate.
- b. increased firing rates at the motor neuron.
- c. blocking of acetyl-choline esterase at motor end plate.
- d. blocking of Ca^{++} channels at nerveterminals.
- e. activation of nicotinic receptors at motor end plate.

Ans: d

17)- Of the followings, choose the LAST event that appears during stimulation- contraction

coupling:

- a. release of Ca^{++} from sarcoplasmicreticulum.
- b. action potential at sarcolemma.
- c. generation of endplate potentials.
- d. activation of troponin C.
- e. conduction of action potentials along Ttubules.

Ans: d

18)- Decreased generation of motor end plate potentials can be a result of all the following conditions EXCEPT:

- a. depletion of chemical gated Na^+ channels at the motor end plate.
- b. decreased generation of action potential by motor neurons.
- c. inhibition of chemical gate Na^+ channels at motor end plate.
- d. blocking of acetyl-choline esterase at motor end plate.

e. inhibition of nicotinic receptors at motor end plate

ans : d

19)- Which of the following events does NOT occur at all in skeletal muscle during excitation-contraction coupling:

- a. activation of voltage gated K⁺ channels at the sarcolemma.
- b. depolarization of the sarcoplasmic reticulum.
- c. activation of voltage gated Na⁺ channels at the sarcolemma.
- d. action potential at T tubules.
- e. binding of Ca⁺⁺ to troponin C

ans : b

20)- The absolute refractory period of an action potential:

- a. is during the after hyperpolarization wave.
- b. refers to the membrane potential at resting state.
- c. coincides with the firing stage of an action potential.
- d. coincides (at the ne time) with the lowest activity of K⁺ channels.
- e. is mostly when Na⁺ channels are closed and not capable for opening

ans: e

21)- Which of the following pairs of events are NOT related to each other in skeletal muscle contractile mechanisms:

- a. replacement of ADP with an ATP: detachment of myosin heads.
- b. rigor mortis: decreased ATP in the sarcoplasm.

C. T tubules: transmission of action potentials.

d. fatigue: increased Ach concentration in cleft.

e. tetanization: frequency summation

ans:d

22)- The followings are events during excitation contraction coupling:

1. generation of end-plate potentials

2. activation of chemical gated Na^+ channels

3. activation of voltage gated Na^+ channels.

4. release of Ca^{++} from sarcoplasmic reticulum

Question: The sequence of events above in the correct order

according to their appearance is:

a. 2, 1, 3 and 4

b. 3, 1, 4 and 2

c. 1, 2, 3 and 4

d. 3, 2, 1, and 4

e. 2, 1, 4 and 3

ans: a

23)- Slow muscles are depending MOST for their energetics during their activity on.

a. oxidative phosphorylation

b. creatine phosphate reserves.

c. glycolysis.

MSS -MID

d. ATP reserves.

e. adenylate cyclase

ans:a

PHARMA

1)-All is true about bacitracin; EXCEPT:

- a. Can cause allergic contact
- b. Systemic use can cause nephrotoxicity
- c. It is highly absorbed through the skin, so systemic toxicity quite frequent
- d. It interferes with cell wall and peptidoglycan synthesis
- e. Usually administered in combination neomycin, polymyxin B, or both

ans:c

2) -All the following antimicrobials are usually used topically in the treatment of acne vulgaris; EXCEPT:

- a. Salicylic acid
- b. Metronidazole.
- c. Adapalene.
- d. Clindamycin.
- e. Erythromycin

ans :a

3)- 1-A female is put on isotretinoin she decides to stop the medicine after how much time can she concieve?

- a. 2 months
- b.1 year
- c. 3 years
- d. 1 month

e. 3 months

ans: d

4)- A 65-year-old woman underwent hysterectomy to remove a uterine carcinoma. The anesthesiologist chose thiopental sodium for induction and isoflurane and tubocurarine for maintenance of general anesthesia. The anesthesiologist also administered another drug in order to counteract tubocurarine induced hypotension. A drug belonging to which of the following classes was most likely given?

- a. Muscarinic agonist
- b. Beta-1 agonist
- c. H1 antagonist
- d. D1 antagonist
- e. Cholinesterase inhibitor

ans:c

5)- 46-A 38-year-old patient was admitted to the emergency room with extensive soft-tissue burns. He was semiconscious and was artificially ventilated. His uncoordinated respiratory movements were interfering with the mechanical ventilation. Which of the following drugs was most likely administered to decrease the patient's spontaneous breathing?

- a. Botulinum toxin
- b. Dantrolene
- c. Vecuronium
- d. Neostigmine
- e. Succinylcholine

ans: e

6)- Which of the following is not an anti-fungal?

- a. Clotrimazole
- b. Metronidazole

c. Amphotericin B

d. Ketoconazole

ans:b

7)- Which of the following can be used to treat psoriasis?

a. Acitretin

b. Tacrolimus

c. Synthetic vitamin D derivative

d. All of the above

ans:d

8)- Which of the following drugs is used only topically because of its high toxicity?

a. Itraconazole

b. Isotretinoin

c. Nystatin

d. Amphotericin B

ans: c

9)- Which of the following is wrong about bacitracin?

a. It is frequently used in combination with polymyxin B and neomycin

b. It is greatly absorbed to the systemic circulation

c. It can cause contact dermatitis

d. It works by inhibiting cell wall and peptidoglycan synthesis

ans:b

10)- Which of the following drugs doesn't treat acne vulgaris?

a. Erythromycin

b. Benzoyl peroxide

c. Clindamycin

d. Neomycin

ans: d

11- Which of the following can't be used to treat actinic keratosis?

a. Fluorouracil

- b. Imiquimod
- c. Hydroquinone
- d. Aminolevulinic acid

ans : c

12-Griseofulvin acts by inhibiting:

- a. DNA chain growth
- b. Ergosterol synthesis
- c. Chitin synthesis
- d. Microtubule formation

ans:d

13- Which of the following formulations would most likely cause irritation of the skin?

- a. Tincture
- b. Water-based gel
- c. Lotion
- d. None of the above can cause this condition

ans: a

14- Which of the following is false regarding corticosteroids?

- a. They can cause moon face appearance
- b. When used, adrenal gland is stimulated by positive feedback
- c. Their function is similar to that of tar compounds
- d. They suppress the immune system

ans : b

15-Which of the following can be used to treat perianal warts caused by HPV virus?

- a. Tacrolimus
- b. Valacyclovir
- c. Imiquimod
- d. Terbinafine

ans:b

16)- All of the following are side effects of retinoic acid derivatives except:

- a. Teratogenic
- b. Hepatotoxicity
- c. Depression
- d. Bleaching

ans : d

17)- D-tubocurarine acts by:

- a. producing depolarizing block.
- b. All of the above
- c. Inhibiting reuptake of acetylcholine.
- d. inhibiting the nicotinic receptors at the autonomic ganglia.
- e. Inhibiting the nicotinic receptors at the myoneural junction

ans: e

18) Which of the following muscle relaxants has the maximum duration of action:

- a. Doxacurium
- b. Atracurium

- c. Vecuronium
- d. They all have the same duration of action
- e. Rocuronium

ans: a

19) Which is true about topical application of Clindamycin:

- a. There is no risk of pseudomembranous colitis since it is topically applied.
- b. It works by inhibiting the transcription process.
- c. Allergic dermatitis is very common.
- d. Can be used to treat Acne.
- e. All of the above.

Ans: d

Anatomy

1)which of the following is true regarding the scalp?

- a. The area around the eye is supplied by branches of external carotid artery
- b. Supraorbital and Supratrochlear veins drain directly in to ophthalmic vein
- c. The area behind the auricle is supplied by lesser occipital nerve, a branch from dorsal root of C2
- d. None of the above

ans: d

2) A child had a head trauma ,and the bleeding took the occipital bone shape .Which of the following is wrong?

- a. The bleeding will not reach the upper eyelid.
- b. The damaged blood vessels are exactly beneath the epicranial apenurosis
- c. The hematoma will be localized at this site only
- d. The hematoma is probably located between the two layers of dura

ans : b

3) - A patient can't close his eyes tightly. What is the affected nerve?

- a. Oculomotor nerve
- b. Facial nerve
- c. Ophthalmic nerve

d. B+C

ans :b

4) A patient had a car accident and lost sensation in the area Anterior to the auricle and down in the lower jaw. A fracture in Which of the following can be associated with this case?

- a. Superior orbital fissure
- b. Foramen rotundum
- c. Foramen ovale
- d. Foramen spinosum

ans :c

5) Which of the following doesn't drain directly to cavernous sinus?

- a. Superior ophthalmic vein
- b. Superior petrosal sinus
- c. Inferior petrosal sinus
- d. Superior sagittal sinus

ans : d

6) A patient's angle of the mouth is pulled to the right .Which nerve is affected?

- a. Left facial nerve
- b. Right facial nerve
- c. Left mandibular nerve

d. Right mandibular nerve

ans : a

7) - Which of the following statements is true?

- a. The whole skin of the face is supplied by the trigeminal nerve
- b. The mastoid process is not prominent in the new-borns
- c. The ophthalmic nerve carries the motor portion of trigeminal nerve
- d. Botulinum toxin works by stimulating muscles of facial expression

ans : b

8)- The correct path of maxillary nerve is:

- a. Lateral wall of cavernous sinus > Foramen rotundum > Pterygopalatine fossa > Inferior orbital fissure
- b. Lateral wall of cavernous sinus > Foramen ovale > Infratemporal fossa > Inferior orbital fissure
- c. Lateral wall of cavernous sinus > Foramen rotundum > Pterygopalatine fossa > Superior orbital fissure
- d. Through the cavernous sinus > Superior orbital fissure

ans : a

9)- A fracture in the cribriform plate of ethmoid can lead to the loss of which of the special senses?

- a. Taste
- b. Vision
- c. Hearing

d. Olfaction

ans :d

10) Mismatched pair:

- a. Sphenoid bone / Cavernous sinus
- b. Inferior part of petrous bone / Inferior petrosal sinus
- c. Superior part of petrous bone / Superior petrosal sinus
- d. Ethmoid bone / Transverse sinus

ans : d

11) – Which of the following is true regarding scalp?

- a. If the cutis superficial to the aponeurosis it will not gape
- b. The skin and connective tissue move on the aponeurosis
- c. The subcutaneous tissue is the most dangerous area of the scalp
- d. It is easy to stop the bleeding of a scalp wound

ans : a

12)- Which of the following is wrong about buccinator muscle?

- a. It arises from the maxilla ,mandible, and pterygomandibular ligament
- b. The central fibers decussate at the angle of the mouth
- c. It is pierced by the parotid duct
- d. It is supplied by buccal branch of mandibular nerve

and: d

13)- Which of the following statement is wrong?

- a. The inferior sagittal sinus moves along the inferior border of falx cerebri
- b. The two dural layers separate to form dural folds and sinuses
- c. Falx cerebri is a continuation of the periosteal layer
- d. The free border of tentorium cerebelli is attached to anterior clinoid processes

ans: c

14)- Which of the following is false about scalp?

- a. Injuries in the 2nd layer cause profuse bleeding
- b. 2nd layer is called the dangerous layer of the scalp
- c. Skin, subcutaneous tissue and aponeurosis move as a single layer
- d. Gaps form when there's a cut in aponeurosis

ans: b

15)- Which of the following structures pass through jugular foramen?

- a. Vagus nerve
- b. Hypoglossal nerve
- c. Internal jugular artery
- d. All of the above

ans: a

16) - Which nerve is injured if you can't close your eye properly?

- a. Oculomotor nerve
- b. Optic nerve

- c. Facial nerve
- d. Ophthalmic nerve

ans: c

17)- Vestibulocochlearnerve leaves cranial cavity through:

- a. Carotid canal
- b. Internal acoustic meatus
- c. Superior orbital fissure
- d. Jugular foramen

ans: b

18)- Whichofthe following isnot abranchofthe facialnerve?

- a. The temporal branch
- b. The cervical branch
- c. The mandibular branch
- d. The maxillary branch

ans: d

19)- To enter the cranial cavity, olfactory nerves pass through part of which bone?

- a. Ethmoid bone
- b. Sphenoid bone
- c. Parietal bone
- d. Temporal bone

ans: a

20)- Retromandibular vein is formed by the union of:

- a. Superficial temporal vein and maxillary vein
- b. Supratrochlear vein and supraorbital vein
- c. Deep facial vein and facial vein
- d. common facial vein and posterior auricular vein

ans: a

21)- Superior orbital fissure is found between:

- a. Body of the sphenoid and the lesser wing
- b. The lesser and greater wings of sphenoid
- c. Petrous part of the temporal bone and occipital bone
- d. Anterior and posterior clinoid processes

ans: b

22)- 'Raccoon eyes' are characteristic for haemorrhage in which layer of the scalp?

- a. 1st layer
- b. 2nd layer
- c. 3rd layer
- d. 4th layer

ans: d

23)- Which of the following structures is not found in the mandible?

- a. Mental spines

- b. Crista galli
- c. Mylohyoid groove
- d. Lingula

ans: b

24)- Danger triangle of the face is called so because it transmits blood into:

- a. Cavernous sinus
- b. Carotid artery
- c. Retromandibular vein
- d. Auricular veins

ans: a

25)- The nerve that supplies the skin over the back of the skull is a branch of:

- a. Posterior ramus of the 2nd cervical nerve
- b. Cervical plexus
- c. Mandibular nerve
- d. Facial nerve

ans: a

26) - Which of the following muscles originate from and insert into the same site?

- a. Palpebral part of orbicularis oculi
- b. Orbicularis oris
- c. Buccinator
- d. Orbital part of orbicularis oculi

ans: d

27)- The parietal bone articulates with the temporal bone at:

- a. Sagittal suture
- b. Lambdoid suture
- c. Squamous suture
- d. Coronal suture

ans: c

28)- Muscles of facial expression, choose the WRONG statement

- a. Corrugator supercilii produce transverse wrinkles above the nose
- b. Lacrimal part of orbicularis oculi aids in the flow of tears
- c. They are inserted into the skin
- d. Frontalis elevates eyebrows
- e. Buccinator muscle is responsible for forceful expulsion of air from the cheeks

ans : a

29)- The cervical plexus of nerves supplies the:

- a. Skin of the face
- b. Strap muscles of the neck
- c. Skin of the back of the neck
- d. Muscles of mastication
- e. Muscles of the tongue

ans : a

30)- The cavernousdural venoussinus, choose theCORRECTstatement:

- a. lies in the tentorium cerebelli
- b. contains the mandibular division of the trigeminal nerve (V3) in its wall
- c. contains valves that help direct blood flow
- d. contains part of the internal carotid artery
- e. lies in the anterior cranial fossa

ans: d

31)- A 62-year-old woman has a parotidectomy. After the procedure ,she has trouble chewing her food. Tests reveal that her trigeminal nerve has not been damaged. However, innervation to which of the following muscles was damaged during the procedure?

- a. Buccinator
- b. Masseter
- c. Lateral pterygoid
- d. Medial pterygoid
- e. Temporalis

ans : a

32)In which of the following layers of the scalp does infection tend to spread?

- a. Periosteal layer
- b. Aponeurotic layer
- c. Connective tissue layer

- d. Skin
- e. Loose areolar tissue layer

ans: e

33)- Falx cerebri, choose the WRONG statement:

- a. Is formed by the periosteal layer of the dura
- b. Lies in the midline between the two cerebral hemispheres
- c. It limits the rotatory movements of the brain within the skull
- d. The inferior sagittal sinus runs in its lower concave free margin
- e. Is attached anteriorly to crista galli and frontal crest

ans: a

34)- Levator palpebrae superioris is supplied by:

- a. Inferior division of oculomotor nerve
- b. Abducent nerve
- c. Trochlear nerve
- d. Facial nerve
- e. Superior division of oculomotor nerve

ans: e

35)- Layers of the scalp include all EXCEPT:

- a. Skin
- b. Galia aponeurotica
- c. Dura

- d. Periosteum
- e. Superficial fascia

ans: c

36)- Which of the followings does NOT travel through the jugular foramen?

- a. Internal jugular vein
- b. Accessory nerve
- c. Glossopharyngeal nerve
- d. Vagus nerve
- e. Hypoglossal nerve

ans: e

37)- -Cutaneous innervation the auricle is derived from:

- a. Auriculotemporal nerve
- b. Great auricular nerve
- c. Lesser occipital nerve
- d. All of the mentioned
- e. Vagus nerve

ans: d

38)- -Which statement is CORRECT:

- a. Facial artery passes deep to the submandibular gland
- b. The mastoid process of the temporal bone can be palpated easily in

the newborn

- C. The internal carotid artery passes through foramen lacerum
- d. Jugular foramen is located between the sphenoid bone and petrous part of temporal bone
- e. The optic canal has 2 cranial nerves passing through it

ans : a

39)- Paralysis of the buccinator muscle would probably result in:

- a. Inability to protrude the lower lip
- b. Dribbling of saliva from the angle of the mouth
- c. Inability to close the mouth
- d. Decrease salivation
- e. Inability to open the mouth

ans: b

40)- Which of the following statements concerning a patient with a large swelling restricted to the area over the occipital bone is INCORRECT?

- a. The edge of the swelling is limited by the attachment of the periosteum to the sutural ligaments
- b. The hematoma was located just beneath the epicranial aponeurosis and was superficial to the periosteum of the occipital bone
- C. The hematoma, although large, did not extend forward to the orbital margins and did not extend laterally as far as the temporal

lines

d.The hematoma is restricted to one skull bone and is situated beneath the periosteum

e. The swelling did not occupy the subcutaneous tissue of the scalp
ans:b

41)- A 20-year-old man is brought to the emergency department 1 hour after he was involved in a motorcycle collision. He was not wearing a helmet. Physical examination shows clear fluid dripping from the nose. X-rays show a fracture of the cribriform plate of the ethmoid bone. This patient is at greatest risk for impairment of which of the following senses?

- a. Hearing
- b. Taste from the anterior two thirds of the tongue
- c. Balance
- d. Olfaction
- e.Vision

ans: d

42)- Scalp, choose the CORRECT statement:

- a. Its wounds do not bleed easily
- b. The large blood vessels of the scalp run in the subaponeurotic loose areolar tissue
- c. Its skin and superficial fascia move on the aponeurosis
- d. Its veins communicate directly with the cavernous sinus

C. The supratrochlear and supraorbital nerves supply forehead and scalp

d. Auriculotemporal nerve is a branch of mandibular nerve

e. Lacrimal nerve supplies the skin on the lateral part of the upper eyelid

ans: b

46)- All the followings are branches of external carotid artery

EXCEPT:

a. Posterior auricular artery

b. Superficial temporal artery

c. Facial artery

d. Supraorbital artery

e. Maxillary artery

ans:d

47)- Regarding the dural venous sinuses, which of the following pairs is matched INCORRECTLY?

a. Sigmoid sinus: jugular foramen

b. Superior sagittal sinus: superior cerebral veins

c. Transverse sinus: occipital bone

d. Straight sinus: free border of falx cerebelli

e. Cavernous sinus: pituitary gland

ans: d

48)- You are on your emergency medicine rotation and are assisting in the examination of a patient who has been in a vehicular accident. You noticed when testing the cranial nerves deviation of the angle of the mouth to the right side. Which cranial nerve is damaged in this case?

- a. The mandibular division of trigeminal on the right
- b. The facial nerve on the left
- c. The facial nerve on the right
- d. Both the maxillary and mandibular divisions of trigeminal on the left
- e. The mandibular division of trigeminal on the left

ans : b

49)--Orbicularis Oculi, choose the WRONG statement:

- a. Lies in the superficial fascia
- b. The orbital part closes the eye gently
- c. Has a lacrimal part that aids in the flow of tears
- d. It surrounds completely each orbital orifice and extends into each eyelid
- e. Is supplied by facial nerve

ans: b