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Class. __ Bs (OT)

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Q No (1)

Ans: →

Pituitary gland: →

Pituitary gland are also called hypophysis ductless gland of the endocrine system that are secrete hormones directley in to the blood stream. the term hypophysis from the greek for lying 'under' another name from the pitutry refers to the gland, position on the underside of the brain.

→ the pitutary gland are also called the master gland b/c its harmone regulate other important endocrine gland including the adrenal thyriod gland. e.g ovaries & testes. & in some case have direct regulatry effect in mayus tissue.

Harmones:

(A) Anterior lobes:→

* Growth harmone (GH)
* prolactin.
* thyriod Stimulating harmone (TSH)
* Adrenocorticotrophic harmone (ACTH)
* follicle Stimulating harmon fsH
* lutinizing harmone (LH)

(b) posterior lob:→

* vasopressin (ADH)
* oxytocin

* Growth harmone

Action of growth harmone.

(1) Stimulating growth of bone Cartilage, & Connective tissue.

* Increse Calcum absorption from GIT
* Decrese Sodium potasium Calcum & phasphorus excreaton from kidney.

Diseases related to growth harmone.

(1) Gigantismi →

it is due to over production of G.H during adolescence

it is characterized.
* Tall structure
* Large hand & feat.

(2) Dawarfismi →

→ Defficency of GH Secretion.
→ Shortness of Structure.
→ Small genitalid.
→ Delicate extremities.

Harmones of anterior pituty. are.

(2) prolactin :-

Action :→ prolactin plays an important role in the development of the mamary gland & in milk synthesis

(3) thyroid Stimulatg harmone :→
it Stimulates the thyroid

gland to produce

→ thyroxin (T_4) &

→ triiodothyronine (T_3)

(4) Adrenocriphic Harmone.

→ it is often produced in response to biological stress

* it is principal effect are increased production & release of corticosteriod.

(5) Follical Stimulating harmone:→

↳ fsH regulate the development growth pubertal maturation & reproductive process of the body.

Harmones of posterior lobes:→

A) Anti diuretic harmones:

↳ To retain water in the body

(B) Oxytocien. ↳ oxytocin is synthesized by in the hypothalamus.

↳ Stored in in posterior lobes of pituitary gland

Q No (2)

Ans:—

Appendicular Skeletal:

The Appendicular Skeletal is the formed by the bones of pactoral girdle, pelvic girdle & upper limbs as lenown as Appendicular Skeletal.

The upper/lower limbs bone are.

- → Clavicale
- → Scapula
- → Humerus
- → ulna
- → Rdius
- → carpals
- → metacarpals
- → phalanges.

- → OS coxa
- → femur
- → petella
- → Tibia
- → fibula
- → Tarsals
- → Metatarsal
- → phalanges

Structure of the bone..

Two types of the bone

1) Compact bone
2) Spongy bone

Compact bone:→

The hard outer layer of bones is composed of compact bone tissue so called its due to minimal gaps & spaces.

Spongy bone:→

Spongy bone fills the interior of the bone which is composed of a network of road & plate like elements that make the over all organ lighter & allowing room for blood vessles & narrow.

(b) Axial Skeletal:→

The Axial system is made up with the skull bones, the vertibrid the Ribs & the stream

Skull bone are.

- → frontal
- → spehnoid
- → ethmoid
- → Nasal
- → acrinal
- ↳ maxilla
- → Mandible
- → Zygomatic
- → occipital

* Vertebria.

The Spine is divided into seval action.

→ the Cervical Vertebrid: make up the neck.

→ the thorid vertebrid Comprise the chest & have ribs are attached.

→ the lumber vertebria are the remaning vertbrid below the last thorid bone.

→ the sacral vertebrid are caged with in the bone of the pelvies.

Q No (3)

Ans:→.

Muscular Tissue:→.

The muscular cells are called ~~muscular~~ muscles fibers.

every fibers Contain thousand of myofibrils.

→ Inside Each myofibril there are many myofilaments that are made of Two protien.

→ the action & the myosin the myofibrals are divided in sub units called Sarcomeres

Types of muscles Tissue:→.

(1) Skeletal muscles.

(2) Cardide muscle

(3) Smoth muscle.

(1) Skeletal muscles:→

→ the skeletal muscles are also known as striated or valuntry

→ they are attached to bones by tendons providing movement.

→ their contraction is quick & variable from powerful to precise. it is controlled by the CNS

(2) Cardiac muscles:→

↳ Cardiac muscles is only found in the heart.

→ it is made of striated fibers & its contraction is directed by the CNS

(3) Smoth muscles:→

→ Smoth muscles are also known as involantry as its contraction is lead by the CNS & the gland.

→ its covred the hallow walls of many organ such as the osephogus the bronchai the uterds or stomuch.

↳ its contract slowley.

Q No (4)

Ans:→

Cycle of breathing:→

→ the avrage respiration rate is 12 to 15 breaths/ minute.

→ Each breath Consist of two phases.

(1) Inspiration.
(2) Expiration:

(1) Inspiration:→

→ When the Capacity of the thoracic Cavity is increased by simultenous Contraction of the intercostal muscles & the diaphragm.

→ the parietal pluerd moves with the walls of the thorax & the diaphragm.

→ this reduce the pressure in plural cavity to a leval Considrebaly lower than admosphutic pressure.

→ the visceral pluerel follows the parietal pluerd pulling the lungs with it.

When we breath in Inspiration. the following happens:→

→ the diaphragm pulls down.

→ the intercostal muscles contract.

→ Air pressure is reduced.

→ Air is inhaled in to the lung.

→ the chest expand.

→ the is process of Inspiration active.

→ Inspiration last about 2 seconds.

② Expiration:→

Relaxation of the intercostal muscles & the diaphragm results in downward & inward movmnt of the rib cage & elastic recoil of the lungs

→ they still contain some air & prevented from collapse by the intact pleura.

→ this process is passive as it does not require the expenditure of energy.

* When we breath out expiration the oppiste happens:→.

* the diaphragm relaxes in to its some position.
* the intercostal muscles relax
* the chest become smaller.
* pressure increase in the lungs.
* Air is forced out.

Q No (5)

Ans: →

Function of Integrity System:→

protection:→

→ first line of defense against
→ bacteria.
→ virus.

* protect underlying structure fr...
→ ultraviolet (UV) radiation
→ Dehydration.

* Vitamin D production.
→ need for calcium absorption.
→
* Sensation.
→ Sensory receptor.

* body temprature regulation.
if too hot
→ Dermal blood vesle dialate
→ vessle carry more blood to the surface so heat can escape
* if too blood hoot
→ Dermal blood vessles.

→ prevent heat from escaping.

* excretion
→ Small amount of waste product are lost through perspiration.

Function of hair:→

- Head
→ UV protection
→ Cushion from trauma
→ Insulation.

* Nostrils, Ear Canals, Eyelashes.
→ prevent entry of foreign matrl

* body hair
→ Sensory detection

* Root hair plexus.
→ Sensory nerve at base of hair follicle

* Arrector pili muscles.
→ Attached to every hair follicel
→ Contrad to stand hair perpendicular to skin surface.

Function of Nail:→

Nail → protect fingers & toes
→ made of dead cells packed with keratin.

→ metabolic disorder can change nail structure

Nail production:→

occur in deep epidermal fold near the bone called the nail root

Nail body:→ → visible portion of the nail
→ covered the nail bed

Side of nail.
→ lie in lateral nail grove
→ surrounded by lateral nail folds.

....the End....