ORBIT 2

1- Eyelid protect the Eye from → ① Excessive light ② injury or trauma

2- upper eyelid is larger and more mobile than lower eyelid due to → levator palpebrae superioris

3- The space btw the Eyelids when they Are open → palpebral Fissure

4- The layers of Eyelids "from Ant. to post." →
① Skin ② sub anous ③ voluntary ms. ④ orbital septum ⑤ conjunctiva

5- Skin + subcutanous tissue → thin layer of connective tissue + easy to become → edematous.
↳ Note:- Contain 2 type of Glands → ① sebaceous Gland "zeis" open to Follicles.
② modified sweat Gland "Ciliary Gland), Moll"

6- voluntary muscle in the eyelid → palpebral part of orbicularis oculi

7- Extension of periostem into Both upper + lower eyelids → Palpebral Fascia
↳ thickened at the margins of lids to form sup. + inf. tarsal plates
Note ↳ medial and lateral Ends of tarsal plates attached to medial and lateral palpebral ligament, → , Respectively.

8- which structure provides major support for eyelid → tarsus.

9- modified sebaceous gland, secrete oily material to prevent overflow of tears → tarsal Gland
↳ Note → another Name of this Gland → Meibomian glands.

10- Thin mucous mem. that Lines the Eyelids + sclera → conjunctiva
↳ Reflected to sup. + inf. fornices

11- Conjunctiva has 2 part → ① bulbar → cover sclera
② palpebral → lines Eyelids

12- Eyelids → closed by → 1- Relaxation of levator palpebrae superioris
2- Contraction of orbicularis oculi.

13- Eyelids → Elevated by → Contraction of levator palpebrae superioris

14- Collection of smooth ms. Fibers, part of levator palpebral superiorus and inserted into the skin of upper eyelid → superior tarsal ms
↳ Note:- innervated by post ganglionic parasympathetic from superior cervical ganglia

15- ptosis → Compelet droping of upper eyelid.
partial ptosis → droping of upper eyelid due to paralysis in sup. tarsal ms
proptosis → bulging of the Eye ball out of the orbit.
↳ Exophthalmous → due to :- 1- increase volume of Fat in orbit
2- hyper thyroidism.

16- Horner's syndrom " due to sympathetic dysfonction " characterized by →
① pupillary constriction → due to paralysis in dilator pupillae ms.
② Partialy ptosis → paralysis in superior tarsal ms.
③ Absence of sweating → Anhidrosis " Ipsilateral " due to Absence of innervation of sweat Gland.

ORBIT (2) - summary -

17 → The Function of orbital fat → ① act as ascket "For Rotate of eyeball" ② Stabilize Eye ball in it's position

18- Production, movment and drainge of Fluid From the surface of eye ball Function of → Lacrimal Apparatus

19- Lacrimal Apparatus made of →
① Lacrimal Gland + it's duct ② Lacrimal Canaliculi ③ Lacrimal Sac ④ Nasolacrimal duct

20- Lacrimal Gland located in → Anterior part of superiolateral region of orbit

21- Lacrimal Gland consists of 2 parts → Large orbital + Small palpebral.
↳ which Are continuos with each other by around the lateral edge of Lavatoer palpebral superioris
لـ زي كانها بتلف من جهة الـ Lateral للعضلة ← فبتنقسم لجزئين الـ Gland
4 contains 12 Ducts

22- the movment of Fluid → Firstly secreted from lacrimal Gland "Latrally" then cross the cornea → Finally Reach Medially → to "lacrimal Lake"

23- tears accumulate medially in → Lacrimal Lake, then Enter →

24- Upper blind End of the Nasolacrimal duct called → Lacrimal Sac

25- Nasolacrimal duct descends in abony canal and opens into → Nose

26- Nerve sopply of lacrimal Gland :-
↳ Sensory :- Lacrimal Nerve From ophthamic division of 5th CN
↳ sympathatic :- superior cervical Ganglion
(secreto-motor) ↳ parasympathatic :- Greater petrosal Nerve from Facial Nerve

27- Foramen Lacerum → opens anteriorly to :- pterygoid canal
opens posteriorly to :- carotid canal

28- Lacrimal Nerve joined by Branch called → Zygomatico temporal N.
↳ Parasympathatic to Lacrimal Gland.

29- Greater petrosal Nerve joined with → Deep Petrosal Nerve
↳ to Form Nerve of the pterygoid Canal called → Vidian Nerve

30- optic Nerve Enter the orbit From middle cranial Fossa through optic canal accompanied by ophthalmic A. +
↳ Note :- pierces the sclera from post. part of the Eye Ball. (optic disk)

* Clinical condition *
↳ papille dema → due to increase intra cranial pressure that lead to increase pressure in sub arachnoid space that surround the optic Nerve.
May the pressure happened due to thrombosis in cavernous venous congestion + sinus

* Note → the point that optic Nerve Enter the Eye ball through it called blind spot "Lacking visual Receptors."

31- Branches of Nasociliary Nerve " From ophthalmic division of 5th CN ".

① Ant. + post. ethmoidal Nerve ② Long ciliary ③ infratrochlear

④ communicating Branch to the ciliary Ganglion

32- trochlear Nerve → 4th CN → Enters the orbit through → sup. orbital fissure

+ supply → Superior oblique

33- Abducent Nerve → 6th CN → Enters the orbit through → sup. orbital fissure

+ supply → Lateral Rectus

34- Oculomotor Nerve → 3rd CN → Enters the orbit through → sup. orbital fissure

+ supply → superior division → 1- levator palpebrae superioris.

2- superior Rectus

↳ inferior division 1- medial + inferior Rectus 2- inf. oblique

↳ Note → Give Branch to ciliary Ganglion to carry parasympathetic innervation and innervate sphincter pupillae + ciliary ms.

↳ another Note → Give the Branch via inferior oblique ms.

then the post Ganglionic fibers leave the Ganglion in Short ciliary N. in the back of Eye ball

* ophthalmic Artery * → Runs along medial wall of the orbit

" Branch of ICA "

1. central Retinal A.
2. Post. ciliary A.
3. Ant. + Post Ethomoidal A.
4. Lacrimal A.
5. Muscular Branch
6. supra-orbital A.
7. supra-trochlear A.
8. External Nasal A.

* pathway of central Retinal Artery → is a small Branch of ophthalmic A. that pierces the meningeal sheath which surround the optic Nerve → then Enter the Nerve and Enters the Eye ball at the center of optic disk and here divided into Branches.

* ophthalmic veins *

superior ophthalmic ↳ leave the orbit through superior orbital fissure

inferior ophthalmic ↳ leave the orbit through inferior orbital fissure to join with Pterygoid plexus.