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Q No 1 :-

Part (a) :-
ANSWER :-

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⇒ Humeroulnar joint is form between the trochlea on medial aspect of humerus and the trochlear notch on the proximal side of ulna.

⇒ It is simple hing joint.

Movements :-

⇒ It is allow for the movement of flexion, extension.

⇒ Flexion is occur in humeroulnar joint is produce by the action of bicep brachii and brachialis.

⇒ Extension is occur by the tricep brachii and anconeus muscle.

Part (b) :-

Answer :-

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Humero radial joint :-

⇒ The humero radial joint is a part of elbow joint composed of two bones humerus and radius.

⇒ Humero radial joint is joint between capitulum of the humerus articulate with the fovea on the head of the radius.

Movements :-

⇒ It allow flexion, extension, pronation and supination.

⇒ In full flexion the movement of radial head is hampered by the compression of the surrounding soft parts so that the feeblest rotatory movement of radius on the humerus pronation &

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supination, occurs in semiflexion.

Part (c) :-

Answer :-

Carrying angle :-

⇒ The angle is formed b/w the axis of humerus & longitudinal of forearm.

⇒ Normal angle :- In men 5 degree
In women 10 degree

⇒ The angle is more in women due to wider pelvis.

⇒ Cubitus Valgus :- Increase in carrying angle.

⇒ Cubitus valgus :- decrease in carrying angle.

Importance :-

⇒ It is important for carrying

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objects.

⇒ It allow forearm to clear hip when we swings arms.

Q No 2 :-

Part (a) :-

Answer :-

Wrist Complex :-

⇒ The wrist is complex joint that bridges the hand to the forearm. It is a collection of multiple bones and joints.

⇒ The bones comprising the wrist include the distal end of ulna and radius.

Joints :-

⇒ The wrist complex consist

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of two compound joints.

⇒ radiocarpal joint.

⇒ midcarpal joint.

Contributions:

⇒ At control length tension relationship in hand muscles.

ROM:

⇒ 65 to 85 of flexion

⇒ 60 to 85 of extension

⇒ 15 to 21 of deviation

⇒ 20 to 45 of ulnar elevation.

Part (b) :-

Answers:-

Carpal Tunnel Syndrome:

⇒ Carpus is a word derived from Greek word "karpos" which means "wrist."

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Carpal tunnel syndrome is pressure on the median nerve - the nerve in the wrist that supplies feeling & movement to parts of hand.

It can lead to numbness, tingling, weakness or muscle damage in the hand fingers.

Q No 3:-

Part (a) :-

Answer :-

Muscle twitch :-

It is also called muscle fasciculation.

A muscle twitch is an involuntary contraction of the fibers that make up a muscle. Nerves control muscle fibers. When something stimulate or damage a

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nerve, it causes the muscle fibers to contract, resulting a twitch.

Summations =

⇒ When mechanical responses to successive stimuli are added to initial response the result is known as summation.

⇒ Refractory Period =

If a second stimulus occurs during the latency period of the first muscle twitch, it produced no additional response & the muscle is said to be completely refractory.

Part (b) =

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Types of muscle

Contractions:-

⇒ There are three types of muscles.

Isometric:-

⇒ A muscular contraction in which the length of muscle does not change.

Isotonic:-

⇒ in which the length of muscles changes.

Eccentric:-

⇒ An isotonic where the muscle length change.

Part (c) :-

Answers:-

⇒ Minimum to no pain.


⇒ Significant loss of function.

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⇒ Complete loss of function.

⇒ Complete rupture of a muscle or tendon. these can present with a palpable defect in the muscle or tendon.

⇒ These injuries some time required surgery to recover damage muscle & tendons.



Q No 4%

Part (a)%

Answer%

Difference b/w Cranial & Spinal nerves%

⇒ Cranial nerve emerge directly from brain & spinal nerve emerge from segment of spinal cord.

⇒ In human cranial nerves



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12 pairs of Cranial & Spinal 31 pairs are present.

⇒ Spinal nerve are attached to the spinal cord & cranial is part of peripheral brain.

~~Part~~

⇒ A spinal nerve forms from the dorsal and ventral roots of the spinal cord. It branches into the dorsal ramus and ventral ramus. Spinal nerve are mixed nerves that carry both sensory and motor information.

Part (b) 80

Answer 80

Axonotmesis 80

⇒

is a moderate



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nerve injury caused by axon damage.

Neuropraxia:

⇒ injury of peripheral nerve.

Neurotmesis:

⇒ is the most severe grade of peripheral nerve injury.

Q No 5:-

Part (a):

Answer:

Wolf's law:

⇒ It is state that bone in healthy person or animal will adapt to the loads under which it is placed.

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⇒ The bone grows and remodels in response to the forces that are placed in healthy person.

Part (b) :-
Answer :-

⇒ Simple fracture is repair by wearing a cast, while others can repair by surgery to fix a broken bone using rods, pins, to hold the bone in place.

⇒ Steps of fracture repair :-

⇒ 1st stage :-

⇒ 1 to 5 days

⇒ This stage begin immediately following the fracture.

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⇒ In this stage hematoma formation can occur.

2nd stage:-

⇒ 5 to 11 days.

⇒ In this stage fibrocartilagenous callus formation occurs.

3rd stage:-

⇒ 11 to 28 days.

⇒ In this phase a hard, calcified callus of immature bone forms called bony callus.

4th stage:-

⇒ In this phase a new bone formation by osteoblast start & hard bony callus is ultimately replaced by compact bone.