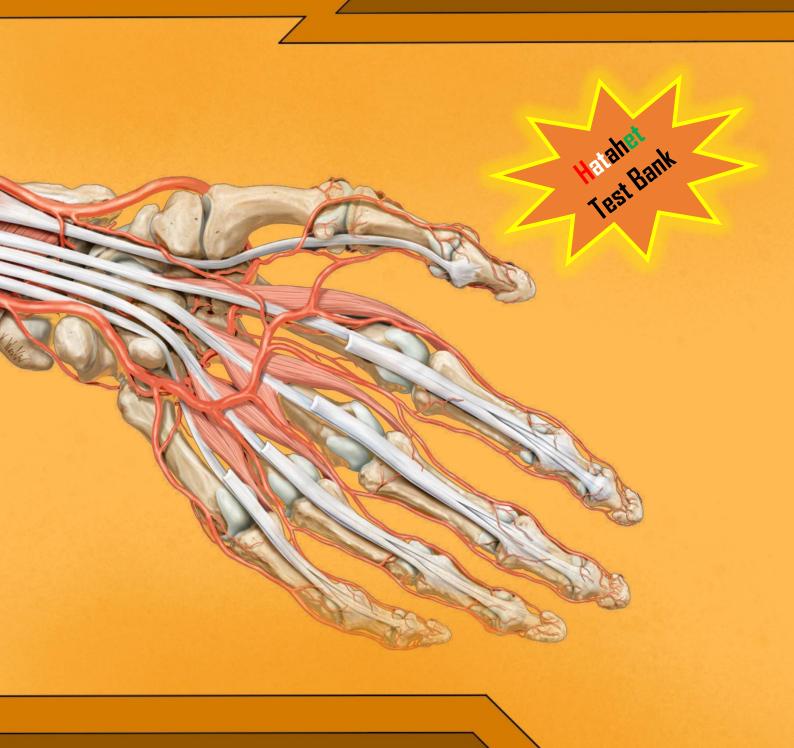
# HATAHET ANATOMY



First Material Questions

Lecture: 1-6 & Labs

Pages: 50 Questions: 209

# هذا العمل إهداء،،،

لحبيبتي و سيدتي و مربيتي أمي سمر حفظها الله و جعلني قرة عينها

لوالدي محمد (أبو فراس) رحمه الله و غفر له ذنبه

لسندي و شقيقي و أخي فارس حتاحت

لجدي و جدتي رحمهم الله و غفر لهم

لأستاذي الراقي الذي زرع في حب التشريح الدكتور راشد الجومرد رحمه الله

لكل صاحب و أخ و عزيز

HATAHET

لكل <mark>طالب علم في هذا الوطن</mark>

لكل من كان سببًا في حصولي على هذا المقعد في هذه الكليّة

تم بحمد الله إنجاز هذا الملف في يوم الثلاثاء، الثامن من شهر رمضان لسنة 1445 هجري الموافق للتاسع عشر من آذار من عام 2024 ميلادي

يُمنَع بيع هذا الملف بأي ثمن بل يُستحَب نشره لكل من يستفيد منه

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<sup>\*</sup> Pages numbers are according to the PDF, not the actual papers numbering

#### Lecture 1: Introduction to Human body

1) Which of the division of anatomy is associated with Disease? A. Pathological anatomy B. Physiological anatomy C. Embryology D. Gross anatomy 2) The stomach is located in the: A. Left upper quadrant B. Left lower quadrant C. Left lumber D. Right hypochondriac 3) The embryology is the study of the first ...... of development A. 8 weeks B. 8 months C. 10 days D. 10 weeks E. 9 months 4) What is the serous membrane that surrounds the abdominal cavity? A. Pleura B. Peritoneum C. Pericardium D. Meninges 5) At the anatomical position, thumb points near the body and the little finger away from the body: A. True B. False

6) Which of the following branches of anatomy does not use microscope?

A. Cytology

B. Pathological anatomy

C. Gross anatomy
D. All of the above

7) "Divides the body or organ into front and back portions", this is the definition of: A. Sagittal plane B. Coronal plane C. Oblique plane D. Horizontal plane 8) A 46-year-old man came to the emergency department due to lower abdominal pain, a CT scan was performed and the findings were acute appendicitis, the doctor booked an appendectomy. What is the proper region that the surgeons will operate on? A. Right iliac region B. Right lower quadrant C. Hypogastric region D. Right lumbar 9) This is defined as a group of cells with similar structure and function: A. Tissue B. Organ C. Molecules D. Organism 10) In which cavity is the stomach located? A. Cranial cavity B. Vertebral cavity C. Abdominal cavity D. Pericardial cavity E. Pleural cavity 11) Choose the directional term that makes the sentence correct: The sternum is \_\_\_\_\_ to the heart: A. Posterior B. Anterior C. Inferior D. Superior E. Lateral 12) Where is the small intestine existing? A. Right lower quadrant B. Umbilical region C. Left lower quadrant D. All of the above

13) One of the following anatomical positions is incorrectly paired:
A. Superior – inferior  B. Anterior – posterior  C. Medial – lateral  D. Distal – Sagittal
14) The function of the secretions of the serous membrane is to:
<ul> <li>A. Separate the thoracic and abdominal cavities</li> <li>B. Protect the central nervous system</li> <li>C. Prevent infection</li> <li>D. Reduce friction between organs</li> <li>E. Carry nervous impulses</li> </ul>
15) This directional term means farthest from the midline:
A. Medial B. Anterior C. Proximal D. Deep E. Lateral
16) The mediastinum is a cavity located between the two pleural cavities and houses the heart (مش عارف أشطب السؤال و أريح راسي منه، الجواب بي لانه مش كافيتي و إنما منطقة)
A. True B. False
17) Which of the following organs is not found in the abdominal cavity?
A. Stomach B. Spleen C. Liver D. Gallbladder E. Trachea
18) This directional term is the opposite of deep.
A. Supericial B. Superior C. Inferior D. Internal E. Proximal

19) $\odot$ The clinicians use the four-quadrant system for the abdominopelvic cavity $\odot$ They use it to study and determine the location of the organs, and not for describing the site of tumors and pain. According to these 2 sentences:
A. Sentence ① is true and sentence ② is false B. Sentence ① is false and sentence ② is true C. Both ① and ② are true D. Both ① and ② are false
20) Which of the following sentences are correct?
<ul><li>A. Mid-sagittal divides the body into unequal right and left halves</li><li>B. The main function for serous fluid is increase friction</li><li>C. Visceral layer is a thin epithelium that cover organs directly</li><li>D. None of the above</li></ul>
21) A transverse plane will cut a body or organ into:
A. anterior and posterior B. left and right C. superior and inferior D. at an angle E. unequal left and right sides
22) The transverse plane is the plane that runs through the body in an angle that exceeds 90°. This statement is:
A. True B. False
23) The most inferior cavity of the ventral cavities is the:
A. Cranial cavity B. Abdominal cavity C. Pericardial cavity D. Pelvic cavity
24) This directional term means farther from the attachment of a limb to the trunk or farther from
the origination of a structure:

25) Choose the directional term that makes the sentence correct. The heart is to the liver.
A. Inferior B. Anterior C. Contralateral D. Superior E. Superficial
26) The using of physical examination and palpation is a part of the:
A. Gross anatomy B. Microscopic anatomy C. Surface anatomy D. Systemic anatomy
27) All of the following are true about body cavities except:
A. Body cavities are spaces within the body B. They are separated by bones, muscles, and ligaments C. They help protect, separate, and support internal organs D. All the choices are true
28) In which of the following positions does a patient lie face down?
A. Dorsal B. Lateral C. Prone D. Supine
29) All of the following define anatomy, except:
<ul><li>A. It studies body structure</li><li>B. It studies relationships of body organs</li><li>C. It is based on Observation and visualization</li><li>D. It focuses on the function of body organs</li></ul>
30) The correct arrangement of any serous membrane from inward to outward is:
A. organ - fluid - visceral layer - parietal layer B. organ parietal layer - fluid - visceral layer C. organ - visceral layer - fluid - parietal layer D. None of the above
31) Radiological anatomy is the study of internal body structures using medical imaging, like X-rays.
A. True

- 32) One of the following structures are contralateral to each other:
- A. stomach and descending colon
- B. gallbladder and ascending colon
- C. Liver and gallbladder
- D. ascending colon and descending colon
- 33) The term (Forearm) describes the area:
- A. between the shoulder and the elbow joint
- B. between the shoulder joint and the wrist joint
- C. between the elbow joint and the wrist joint
- D. between the scapula and the clavicle
- 34) One of the following choices is not related to the standard anatomical position:
- A. Eyes are looking forward
- B. Palms of the hand are facing medially toward the thighs
- C. Feet are flat and straight on the floor
- D. Body is in erect position

1	2	3	4	5	6	7	8	9	10
Α	В	Α	В	В	С	В	Α	Α	С
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С	В	D	E	D	С	D	С	D	С
31	32	33	34						
Α	D	С	В						

#### Lecture 2: Basics of Skeletal system

- 1) The membrane that lines the medullary cavity is:
- A. Single-layered membrane
- B. Two-layered membrane
- C. It does not contain a layer
- 2) Small and round bones found in tendons of certain muscles to reduce friction over bony surfaces. This sentence is related to:
- A. Long bone
- B. Sesamoid bone
- C. Irregular bone
- D. Flat bone
- 3) Which of the following is a function of skeletal system?
- A. Movement
- B. Triglyceride storage
- C. Protection
- D. All of the choices listed are functions of the skeletal system
- 4) Regarding bone surface markings, a groove is:
- A. Narrow slit
- B. Shallow linear depression
- C. Completely surrounded space
- D. Linear elevation
- E. Short wide elevation
- 5) Epiphysis is covered by periosteum & Diaphysis is covered by articular cartilage. This sentence is:
- A. False
- B. True
- 6) Which of the following minerals are stored by the skeletal system?
- A. Calcium
- B. Potassium
- C. Manganese
- D. All of the above
- 7) Hollow, cylindrical space within diaphysis that contains the yellow bone marrow. This sentence is related to the:

A .Periosteum B. Metaphysis C. Medullary cavity D. Spongy bone	
8) Which of the following is a flat bone:	
A. tibia B. carpal C. scapula D. thoracic vertebra	
9) One of the following cells is mismatched with the paired information:	
A. Osteoblasts - bone building B. Osteoprogenitor - stem cell C. Osteocytes - maintain bone structure D. Osteoclasts - nutrition of bone tissue	
10) The main characteristic of long bones is that both length and width are equal. This statement is:	
A. True B. False  11) All of the following are considered depression surfaces, EXCEPT: A. Sulcus B. Fissure C. Crest D. Facet	
12) Yellow (Fatty) bone marrow mainly consists of:	
A. Phospholipids B. Triglycerides C. Steroids D. Glycoproteins	
13) All of the following are flat bones except:	
A. Sternum B. Scapula C. Atlas D. Ribs	

- 14) A constriction below the head of a bone. This is a description of the term: A. Neck B. Spine (Spinous process) C. Sulcus
- D. Foramen
- E. None of the above
- 15) The nutrient artery penetrates the diaphysis of tibia through the nutrient foramen will then go up in an oblique direction towards the knee. This statement is:
- A. False
- B. True
- 16) An elongated sharp bone elevation is a:
- A. Fissure
- B. Spine
- C. Facet
- D. Process
- 17) The largest bony projection of the following is:
- A. Trochanter
- B. Tubercle
- C. Condyle
- D. Tuberosity
- 18) Which of the following does both metaphyseal and epiphyseal vessels have in common?
- A. They both supply the red bone marrow
- B. They both invade the diaphysis
- C. They both have penetrate the bone by the nutrient foramen
- D. These two vessels have nothing in common

1	2	3	4	5	6	7	8	9	10
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С	В	С	Α	Α	В	Α	Α		

#### Lecture 3: Appendicular Skeleton

- 1) One of the following sentences is WRONG about the clavicle:
- A. First bone to ossify in the embryo
- B. It doesn't have any bone marrow
- C. It is attached from the medial end to the sternum
- D. It is not part of the shoulder girdle
- 2) A patient has Carpal tunnel syndrome. This patient is hurt in the:
- A. Ankle
- B. Wrist
- C. Knee
- D. Elbow
- 3) The elbow joint is made of the articulation of the:
- A. Proximal end of ulna with capitulum & head of radius with trochlea
- B. Proximal end of ulna with trochlea & head of radius with capitulum
- C. Head of ulna with trochlea & head of radius with capitulum
- D. Proximal end of ulna with trochlea only
- 4) One of the following statements is CORRECT about the forearm bones:
- A. Head of radius is proximal relatively to the head of ulna
- B. Both radius and ulna articulate with the humerus
- C.A + B
- D. Both radius and ulna articulate with the carpals
- E. All of the answers are correct
- 5) The bases of the metacarpals are proximal to the heads. This statement is:
- A. True
- B. False
- 6) One of the following statements is INCORRECT about the humerus:
- A. Its head is facing upward medially
- B. Surgical neck is distal to the anatomical neck
- C. It articulates with the acromion process of the scapula
- D. Its most lateral landmark is the greater tubercle

- 7) There is only one point where a whole upper limb articulates with the axial skeleton, and it is the Acromioclavicular joint. This statement is:

  A. True
  B. False

  8) Determine the specific location of Scapular Notch:

  A. In the inferior border medial to the base of coracoid process
  B. In the superior border lateral to the base of coracoid process
  C. In the inferior border lateral to the base of coracoid process
  D. In the superior border medial to the base of coracoid process
  - 9) How many phalanges are in one hand?
  - A. 15
  - B. 16
  - C. 14
  - D. 13
  - 10) The distal radioulnar joint is between:
  - A. Head of radius and radial notch of ulna
  - B. Head of ulna and ulnar notch of radius
  - C. shaft of radius and ulna by the interosseus membrane
  - D. All of the above
  - 11) One of the following statements are TRUE regarding the clavicle:
  - A. Medial two-thirds is convex anteriorly and lateral one-third is convex posteriorly
  - B. Has 2 surfaces; anterior and posterior
  - C. The sternal end is flat, and the acromial end is rounded
  - D. Two answers are correct
  - E. Does not articulate with the 1st rib
  - F. All answers are true
  - 12) The border of the scapula that faces the humerus is the:
  - A. Medial border
  - B. Vertebral border
  - C. Lateral border
  - D. Superior border
  - 13) The **free** lower limbs are directly connected to the axial skeleton. This statement is:
  - A. True
  - B. False

14) The distal end of the radius articulates with how many bones of the wrist? A. 1 B. 2 C. 3 D. 4 E. 5 15) The Carpometacarpal joint consists of: A. Base of metacarpal bone and distal row of carpal bones B. Base of metacarpal bone and proximal row of carpal bones C. Head of metacarpal bone and distal row of carpal bones D. Head of metacarpal bone and proximal row of carpal bones E. None of the above 16) Which of the following is NOT a tarsal bone? A. Talus B. Calcaneus C. Navicular D. Cuneiform E. Capitate 17) The tibiofemoral joint includes: A. Femur condyles B. Condyles of the tibia C. Condyles of the fibula D. Patella E. Two answers are correct F. Three answers are correct G. All answers are correct 18) Which of the following is the most superior structure on the scapula? A. Infraspinous fossa B. Supraspinous fossa C. Acromion D. Subscapular fossa E. Scapular notch 19) The most medial part of the following is (شغله 🎱 ):

A. Lesser trochanterB. Greater trochanter

D. Styloid process of radius

C. Scaphoid

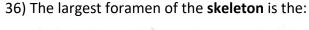
20) The lateral malleolus is found on the distal end of what bone?
A. Tibia B. Fibula C. Radius D. Metatarsals E. None of the above
21) Which structure is found in the elbow joint?
A. Acromion B. Surgical neck C. Olecranon D. Lesser tubercle E. Both a and c
22) The ulna and radius connect with each other at how many points?
A. 1 B. 2 C. 3 D. 4 E. 5
23) Which of the following carpal bones is found most distally?  A. Lunate B. Scaphoid C. Triquetrum D. Hamate
24) Which notch is found between the olecranon and coronoid process of the ulna?
A. Ulnar notch B. Radial notch C. Olecranon notch D. Trochlear notch E. Epicondyle notch
25) The 2 Coxal bones unite anteriorly together at a joint called:
A. Bony pelvis B. Pelvic girdle

C. Acetabulum

D. None of the above

26) The head of fibula articulates with the tibia and the resultant joint is named the distal tibiofibular joint. The statement is:
A. True B. False
27) One of the following matched pairs is NOT correct:
<ul> <li>A. Intercondylar notch - Distal end of femur</li> <li>B. Olecranon process - Proximal end of ulna</li> <li>C. Styloid process - Distal end of tibia</li> <li>D. Medial epicondyle - Distal end of humerus</li> </ul>
28) One of the following matched pairs is NOT correct:
A. Acetabulum - Pubis, Ilium, and Ischium B. Lateral malleolus - Fibula C. Coronoid process - Mandible D. Trochlear notch - humerus
29) All of the three main parts of the hip bones participate in the formation of the acetabulum but only the ilium and ischium participate in the formation of greater sciatic notch. The statement is:
A. False B. True  30) If you decided to touch the medial side of your ankle, which of the following structure you will have actually touched?
A. The medial malleolus of the fibula B. The medial malleolus of the radius C. The medial malleolus of the tibia D. The lateral malleolus of the tibia
31) The scapula lies between the ribs and the surface facing the thoracic cage is the surface.
A. 1 <sup>st</sup> and 6 <sup>th</sup> / posterior surface B. 2 <sup>nd</sup> and 7 <sup>th</sup> / anterior surface C. 3 <sup>rd</sup> and 7 <sup>th</sup> / anterior surface D. 2 <sup>nd</sup> and 7 <sup>th</sup> / superior surface
32) The medial side of ilium has gluteal lines that are muscle attachment points. This statement is:  A. True  B. False

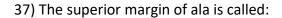
33) How many rami does one pubis bone have? A. 3 B. 1 C. 2 D. 0 34) This depression is found laterally and inferior to the trochlear notch at the upper end of ulna: A. Radial notch B. Elbow notch C. Proximal radioulnar joint D. Ulnar notch E. Styloid process 35) How are the carpal bones normally arranged? A. 2 transverse rows of 5s B. 2 parallel rows of 5s C. 2 transverse rows of 4s D. 2 perpendicular rows of 4s



A. Acetabulum

E. Randomly

- B. Obturator foramen
- C. Vertebral foramen
- D. Foramen magnum
- E. Two answers are correct



- A. Gluteal lines
- B. Iliac crest
- C. Iliac spines
- D. Iliac tuberosity



- A. 1st rib
- B. 7th cervical vertebra
- C. Acromion of the scapula
- D. Body of sternum
- E. Manubrium of the sternum



C. Fibula D. ilium
40) When sitting, the Weight of the body is supported by:
A. Pubic arch B. Sacrum
C. Coccyx D. Free lower limbs
41) Regarding the fibula, all of the following statements are true, EXCEPT:
A. It is the lateral bone of the leg B. It is not involved in weight transmission C. It has a lateral malleolus D. Styloid process projects from its lower/distal end
42) All of the following are a component to acetabulum, EXCEPT:
A. Ischium B. Sacrum C. ilium D. pubis
43) The condyles of the femur articulate with the condyles of tibia to form the:
A. Femocarpal joint B. Fibular joint C. Knee joint D. Elbow joint
44) All of the following are a component to pelvic brim, EXCEPT:
A. Ischium B. Sacrum
C. Ilium  D. Pubic symphysis
45) Pubis is the anterior inferior part of the hip bone. The statement is:
A. True B. False

39) The adductor tubercle is located in which of the following bones?

A. Femur B. Tibia

1	2	3	4	5	6	7	8	9	10
D	В	В	С	Α	С	В	D	С	В
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D	С	В	В	Α	E	Е	С	Α	В
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С	С	D	D	D	В	С	D	Α	С
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В	В	С	Α	С	В	В	С	Α	С
41	42	43	44	45					
C	В	С	Δ	Δ					





# Lecture 4+5: Axial Skeleton

1) Which of the following vertebrae has a spinous process facing downwards?

A. Axis
B. Thoracic vertebrae
C. Lumbar vertebrae
D. 7 <sup>th</sup> cervical vertebrae
E. S1 - S5
2) Besides the maxilla, the hard palate is also composed of?
A. Ethmoid bone
B. Palatine bones
C. Zygomatic bones
D. Vomer bone
3) One of the following is FALSE about the Atlas:
A. It doesn't have a spinous process
B. It has no body but 2 lateral masses
C. It will articulate with the ethmoid bone
D. It is the upper-most vertebrae of the vertebral column
4) One of the following ribs articulate with sternum at the sternal angle:
A. 1 <sup>st</sup>
B. 2 <sup>nd</sup>
C. 3 <sup>rd</sup>
D. 4 <sup>th</sup>
5) Of the following, which is the largest individual vertebrae?
A. C5
B. L4
C. T4
D. C7
E. Axis
6) Which of the following regions follows the original fetal curve direction?
A. Cervical
B. Thoracic
C. Lumbar
D. All of the above

- 7) The most subcutaneous part of the sternum is meant to be the:
- A. The whole sternum is subcutaneous at the same level
- B. Manubrium
- C. Xiphoid process
- D. Sternal angle
- 8) One of the following is TRUE about vertebral column:
- A. It supports the head and protects the spinal cord
- B. It has four curves: 2 convex + 2 concave
- C. It makes the  $\frac{2}{5}$  of the height of the body
- D. All of the above are correct
- 9) Which of the following is NOT a facial bone?
- A. Parietal
- B. Nasal
- C. Maxillae
- D. Palatine
- 10) Which is FALSE of the skull?
- A. They include mucous membranes
- B. The only movable bone in the skull is the mandible
- C. The skull contains foramina but no fissures
- D. The facial bones provide support for entrance into the digestive system
- E. They include sinus cavities
- 11) Regarding the skeletal system, which of the following statements are FALSE?
- A. The axial skeleton has 80 bones
- B. The appendicular skeleton has 126 bones
- C. The axial skeleton is composed of the bones that run through the axis of the body
- D. Children have more bones than adults
- E. The appendicular skeleton does not include the girdles
- 12) Which of the following is found in the axial skeleton?
- A. Tarsals
- B. Tibia
- C. Sphenoid
- D. Scapula
- E. Clavicle

A. Parietal B. Frontal C. Mandible D. Occipital E. Maxilla							
14) One of the following statements is INCORRECT regarding cervical vertebrae:							
<ul> <li>A. All the statements below are false</li> <li>B. The majority of them have bifid spinous processes</li> <li>C. Each cervical vertebrae had a total of 3 foramina each</li> <li>D. The typical cervical vertebrae are (C3 - C7)</li> </ul>							
15) This bone forms the anterior aspect of the cranium and part of the cranial floor:							
A. Frontal B. Temporal C. Parietal D. Occipital E. Nasal							
16) The mastoid process is best described as which one of the following statements?							
A. a rounded projection of the parietal bone B. located anterior to the styloid process of temporal bone C. situated posteroinferior to the external auditory meatus D. Both A and C E. All of the above							
17) This bone includes the organs of hearing and balance and articulate with the mandible.							
A. Frontal B. Temporal C. Parietal D. Occipital E. Nasal							
18) One of the following is CORRECT regarding sternum:							
<ul><li>A. It articulates with all the ribs</li><li>B. It is considered as an irregular bone</li><li>C. It mainly consists of manubrium, body and xiphoid process</li></ul>							

D. it articulates with the acromial end of the clavicle

13) Which of the following bones is not visible from the anterior view of the skull?

19) The main characteristic (Key character) of all the thoracic vertebrae is that:
<ul><li>A. They all have heart-shaped bodies</li><li>B. They all have their spinous process pointed inferiorly</li><li>C. They are the ones articulating with the ribs of the thoracic cage</li><li>D. They have the biggest intervertebral foramina</li></ul>
20) Which of the following is NOT found in the axial skeleton?
A. Hyoid B. Ribs C. Vertebrae D. Carpals
21) The lower jaw is also called the and the upper jaw is a part of the bone/s
A. mandible / maxilla and palatine B. maxilla / mandible C. mandible / maxilla D. maxilla / occipital
22) What bone feature of the second cervical vertebrae articulates with the first cervical vertebrae?
A. Primary projection B. Ocular process C. Odontoid process D. Cervical projection E. Cervix
23) What is the junction/structure between the manubrium and the body of the sternum called?
<ul><li>A. Suprasternal notch</li><li>B. Xiphoid process</li><li>C. Sternal angle</li><li>D. Sternoclavicular joint</li><li>E. Manubrium joint</li></ul>
24) These projections on either side of the foramen magnum articulate with superior articular facets of the first cervical vertebrae. These projections are the:
<ul><li>A. Mastoid processes</li><li>B. Temporomandibular joint</li><li>C. Foramen magnum</li><li>D. Occipital condyles</li><li>E. Sella turcica</li></ul>

- B. Frontal C. Ethmoid D. Nasal E. Sphenoid 26) This cranial bone is anterior to the sphenoid and posterior to the nasal bones. It contains foramina for the olfactory cranial nerve. A. Ethmoid B. Frontal C. Palatine D. Maxilla E. Temporal 27) One of the following is CORRECT regarding the ribs: A. Ribs do not run obliquely B. As the ribs go down, their length increases until we reach the longest, the 7<sup>th</sup> rib C. Ribs have more than one articulation point with the vertebral column D. Ribs are considered as a part of the appendicular skeleton; because they are not at the midline E. All ribs articulate anteriorly with the sternum 28) One of the following is WRONG considering the intervertebral disc: A. Each one of the intervertebral discs consists of inner nucleus pulposus and outer annulus fibrosis B. They occupy the scape between the bodies of adjacent vertebrae C. The biggest intervertebral discs are found between the sacral vertebrae of the sacrum D. All the previous statements are considered wrong
- 29) The sphenoid bone is also called the Keystone of the cranium; because:

25) Which cranial bone articulates with every other cranial bone?

A. Occipital

- A. It is the largest cranial bone
- B. It makes the majority of the orbits
- C. It articulates with the rest of the cranial bones
- D. It is the only cranial bone that is not paired
- 30) What are the two bones that make up the bony nasal septum?
- A. Perpendicular process of palatine and vomer bone
- B. The 2 nasal bones
- C. Palatine process of maxilla and palatine bone
- D. the 2 inferior nasal conchae
- E. Perpendicular process of ethmoid and vomer bone

31) The largest air sinuses found in the skull are the: A. Maxillary sinuses B. Ethmoidal sinuses C. Frontal sinuses D. Sphenoidal sinuses 32) A suture found in the midsagittal plane of the body, this suture is the: A. Coronal suture B. Squamous suture C. Sagittal sutures D. Lambdoidal sutures 33) One of the following sentences is FALSE regarding the fontanels of the skull (للأسنان): A. Fontanels are important for pediatricians to diagnose infants B. The last fontanel to be ossified is the anterior fontanel C. Each mastoid fontanel is located between 4 bones of the skull D. Fontanels are un-ossified dense connective tissue 34) The bones that make the floor of the anterior cranial fossa are: A. Frontal + Ethmoid + Temporal B. Frontal + Sphenoid + Ethmoid C. Frontal + Parietal + Sphenoid D. Sphenoid + Temporal + Ethmoid 35) Regarding the orbits (eye sockets), choose the CORRECT statement of the following: A. Each orbit consists of 7 facial bones B. The zygomatic bone is not a part of the orbit C. Each orbit has one fissure that passes vessels and nerves D. The orbit contains the smallest bone in the entire skull 36) Regarding the vertebral column, choose the CORRECT statement of the following: A. During intrauterine (inside the mother's womb) life, the fetus vertebral column is convex anteriorly B. Cervical curve is one of the primary curves of the normal vertebral column C. Curves of the vertebral column can be observed from the anterior view only D. None of the above are correct 37) The external acoustic meatus is a part of the:

A. TemporalB. EthmoidC. ParietalD. Occipital

- 38) The false ribs of the thoracic cage are also named (The vertebrochondral ribs); because: A. They attach anteriorly and posteriorly with the vertebral column B. They articulate with the thoracic vertebrae only C. They articulate anteriorly with the 7<sup>th</sup> costal cartilage rather than articulating directly with sternum D. None of the above statements is the correct reason 39) One major feature of the hyoid bone makes it special from other bones of the skeleton, which is: A. It does not articulate with any bone in the skeleton B. It does not make any attachment with any muscle C. It is located in the neck region D. Two answers are correct 40) All of the following are benefits of the paranasal sinuses, except: A. Making the bones lighter in weight B. Allows the skull to increase in size without increasing in mass C. Enhancing the quality of the voice D. Reducing the need of oxygen at night 41) The most lateral foramen of the following foramina is: A. Cribriform plate B. Foramen spinosum C. Foramen magnum D. Hypoglossal canal (للأسنان) ?How many fontanels should have been ossified in a normal 1-year-old baby A. 2 B. 3 C. 4 D. 5 43) One of the following statements regarding the foramina of the skull is FALSE: A. The foramen magnum is where the medulla oblongata passes to the vertebral column B. The jugular foramen is where the jugular vein and cranial nerves (IX, X, XI) passes through
- C. The olfactory nerves passes to the nasal cavity through the superior orbital fissure
- D. The middle meningeal artery passes through the foramen spinosum
- 44) What is special (atypical) about the 7<sup>th</sup> cervical vertebra is that:
- A. It has the largest transverse foramina out of all cervical vertebrae
- B. Its spinous process is not bifid
- C. It lacks its body and vertebral arch
- D. Nothing is special about C7

45) A 30-year-old woman was presented in the dental clinic, she suffered from upper jaw pain. Dentists there suggested the removal of the upper left canine as a treatment to release the pressure. Where should the local anesthesia be injected?

- A. In the mental nerve through the mental foramen of the mandible
- B. In the infraorbital nerve through the infraorbital foramen
- C. In the nasopalatine nerve near the incisive fossa
- D. In the fascial nerve

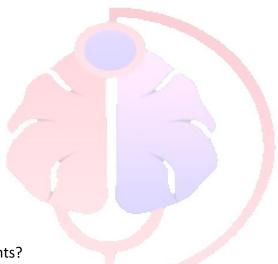
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E	С	D	D	Α	С	В	С	В	D
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С	С	С	D	E	Α	С	С	С	E
31	32	33	34	35	36	37	38	39	40
Α	С	С	В	D	Α	Α	С	Α	D
41	42	43	44	45					
R	R	C	R	_					





# Lecture 6: Joints (Articulations)

- 1) This type of joint lacks a synovial cavity:
- A. Fibrous
- B. Cartilaginous
- C. Synovial
- D. Both A and B
- E. All of the above
- 2) Which of the following can be classified as synarthrosis joints?
- A. Gomphosis
- B. Synchondrosis
- C. Pivot joints
- D. Both a and c
- E. All of the above
- 3) The type of joint that includes the hip joint is the:
- A. Gomphosis
- B. Suture
- C. Symphysis
- D. Synovial
- E. Synchondrosis
- 4) Which of the following is used to reduce friction in joints?
- A. Bursae
- B. Synovial fluid
- C. Sutures
- D. Both a and b
- E. All of the above
- 5) This type of motion results from relatively flat bone surfaces moving back and forth and from side to side with respect to one another. This is the description of which of the following?
- A. Flexion
- B. Extension
- C. Gliding
- D. Circumduction
- E. Opposition



6) This type of movement is a continuous sequence of flexion, abduction, extension, and adduction:
A. Circumduction B. Lateral flexion C. Hyperextension D. Gliding E. Elevation
7) Examples of this type of movement include moving the humerus laterally at the shoulder joint:
A. Lateral flexion B. Hyperextension C. Adduction D. Abduction E. Gliding
8) Which of the following bones can NOT be elevated or depressed? (سؤال من تست بانك الكتاب، بالاستثناء حبايبي)
A. Hyoid B. Clavicle C. Ribs D. Maxilla E. Mandible
9) One of the following statements is WRONG regarding the joint movements:
A. Flexion is a decrease in the angle between two bones B. Extension is returning to normal anatomical position C. Eversion is making the sole of the foot face medially D. Adduction is the movement of limbs towards the midline
10) The least mobile joint of the following joints is:
A. Shoulder joint B. Hip joint C. Interosseus membrane D. Metacarpophalangeal joint
11) All of the following synovial joints can move in one axis, except:
A. Hinge joints B. Pivot joints C. Planar joints D. None of the above

angle is greater than 180°, this movement has a special term called Hyperflexion. This statement is:
A. True B. False
13) The fluid-filled cavity in all synovial joints is called the:
A. Synovial cavity B. Serous cavity C. Meninges layers D. Fibrous capsule
14) An example of a secondary cartilaginous joint is the?
A. Costochondral joint B. Intervertebral disc C. Lambdoid suture D. Epiphysial plate
15) Which of the following is not considered a special movement?
A. Depression B. Protraction C. Elevation D. Supination E. All of the above are special movements
16) As you open your mouth, the type of movement that the lower jaw (mandible) performs is:
A. Protraction B. Retraction C. Elevation D. Depression E. Supination
17) Which of the following is not a structural category of synovial joint?
A. Planar B. Hinge C. Condyloid D. Inversion

12) When the extension occurs to a level beyond the anatomical position of the limb so that the joint

A. Pronation B. Supination C. Eversion D. Retraction E. None of the above
19) Another term for the (Dentoalveolar joint) is:
A. Syndesmoses B. Gomphoses C. Synchondroses D. Symphyses E. Suture
20) The joint between the 1st costal cartilage and the manubrium of the sternum is classified as:
A. Plane joint B. Synchondrosis C. Secondary cartilaginous joint D. All of the above
21) This special movement occurs when you stand on your heels.  A. Inversion B. Eversion C. Dorsiflexion D. Plantar flexion E. Supination
22) Where do symphyses occur?
A. Upper limbs B. Lower limbs C. Axial skeleton D. Ankles E. Knees
23) Bending the trunk forward at the <b>Coronal plane</b> is an example of whic angular movement?
A. Flexion B. Extension C. Lateral flexion D. Hyperextension E. None of the above

18) This special movement includes the ability of your thumb to move across the palm to touch the

tips of the fingers on the same hand.

,	
	24) A condyle joint:
	A. Is also called ellipsoidal
	B. Is biaxial
	C. Can have flexion & extension or abduction & adduction
	D. Found in the wrist and metacarpophalangeal joints for the 2 <sup>nd</sup> through 5 <sup>th</sup> digits
	E. All of the above
	25) In this type of joint, the rounded or pointed surface of one bone articulates with a ring formed
	partly by another bone and partly by a ligament. What is that synovial joint?
	A. Pivot joint
	B. Planar joint
	C. Hinge joint
	D. Ball-and-socket joint
	E. Saddle joint
	26) This is a type of movement where there is a decrease in the angle between articulating bones.
	A Florian
	A. Flexion

27) Regarding arthrology, which of the following NOT a characteristic of the synovial joints?

28) One of the following joints is composed of extensive sheets of dense irregular CT:

B. ExtensionC. Gliding

E. Rotation

D. Circumduction

A. Include a cavity
B. Are freely movable

B. Metopic sutureC. Gomphosis

D. Pubic symphysis

A. Synovial jointB. DiarthrosisC. Synarthrosis

D. Ball-and-Socket jointE. Two answers are correct

C. Have bones covered in hyaline cartilage

A. Interosseus membrane between radius and ulna

29) The best functional classification of the shoulder joint is:

E. All synovial joints are Diarthrosis

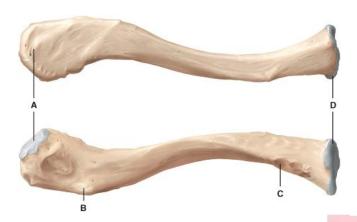
D. All statements are considered characteristics of synovial joints

- 30) Which is the classification of elbow joint?
- A. Hinge synovial
- B. Planar synovial
- C. Syndesmoses
- D. Condyloid synovial
- E. Pivot synovial
- 31) The movement of a limb away from the midline is called:
- A. Extension
- B. Flexion
- C. Adduction
- D. Abduction
- E. None of the above
- 32) Rotation of joints can occur:
- A. Medially
- B. Laterally
- C. Axially (neither medial nor lateral)
- D. All of the above, based on the joint
- 33) When the palm of the hand rotates posteriorly from the anatomical position, the forearm movement is called:
- A. Adduction
- B. Supination
- C. Pronation
- D. Flexion abduction
- E. Abduction
- 34) One of the following is exclusive for ball-and-socket joints rather than other synovial joints:
- A. It has a synovial capsule
- B. It can make flexion, extension, adduction and abduction
- C. It is considered a diarthrosis
- D. None of the above features can distinguish ball-and-socket joint from all other synovial joints

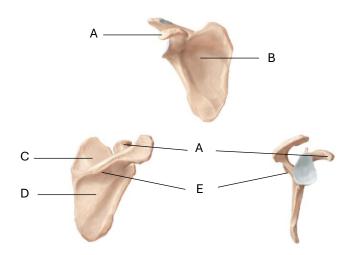
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D	С	D	D	С	Α	D	D	С	С
11	12	13	14	15	16	17	18	19	20
С	В	Α	В	E	D	D	E	В	Α
21	22	23	24	25	26	27	28	29	30
D	С	С	E	Α	Α	D	Α	В	Α
31	32	33	34						
D	D	С	D						

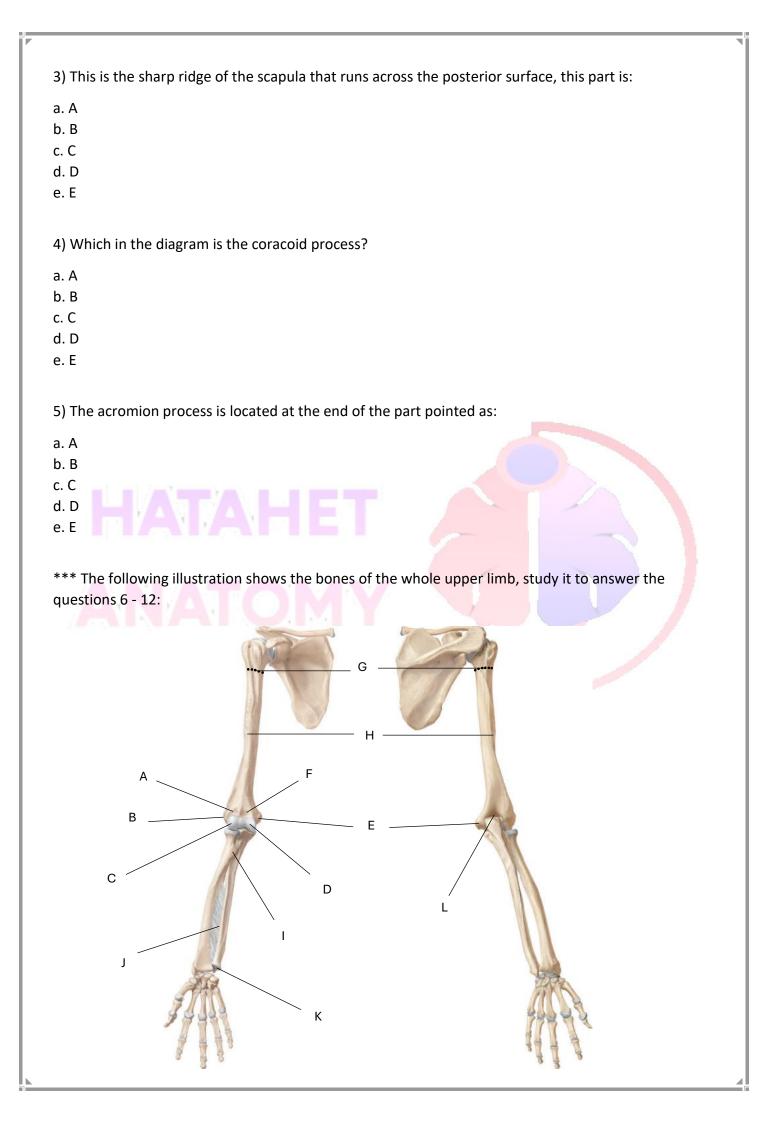
## Practical Labs (Skeletal System)

\*\*\* The figure on below shows the clavicle, study this image to answer the questions 1 - 2:



- 1) Which part of the clavicle articulates with the manubrium?
- a. A
- b. B
- c. C
- d. D
- 2) Which part of the clavicle is an attachment site for the costoclavicular ligament?
- a. A
- b. B
- c. C
- d. D
- \*\*\* Study the following diagram of the scapula and answer the questions 3 5:





6) This receives the head of the radius when the forearm is flexed.
a. A
b. B
c. C
d. D
e. F
7) In the diagram of the humerus, where is the anatomical neck?
a. D
b. E
c. F
d. G
e. None of the above
8) Where do most of the fractures of the humerus occur?
a. G
b. H
с. В
d. F
e. A
9) In the diagram of the humerus, the olecranon fossa is pointed at by the letter:
a. A
b. B
c. C d. F
e. L
E. L
10) The part D in the diagram articulates with the:
a. Head of radius
b. Head of ulna
c. Proximal end of ulna
d. Styloid process of ulna
e. Two answers are correct
11) The insertion (attachment point) of the biceps brachii muscle is pointed by the letter:
a. I
b. D
c. E
d. H
e. K

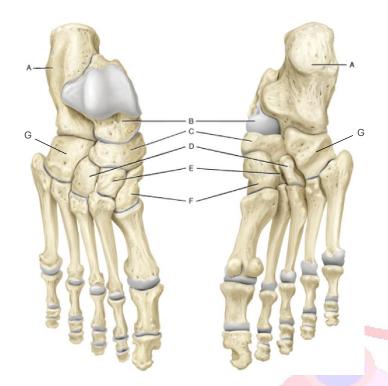
12) The radial tuberosity in the diagram is given the letter:	
a. I b. K c. B d. E e. D	
*** This illustration is for a hip bone, based on the marked structures answer the questions 13 - 16:	:
B  G  E  H  D  D  X  13) Choose the letter that marks the PIIS (Posterior Inferior Iliac Spine):	
a. I b. D	
c. E d. F	
e. G	
<ul><li>14) In the diagram of the hip bones, where do the tendons of the gluteal muscles attach?</li><li>a. B</li><li>b. E</li><li>c. F</li><li>d. G</li><li>e. H</li></ul>	
15) This is where the longest nerve in the body passes through	
a. C b. D c. F d. G e. H	

16) The ischial tuberosity is the part pointed at by the letter:
a. E b. K c. G d. H e. None of the above
*** Study the diagram below which shows the whole lower limbs to answer the questions 17 - 21:
17) In the diagram of the femur, where is the intertrochanter line?  a. B  b. C  c. D  d. M
e. None of the above
18) The gluteal line blends into the linea aspera; where are they in the diagram?  a. B and C  b. A and D  c. M and L  d. J and K  e. E and H
<ul><li>19) In the diagram of the femur, where is the lateral epicondyle?</li><li>a. F</li><li>b. G</li><li>c. E</li></ul>

d. I

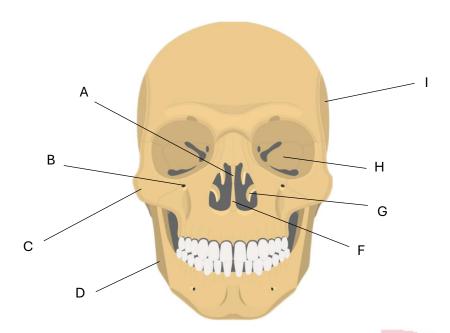
20) The intercondylar fossa is at:
a. H b. I c. J d. K e. L
21) The pointed part G will articulate posteriorly with which of the following?
<ul><li>a. H and F</li><li>b. E and I</li><li>c. K and I</li><li>d. None of the listed above</li></ul>
*** The following illustration shows tibia and fibula, answer the questions 22 - 24:
22) In the diagram of the tibia and fibula, this forms an articulation with the talus bone and forms a protrusion on the medial surface of the ankle.
a. E b. F c. G d. Both E and F e. All of the above  23) What articulates with the condyles of the femur to form the tibiofemoral joint?
a. A and B b. B and C c. A and C d. E and F e. None of the above
24) In the diagram of the tibia and fibula, where is the tibial tuberosity?
a. B b. C c. E d. F e. G

\*\*\* Answer the questions 25 - 27 after studying the diagram below:



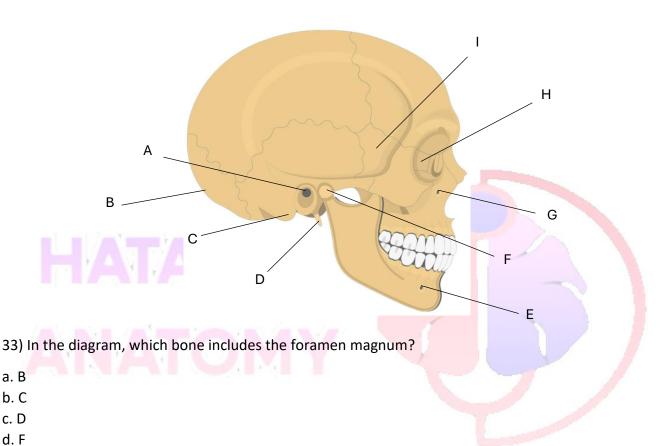
- 25) Between these bones is where intertarsal joints are found.
- a. B and C
- b. C and A
- c. D and C
- d. E and B
- e. All of the above
- 26) This is the only bone of the foot that articulates with the fibula and tibia.
- a. A
- b. B
- c. C
- d. All of the above
- e. None of the above
- 27) In the diagram of the foot, where is the navicular?
- a. A
- b. B
- c. C
- d. D
- e. E

\*\*\* Using the diagram below, answer the questions 28 - 32:



- 28) The letter H is a part of which of the skull bones?
- a. Sphenoid
- b. Ethmoid
- c. Palatine
- d. Maxilla
- 29) In the diagram, which bone primarily forms the calvaria?
- a. G
- b. I
- c. A
- d. F
- e. B
- 30) The bone that makes the anterior half of the zygomatic arch is
- a. A
- b. B
- c. C
- d. D
- e. None of the above
- 31) In the diagram, where is the vomer bone?
- a. A
- b. G
- c. F
- d. I
- e. None of the above

- 32) The letter G is pointing at a bony structure, this structure is considered as a:
  a. Part of the maxilla
  b. Part of the lacrimal bone
  c. Part of the ethmoid bone
  d. Separate bone
  - \*\*\* Using the diagram below, answer the questions 33 36:



- 34) In the diagram, which bone is considered the keystone of the cranial bones?
- a. E

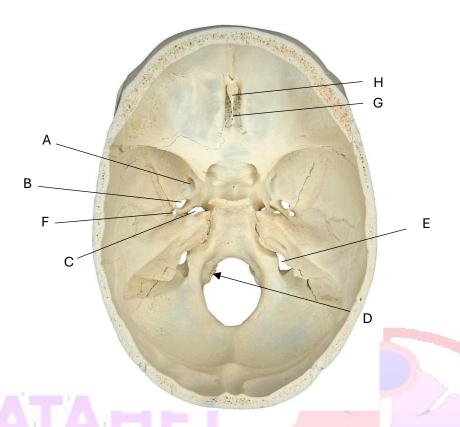
e. G

- b. I
- c. G
- d. H
- e. Two answers are correct
- 35) In the diagram, where is the ethmoid bone?
- a. I
- b. K
- c. G
- d. H
- e. Not visible from that view

36) In the diagram, where is the styloid process?
a. I b. K c. G d. H e. D
*** Using the diagram below, answer the questions 37 - 39:
A  B  C  37) Which of the following is the supreme nuchal line?  a. A  b. B  c. C  d. D  e. E
38) In the diagram, where is the external occipital protuberance?
a. A b. E c. B d. H e. I
39) The suture pointed at by the letter A is called?
a. Metopic b. Sagittal c. Lambdoidal d. Coronal

e. None of the above

\*\*\* Using the diagram below, answer the questions 40 - 43:



40) In the diagram, where is the foramen spinosum?

- a. A
- b. B
- c. F
- d. G
- e. H

41) In the diagram, where do the olfactory nerve pass to the nasal cavity?

- a. D
- b. A
- c. F
- d. G
- e. H

42) In the diagram, where is the foramen rotundum?

- a. A
- b. D
- c. E
- d. C
- e. B

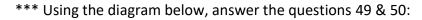
43) In the diagram, where does the jugular vein pass through?
a. C b. D c. E d. H e. G
*** Using the diagram below, answer the questions 44 - 46:
A B D C C C 44) Where is the mental foramen in the diagram?
a. C b. D c. E d. F e. None of the above
45) Where is the mandibular notch in the diagram?
a. A b. B c. E d. F e. None of the above
46) What is the process that make the TMJ of the skull?
a. F b. B c. E d. A

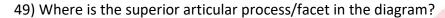
e. None of the above

- \*\*\* Using the diagram below, answer the questions 47 & 48: (الأسنان)
- 47) This fontanel usually closes about two months after birth.
- a. A
- b. B
- c. C
- d. D
- e. None of the above



- a. Mastoid fontanel
- b. Posterior fontanel
- c. Anterior fontanel
- d. Sphenoid fontanel
- e. Styloid process





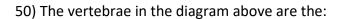


b. D

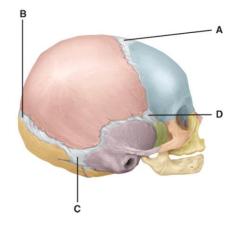
c. E

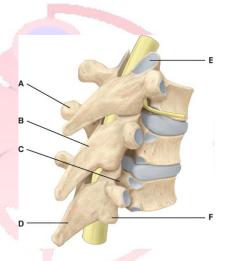
d. F

e. B



- a. Cervical vertebrae
- b. Thoracic vertebrae
- c. Lumbar vertebrae
- d. Sacral vertebrae
- e. Coccygeal vertebrae
- \*\*\* Using the diagram below, answer the questions 51 & 52:
- 51) Which of the cervical vertebrae are responsible for the ability to move your head from side-to-side signifying "no"?
- a. A & B
- b. C & B
- c. D & E
- d. C & D







a b c	52) Which of the following vertebrae is considered typical cervical vertebra?  a. A  b. B  c. C  d. E  e. Two answers are correct
k	*** Using the diagram below, answer the questions 53 - 55:
a b	A  B  E  F  63) In the diagram, which part is the most superficial (subcutaneous) part of the sternum?  a. A  b. B  c. C
C	d. DANATOMY e. EANATOMY
5	54) Where is the clavicular notch?
b c	a. A b. C c. D d. B e. F
а	55) The last process to be ossified completely at the diagram above is: a. C b. A

c. B d. E e. D

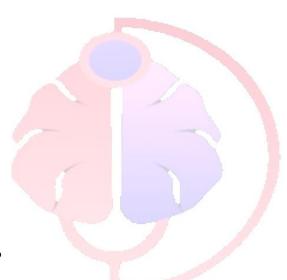
## **Answers**

1	2	3	4	5	6	7	8	9	10
D	С	Е	Α	Е	Α	E	G	D	С
11	12	13	14	15	16	17	18	19	20
Α	Α	Е	Α	С	D	В	С	С	С
21	22	23	24	25	26	27	28	29	30
Α	В	Α	В	Е	В	С	Α	В	С
31	32	33	34	35	36	37	38	39	40
С	D	Α	В	D	E	E	С	С	С
41	42	43	44	45	46	47	48	49	50
D	Α	С	В	В	D	В	D	С	В
51	52	53	54	55					
Α	С	D	В	С					

## Highness & Arak 2022 Mid exam (Dr. Wafaa' questions)

- 1) The secondary vertebral curves that develop later in life are:
- A. The convex cervical and thoracic curves
- B. The concave sacral and thoracic curves
- C. The concave cervical and lumbar curves
- D. The convex cervical and lumbar curves
- 2) Regarding the tarsal bones, the CORECT statement is:
- A. eight tarsal bones contribute the ankle
- B. cuboid is located laterally
- C. the calcaneus articulates with the tibia and fibula
- D. the bone of the foot that forms the heel is the talus
- 3) Regarding the femur, the CORRECT statement is:
- A. has medial & lateral condyles which articulates with fibula
- B. all statements are correct
- C. posteriorly has a ridge called the linea aspera
- D. femur has an intertrochanteric line located posteriorly
- 4) The inferior orbital fissure is located between:
- A. Maxilla and Palatine bone
- B. Body and lesser wing of the Sphenoid
- C. The greater wing of the Sphenoid and the Maxilla
- D. The greater and lesser wings of Sphenoid

- 5) One of the following matches is INCORRECT:
- A. joints between carpal bones ...... plane type
- B. superior radioulnar joint ..... pivot type
- C. carpometacarpal joint of thumb ...... hinge type
- D. shoulder joint ..... ball and socket type
- 6) The proximal row of the carpal bones contains all of the following EXCEPT:
- A. Pisiform
- B. Trapezium
- C. Lunate
- D. Scaphoid
- 7) All of the following are facial bones, EXCEPT:
- A. Nasal
- B. Ethmoid
- C. Mandible
- D. Maxilla
- 8) A typical lumbar vertebra has:
- A. a transverse foramen
- B. articulation sites for ribs
- C. a bifid spinous process
- D. a short and quadrangular spinous process
- 9) Which of the following pairs of terms is not matched?
- A. Abduction ..... movement of a bone away from the midline
- B. Inversion ..... movement of the sole medially
- C. Plantar flexion ..... occurs when you stand on your heels
- D. Pronation ...... a movement of the forearm in which the palm is turned posteriorly
- 10) All of the following about mandible are true, EXCEPT:
- A. the mandibular condyle articulates with the mandibular fossa of temporal bone to form the TMJ
- B. the mandibular foramen is located on the medial side of the ramus
- C. the mental foramen lies on the anterior part of the lateral surface of the body
- D. superior part of ramus divides into a condylar process anteriorly & a coronoid process posteriorly
- 11) Which of the following is a part of the ilium?
- A. Lesser sciatic notch
- B. Greater sciatic notch
- C. Pectineal line
- D. Obturator foramen



- 12) what is the name of the bony projection(s) at which the occipital bone articulates with the Atlas?
- A. the nuchal line
- B. the internal occipital protuberance
- C. the occipital condyles
- D. the external occipital protuberance

## **Answers**

1	2	3	4	5	6	7	8	9	10	11	12
С	В	С	С	С	В	В	D	С	D	В	С

## تم بحمد الله

دعواتكم لي و لأنفسكم بالخير و البركة في الدنيا و الآخرة, رينا آتنا في الدنيا حسنة و في الآخرة حسنة و قنا عذاب النار



