

COLLECTED QUESTIONS OF MSS 017 + MSS MIDTERM TEST 018

1-A 60 years old female patient came to the clinic and was physically diagnosed with bone weakness. An X-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

2-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

3-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

4-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

5-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

6-The most common cause of dwarfism is:

- a. Thanatophoric dysplasia
- b. Dysostosis
- c. Achondroplasia
- d. Osteopetrosis

7-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)

8-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

9-Which of the following is not activated during smooth muscle contraction:

- a. Calmodulin
- b. Ca^{+2} pumps
- c. Myosin kinase

d. Troponin C

10-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

11-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

12- 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

13-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

14-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

15-Rigor mortis is caused by the depletion of which of the following?

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

16-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

17-Griseofulvin acts by inhibiting:

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

18-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

19-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

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

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

21-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

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

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

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

- a. Cutaneous TB
- b. Nocardiosis
- c. Impetigo

d. Necrotizing fasciitis

24-Which of the following is true regarding Steven-Johnson syndrome (SJS)?

- a. SJS and erythema multiforme are considered as the same condition
- b. SJS can't progress to become TEN
- c. It's a self-limiting condition
- d. Nikolsky sign can be seen in SJS patients

25-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

26-A patient who had a dental surgery two months ago, is back with chest pain and heart complications. Which of the following rashes could potentially be found on his body?

- a. Ecthyma gangrenosum
- b. Janeway lesions
- c. Rose spots
- d. Meningococcal rash

27-A patient was admitted to a hospital two weeks ago because of a severe burn. He developed punched-out ulcers and blood tests indicated reduced number of neutrophils in the blood. Which of the following is correct?

- a. The causative agent is most probably a gram-positive coccus
- b. The causative agent is a virus
- c. A combination of piperacillin/tazobactam should be given
- d. KOH mounted skin scrapings can help in the diagnosis

28-Which of the following is true regarding varicella zoster virus?

- a. Respiratory droplets and direct contact are the only ways of transmission
- b. Chicken pox, which is caused by this virus, involves maculopapular rash
- c. Shingles, which are caused by this virus, come always with rash
- d. Unlike chicken pox, patients with shingles are given antivirals

29-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

30-Which of the following structures pass through jugular foramen?

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

31-A component of the hair follicle that is formed by the continuation of epidermis of the skin:

- a. Inner root sheath
- b. Outer root sheath
- c. Glassy membrane
- d. None of the above

32-Which of the following is a real difference between thick and thin skin?

- a. Thick skin has hair follicles while thin skin doesn't
- b. Thick skin has thinner dermis than thin skin
- c. Unlike thick skin, thin skin has well developed stratum granulosum
- d. None of the above is a real difference

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

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

34-Vestibulocochlear nerve leaves cranial cavity through:

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

35-Which of the following is not a branch of the facial nerve?

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

36-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

37-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

38-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

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

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

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

- a. Mental spines
- b. Crista galli
- c. Mylohyoid groove
- d. Lingula

41-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

42-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

43-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

44-The parietal bone articulates with the temporal bone at:

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

45-Merkel cells and melanocytes are located in:

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

ANSWERS

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

SAMIA SAMI ✨

AMEEN ALSARAS 🙏

من عامل الله باليقين عامله بالمعجزات، اللهم لطفاً يجلُّ على تفاصيل أيّامنا فيغير مساراتها للأفضل.. 🙏✨

Good Luck!!