Option #1

Specify the bone that is part of the axial skeleton:

1) *sacrum* ;
2) ilium ;
3) collarbone ;
4) ischium.

2. Indicate the part of the rib that forms a joint with the bell body:

1) *rib head* ;
2) neck of the rib;
3) rib tubercle;
4) body of the rib.

3. Indicate the part that is missing in the first cervical vertebra:

1) anterior arch of the atlas;
2) vertebral *body ;*
3) posterior arch of the atlas;
4) transverse process.

4.Vertebrae according to classification belong to:

1) mixed bones;
2) spongy bones;
3) flat bones;
4) sesamoid bones;

5.Number of cervical vertebrae:

1) 5;
2) 6;
3) *7;*
4) 8;

6. **Indicate the characteristic feature of all thoracic vertebrae:**

1) the presence of an opening of the transverse process;
2 *) the presence of costal fossae;*
3) the presence of a mastoid process;
4) the presence of an additional process.

7.Where does the rib groove go?

1) along the neck of the rib;
2) along the upper edge of the rib;
3) on the outer surface of the rib;
4) *along the lower edge of the rib.*

8. Determine the meaning and functions of the skeleton

1) Receptacle for internal organs, depot of minerals
2) *Supportive, motor, protective, biological*
3) Hematopoietic, protective, motor
4) Protective, motor, support,

9.Name the chemical composition of bone

1) Calcium, magnesium, phosphorus, manganese, proteins
2) Organic and inorganic substances
3) Proteins, fats, carbohydrates, calcium salts
4) Minerals

10. What curves of the spinal column are called kyphosis?

1) Convex to the right or left
2) Convex back
3) Convex forward
4) Convex to the right or back

Option No. 2

1. Human body parts:
1) head, upper limbs, neck, torso, back, lower limbs
2) head, neck, torso, back, limbs
3) head, neck, torso, limbs
4) head, torso

2. The sagittal plane divides the human body into parts:
1) front, back
2) left, right
3) top, bottom
4) front, right

3. The spinous process departs from the vertebral arch:
1) one;
2) two;
3) three;
4) four;

4.What are the physiological curves of the spinal column?
1) Cervical and sacral kyphosis, thoracic and lumbar kyphosis, thoracic scoliosis
2) Cervical and lumbar lordosis, thoracic and sacral kyphosis, thoracic scoliosis
3) Cervical and lumbar kyphosis, thoracic and sacral kyphosis, thoracic scoliosis
4) Cervical and lumbar kyphosis, thoracic and lumbar kyphosis, thoracic scoliosis

5. The main distinguishing feature of all cervical vertebrae is:
1) small size of the vertebral body;
2) hole in the transverse processes;
3) vertebral artery groove;
4) location of the articular processes in the frontal plane;

6. The main distinguishing feature of all thoracic vertebrae is:
1) hole in the transverse processes;
2) small size of the vertebral body;
3) costal fossae on the vertebral body;
4) location of the articular processes in the sagittal plane;

7. . A characteristic feature of the lumbar vertebrae is:
1) location of the articular processes in the frontal plane;
2) mastoid process on the transverse process;
3) mastoid process on the inferior articular process;
4) mastoid process on the superior articular process;

8. What causes bone growth in length:
1) Due to the diaphyseal cavity
2) Due to epiphyseal ossification points
3) Due to metaphyseal cartilages
4) Due to apophyses

9. Ribs according to classification relate to:
1) tubular bones;
2) spongy bones;
3) flat bones;
4) mixed bones;

10. True ribs include:
1) I – VII ribs;
2) I – VIII ribs;
3) VII – X ribs;
4) VIII – X ribs;

Option #3

1. What causes bones to grow in width?

2) Due to the diaphyses and metaphyses

3) Due to the cambial layer of the periosteum

4) Due to apophyses

2. Name the parts of the tubular bone

1) Metaphyses , epiphyses, diaphyses, body

2) Epiphyses, two diaphyses, metaphyses

3) Diaphysis, epiphyses, apophyses, metaphyses

4) Tubercle, pits and ridge

3. What curves of the spinal column are called lordoses?

1) Convex to the right or left

2) Convex forward

3) Convex back

4) Convex to the left and back

4. The pediatrician examined the 11.5 month old child. No complaints. The child is active, holds his head up, sits, stands in the playpen. What curves of the spinal column formed into it?

1) Thoracic lordosis, lumbar lordosis, sacral kyphosis

2) Cervical lordosis, thoracic kyphosis, lumbar lordosis, sacral kyphosis

3) Cervical lordosis, thoracic kyphosis, lumbar lordosis

4) Cervical lordosis, sacral kyphosis

5. Number of transverse processes:

1) one;

2) *two* ;

3) three;

4) four;

6. Which vertebra has the carotid tubercle?

1) On the sixth cervical,

2) On the fifth neck

3) On the seventh neck

4) On the fourth

7. . Oscillating ribs include:

1) I – VII ribs;

2) I – VIII ribs;

3) VII – X ribs;

4) XI – XII ribs;

8. The sternum according to classification refers to:

1) tubular bones;

2) spongy bones;

3) flat bones;

4) mixed bones;

9.. The upper opening of the chest is limited:

1) I thoracic vertebra, outer edges of the first ribs, upper edge of the manubrium of the sternum;

2) VII cervical and I thoracic vertebrae, inner edges of the first ribs, upper edge of the manubrium of the sternum;

3) I thoracic vertebra, inner edges of the first ribs, body of the sternum;

4) I thoracic vertebra, inner edges of the first ribs, upper edge of the manubrium of the sternum;

10. A characteristic feature of the lumbar vertebrae is:

1) location of the articular processes in the frontal plane;

2) location of the articular processes in the sagittal plane;

3) bifurcated spinous process;

4) opening in the transverse processes ;

Option No. 4

1. It is known that older people have a hump. When changing what physiological curvature of the spine can such a hump appear?

1) With increasing thoracic lordosis
2) With increasing lumbar lordosis
3) With a decrease in thoracic kyphosis
4) *With increasing thoracic kyphosis*

2. On the transverse processes of which vertebrae is there a costal fossa?

1) X breast
2) *I-XII chest*
3) X-XII breast
4) All babies

3. A sick 10-year-old child was found to have a spina bifida in the area of the XII thoracic vertebra. Failure of fusion (gap) of what anatomical formation led to protrusion of the spinal cord?

1) *Vertebral arches*
2) Articular processes
3) Vertebral bodies
4) Intervertebral disc

4. To establish the boundary between the cervical and thoracic spine, the doctor must palpate the process of the VII cervical vertebra.
What kind of shoot is this?

1) *spinous*
2) Upper articular
3) Transverse
4) Lower articular

5. Number of thoracic vertebrae:

1) 5;
2) 6;
3) 7;
4) *12;*

8.The lower opening of the chest is limited:

1) behind – by the body of the X thoracic vertebra, in front – by the xiphoid process, on the sides – by the lower ribs;
2) *behind - the body of the XII thoracic vertebra, in front - the xiphoid process, on the sides - the lower ribs;*
3) behind – by the body of the XI thoracic vertebra, in front – by the body of the sternum, on the sides – by the lower ribs;
4) behind - the body of the XI thoracic vertebra, in front - the xiphoid process, on the sides - the lower ribs;

9. The intermediate sacral crest is formed from the fusion of:

1) spinous processes of the sacral vertebrae;
2) transverse processes;
3) transverse and costal processes;
4) *articular processes;*

10. The jugular notch of the sternum is located:

1) on the body of the sternum;
2) on the xiphoid process;
3) *in the area of the sternum angle;*
4) between the manubrium and the body of the sternum

1.The skeleton of the free upper extremity includes

1) scapula,humerus,forearm bones,hand bones;
2) humerus,ulna,hand bones;

3) scapula,clavicle,humerus;
4) humerus,ulna,radius,hand bones;
2.The clavicle is classified as:
1) tubular bones;
2) spongy bones;
3) flat bones;
4) mixed bones
3.On the lower surface of the sterna end of the clavicle is located:
1) cone-shaped tubercle;
2) the impression of riboclavicular ligament is depressed;
3) trapezoidal line;
4) sterna articular surface;
4.The metacarpal bones are classified as:
1) tubular bones;
2) spongy bones;
3) flat bones;
4) mixed bones;
5.At the distal end of the radial bone is:
1) the tuberosity of the radial bone;
2) the neck of the radius;
3) corpal articular surface;
4) the head of the radius;
6.At the proximal end of the radial bone is:
1) ulnar notch;
2) styloid process;
3) carpal articular surface;
4) the head of the radius;
7.What ligaments strengthen the shoulder joint?
1) the coraco-acromial ligament;
2) the coraco-clavicular ligament;
3) the upper transverse ligament of the scapula;
4) the coraco-humeral ligament
8.What is the ligament of the scapula?
1) coracoacromical ligament;
2) ulnar collateral ligament;
3) the annular ligament of the radius;
4) interclavicular ligament;
9.What movements are possible in the elbow joint?
1) the abduction and adduction of the forearm;
2) flexion and extension of the forearm;
3) flexion and extension of the hand;
4) circular motion
10.Which bone is involved in the formation of the wrist joint?
1) piciform
2) capitate
3) hamate
4) radius bone.

Option 2
1.The clavicle has:
1) body,costal acromical ends;
2) body,scapular and sternal ends;
3) body,acromical and sternal ends;

4) body,costal and scapular ends;
2.On the lower surface of the acromical end of the clavicle is located:
1) the acromical articular surface;
2) the riboclavicular ligament is depressed;
3) sternal articular surface;
4)trapezius line;
3.The conoid tubercle is located on:
1) the lower surface of the sternal end of the clavicle;
2) the upper surface of the acromical end of the clavicle;
3) the lower surface of the acromical end of the clavicle;
4) the body of the clavicle;
4.Three borders are distinguished in the scapula:
1) upper,lower,lateral;
2) medial,inferior,superior;
3) ribial,medial,upper;
4)medial,lateral,upper;
5.The structure of the elbow joint is:
1. simple;
2. hinge;
3. complex;
4. combined;

6. Which ligament is the intrinsic ligament of the scapula?
1)coraco-acromial ligament;
2)ulnar collateral ligament;
3)annular ligament of the radius;
4)interclavicular ligament.
7**. The proximal radial ulnar joint is:**
1. flat;
2. condylar;
3. cylindrical;
4. ellipsoidal;

8.The structure of the sholder joint is:
1) simple;
2) complex;
3) ellipsoidal;
4) combined;
9.The elbow joint is strengthened by ligaments:
1) clavicle-acromical;
2) rib-clavicular,acromial-clavicular;
3) coraco-clavicular,acromial-clavicular
4)ulnar and radial collateral, annular ligament of the radius;
10.The radial ligament of the wrist connest:
1) the scaphoid bone to the bones of the wrist;
2) the hamate bone to the wrist bones;
3) the capitate bone to the carpal bone;
4)pisiform bone with wrist bones;

3-option
1. There are three angles in the scapula:
1) costal, medial, upper;
2) medial, lower, upper,
(3) upper, lower, lateral;
4) medial, lateral, clavicular
2.The humerus is classified as:
1) tubular bones;

2) spongy bones;
3) flat bones,
4) mixed bones;

3.Above the humerus trochlea from behind is:

1) radial fossa,
2) coronal fossa,
3) sulcus of the radial nerve;
4)fossa of the ulnar process;

4.The radial nerve sulcus is located on:

1) the proximal epiphysis of the humerus;
2) the distal epiphysis of the humerus,
3)diaphysis of the humerus

5.Above the in front trochlea humerus is located:

1)ulnar fossa;
2) coronal fossa;
3) sulcus of the radial nerve;
4)ulnar nerve sulcus;

6. The body of the ulna has three margins:

1) Anterior, medial, posterior;
2) Anterior, medial, lateral;
3) Anterior, interosseous, medial;
4) Anterior, interosseous, posterior;

7) What is the ligament of the scapula?

1) Coracoacromial ligament;
2) ulnar collateral ligament;
3) The anular ligament of the radius;
4) interclavicular ligament;

8. What movements are possible in the elbow joint?

1) The abduction and adduction of the forearm;
2) Flexion and extension of the forearm;
3) Flexion and extension of the hand;
4) circular motion;

9. What movements are possible in the radiocalpar joint?

1) Rotation of the radius;
2) Rotation of the ulna;
3) Flexion and extension of the hand;
4) The rotation of the navicular bone;

10. The interphalangial joints of the hand by the shape of their articular surface are;

1) Ellipsoidal;
2) Globular;
3) block shape;
4) Flat

4-option

1.On the lower surface of the acromial end of the clavicle is:

1) the acromial articular surface ;
2) cone-shaped tubercle;
3) the riboclavicular ligament impression;
4) sternal articular surface;

2.The scapular fossa is located:

1) on the dorsal surface of the scapula;
2) above the scapular spine;
3) below the scapular spine;
4) on the rib surface of the scapula.;

3. Above the head of the condule of the humerus is:

1) radial fossa;
2) The coronal fossa;
3) sulcus of the radial nerve;
4) ulnar nerve sulcus;

4. The head of the humerus is separated from the rest of the bone:

1) The surgical neck ;
2) intercuspidal sulcus;
3) the sulcus of the radial nerve;
4) the anatomical neck

5. The ulnar nerve sulcus is located;

1) in the upper third of the diaphysis of the humerus;
2) on the posterior surface of the medial epicondyle;
3) on the posterior surface of the middle third of the diaphysis of the humerus;
4) The upper surface of the lateral epicondyle;

6. The radial bone is classified as;

1) Tubular bones;
2) spongy bones;
3) flat bones;
4) mixed bones;

7. The body of the radial bone has three borders;

1) anterior , superior, posterior;
2) anterior, posterior, lateral;
3) anterior, posteror, interosseous;
4) anterior, medial, interosseous;

8. Which of the bones is involved in the formation oh the mediocarpal joint?

1) Navicular bone;
2) metacarpal bone;
3) distal phalanx of the thumb;
4) proximal phalanx oh the thumb;

9. The humeral – radial joint is formed by;

1) The head of the humerus and the acromion of the scapula;
2) The head of the humerus and the radius;
3) The head of the condule of the humerus and the articular socket of the scapula;
4) The head of the condule of the humerus and the fossa on the head of the radius;

10. The structure of the wrist joint is;

1) Simple;
2) complicated;
3) complex;
4) combined;

5-option

1. The scapula is classified as;

1) Tubular bones;
2) spongy bones;
3) flat bones;
4) mixed bones;

2. In the interphalangial joints movements are possible;

1) Cicular;
2) opposing;
3) flexion- extencion;
4) adduction - abduction

3. The distal row of the wrist consists of the bones;

1) Navicular, Semilunate, cephalic, hook-shaped;
2)trapezium,trapezoid,triangular,cephalic;
3)trapezoidal,trapezium ,trihedral,hook-shaped;
4)trapezoidal,trapezium,capitates,hamate;

4. The distal epiphysais of the ulna has

1) the articular circumference of the head of the ulna
2) ulnar notch
3)radial notch
4)carpal articular surface

5. the body of the radius has three surfaces

1) anterior, medial, posterior
2) anterior, medial, lateral
3) posterior, medial, lateral
4) anterior, posterior, lateral

6. The phalanges of the fingers of the hand are classified as

1) tubular bones
2) spongy bones
3) flat bones
4) mixed bones

7. The glenoid cavity of the scapula is located

1) at the apex of the acromion
2) on the dorsal surface of the scapula
3) on the rib surface of the scapula
4) In the area of the lateral angle

8. In terms of the shape of the articular surface the shoulder joint refers to

1) flat
2) block-shaped
3) globular
4) ellipsoidal

9. Intercarpal joints are formed by

1) the heads and bases of the adjoining phalanges
2) the bones of the distal carpal row and the base of the metacarpal bones
3) the bones of the proximal and distal carpal rows
4) the bases of the metacarpal bones

10. In the metacarpophalangeal joints , movements around the saggital axis is possible

1) oppositions
2) flexion, abduction
3) extension, abduction
4) abduction, adduction