

# MIDTERM COLLECTED QUESTIONS OF MSS 018

**1- An anaemic patient is present with severe hip joint pain. He has been on steroids for 30 years and X-ray imaging showed a wedge-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

**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

**3- A 71-year-old patient came to the clinic and was physically diagnosed with sever 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

**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

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

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

**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

**7- What is the function of OPG?**

- a. Blocks NF $\kappa$ B receptor
- b. Blocks M-CSF receptor
- c. Blocks RANK-L, stimulating osteoclast differentiation
- d. Blocks RANK-L, inhibiting osteoclast differentiation

**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

**9-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 granules

**10- 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 into 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

**11-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 aponeurosis
- c. The hematoma will be localized at this site only
- d. The hematoma is probably located between the two layers of dura

**12- 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

**13- 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

**14-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

**15-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

**16- 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

**17-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

**18-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

**19-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

**20-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

**21- 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

**22- Which of the following is true regarding scalp?**

- a. If the cut is 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

**23-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

**24- 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 nearby keratinocytes
- d. Their proliferation is stimulated by exposure to sun light

**25-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

**26- Which of the following is not an anti-fungal?**

- a. Clotrimazole
- b. Metronidazole
- c. Amphotericin B
- d. Ketoconazole

**27-Which of the following can be used to treat psoriasis?**

- a. Acitretin
- b. Tacrolimus
- c. Synthetic vitamin D derivative
- d. All of the above

**28-Which of the following drugs is used only topically because of its high toxicity?**

- a. Itraconazole
- b. Isotretinoin
- c. Nystatin
- d. Amphotericin B

**29- 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

**30- Which of the following drugs doesn't treat acne vulgaris?**

- a. Erythromycin
- b. Benzoyl peroxide
- c. Clindamycin
- d. Neomycin

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

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



**32- 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

**33-Use these statements to answer the following question.**

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

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

**34- 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

**35- Which of the following is not involved in the smooth muscle contraction?**

- a. Activation of calcium channels
- b. Phosphorylation of calmodulin
- c. Activation of phospholipase C
- d. Phosphorylation of myosin head

**36-Which of the following doesn't occur after activation of nicotinic receptors at neuro muscular 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

**37- 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

**38- Which of the following statements is wrong?**

- a. Continuous conduction occurs in unmyelinated fibers
- b. The conduction velocity increases as the fiber diameter decreases
- c. Saltatory conduction is faster than continuous conduction
- d. In myelinated fibers, the impulse jumps from one node of Ranvier to the adjacent one

**39-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  $P_i$
- d. Interaction between thin filaments and cross bridges

**40-Which of the following is not a skin manifestation of organ and system involvement?**

- a. Janeway lesion
- b. Osler's node
- c. Meningococcal rash
- d. Skin boils

**41- Which of the following statements is wrong?**

- a. Use of catheters increases the number of bacteria needed to make the infection
- b. Surgical site infections are more common in GI and female genital tract surgeries
- c. The commonest organism causing surgical site infections is *S. aureus*
- d. A patient can return with a surgical site infection after 6 months, if catheters were used

**42- Which of the following statements is true?**

- a. Erythema multiform can progress into SJS and even TEN
- b. SJS is an acute, self-limiting condition
- c. Both SJS and TEN are characterized by bullous formation and mucous membrane involvement
- d. Erythema multiform patients are admitted to ICU or burn unit

**43- Which of the following statements is true?**

- a. Shingles is less common among old people
- b. In chickenpox, macules, papules, vesicles and crusted lesions can be seen all at the same time

- c. Hutchinson's sign can be seen when the VZV virus is dormant in the facial nerve
- d. Antivirals have small to no involvement in treatment of shingles

**44- Which of the following statements is wrong?**

- a. SSS is characterized by breakdown of desmoglein-1 in the epidermis
- b. Cutaneous leishmaniasis can resolve over months without treatment
- c. SSS is caused by exfoliating streptococci
- d. All dermatophytes are capable of invading and feeding off dead keratin

**45- 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

# Answers

1	A	24	C
2	C	25	C
3	A	26	B
4	B	27	D
5	B	28	C
6	D	29	B
7	D	30	D
8	C	31	C
9	D	32	A
10	D	33	A
11	B	34	D
12	B	35	B
13	C	36	B
14	D	37	A
15	A	38	B
16	B	39	A
17	C	40	D
18	B	41	A
19	A	42	C
20	D	43	B
21	D	44	C
22	A	45	A
23	D	-	-

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لا يظماً قلبٌ كان الدعاء له سقياً ، إن الله معك حاشاه أن ينسأك أو يقطعك. ✨

*Good Luck!!*