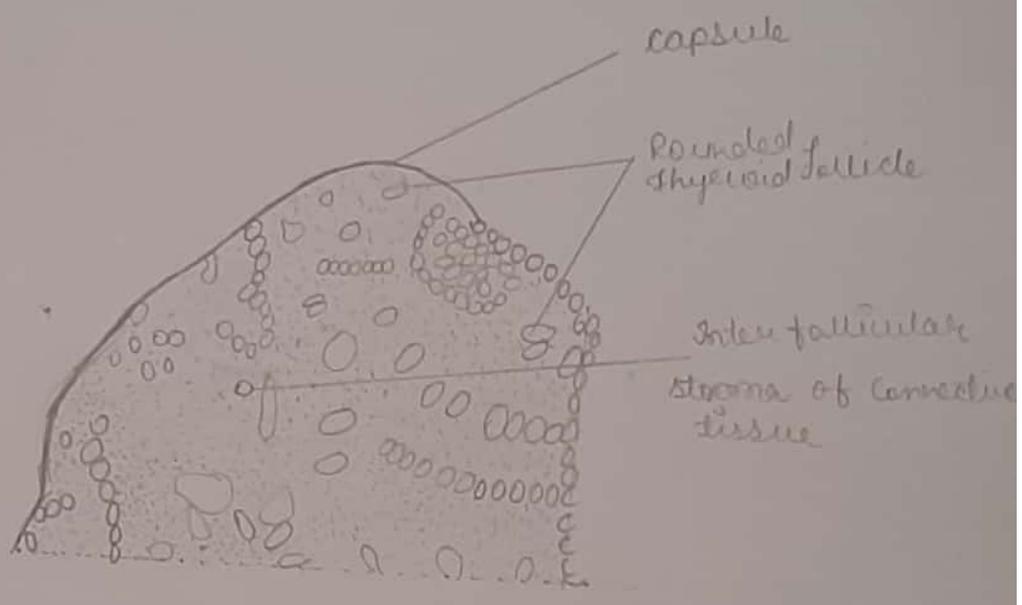


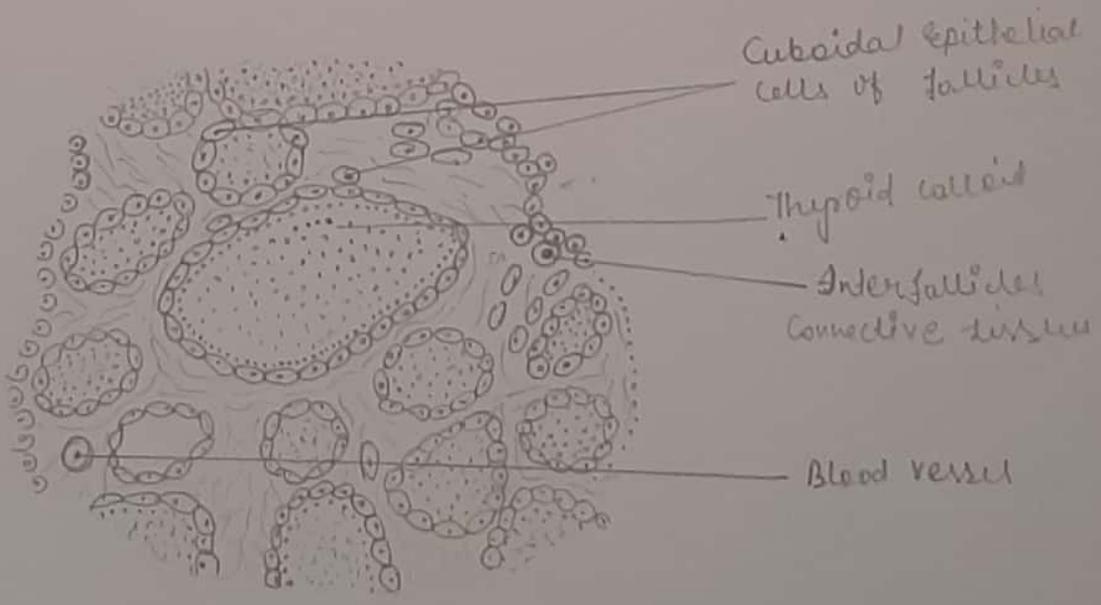
TDC
PART-III

PRACTICAL

⇒ Study of I.S. of Thyroid gland -



⇒ Under low Magnification



⇒ Under high Magnification

2.

Study of T.S. of Thyroid Gland :-

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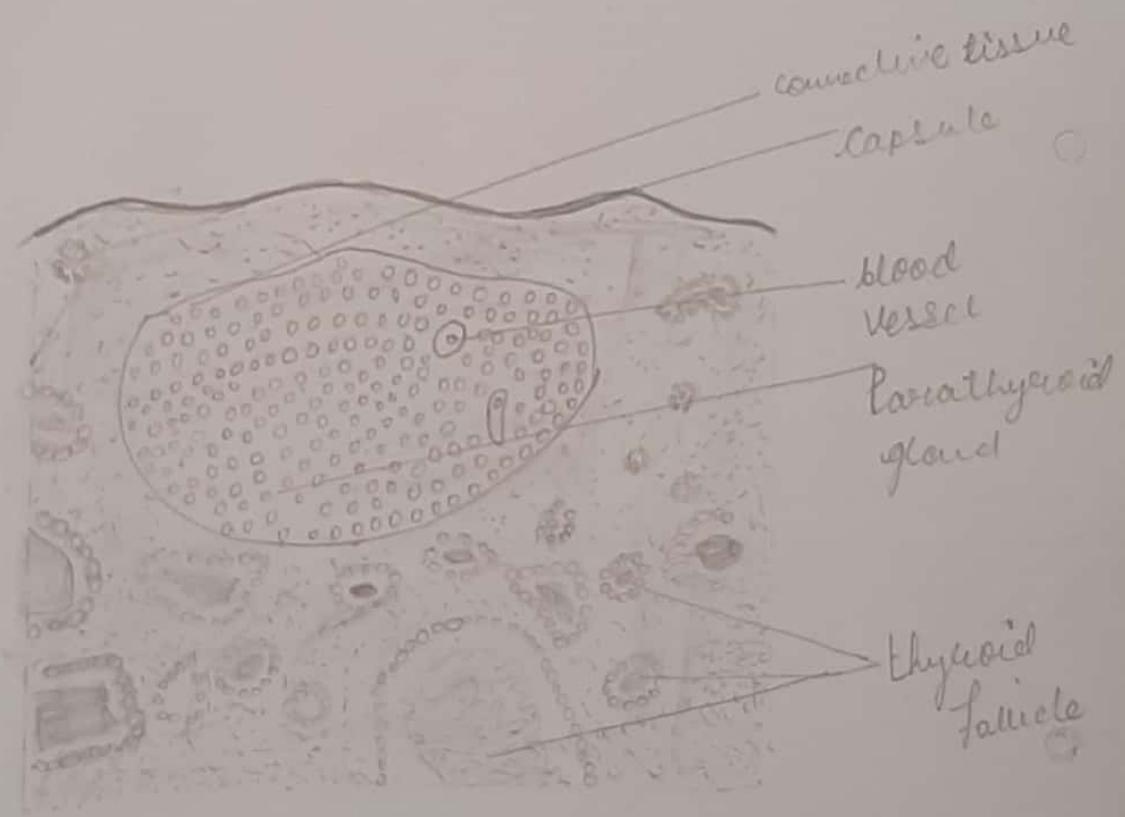
* Under Low Magnification :-

- (i) It is the most familiar endocrine gland consisting of left and right lobe connected across to the ventral side of trachea by isthmus.
- (ii) Thyroid gland comprises of a framework of connective tissue, enclosing numerous rounded or oval follicle or vesicles of different size.
- (iii) Histologically it consists of a no. of rounded thyroid follicles of various sizes separated by one another by connective tissue strand.

* Under high Magnification :-

- (i) The thyroid is composed of follicular and inter follicular zones.
- (ii) follicles are surrounded by single layered cuboidal or rounded epithelial cell.
- (iii) lumen of each follicles contains a viscous

Study of T.S of Parathyroid gland :-



→ T.S. of Parathyroid gland

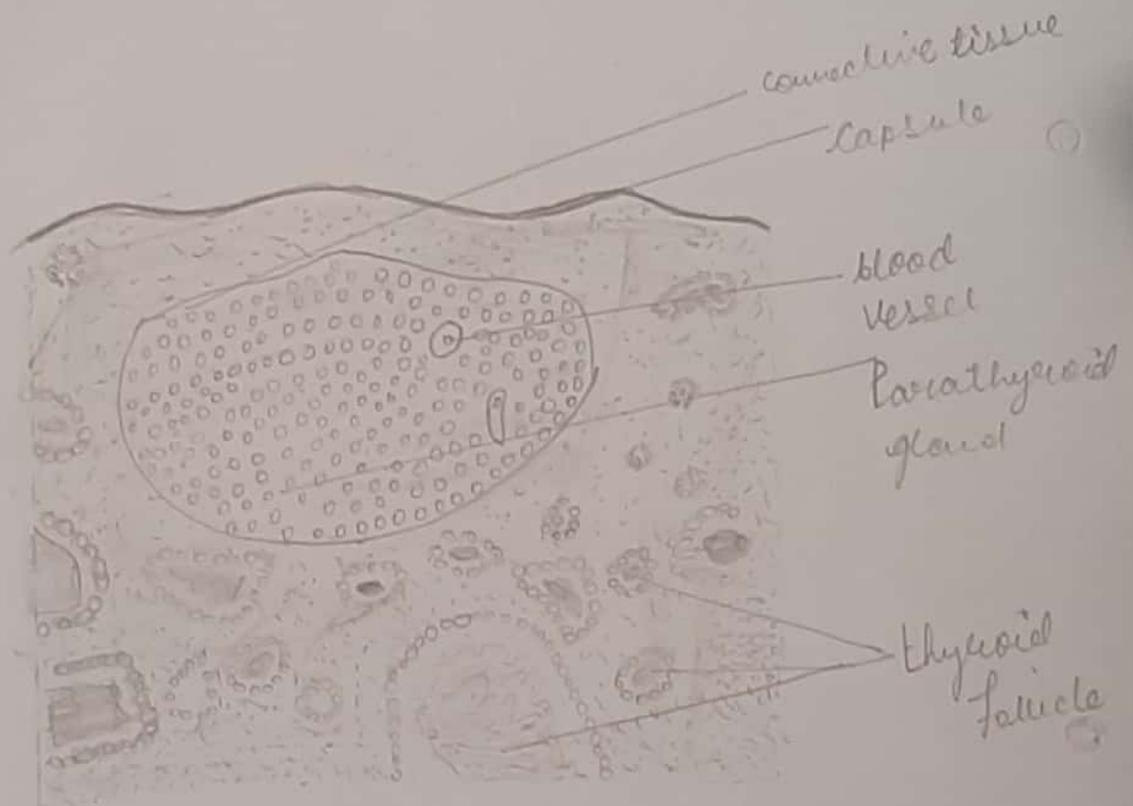
3

Study of Parathyroid Gland :-

• Comments :-

- (i) Two parathyroid glands are always found embedded in the substance of thyroid or found on each side of thyroid gland.
- (ii) Each parathyroid is enclosed with a capsule.
- (iii) Each parathyroid is a glandular organ consisting of columns of epithelial cells.
- (iv) The gland contains chief cells or oxyphil cells, separated by connective tissue.
- (v) Parathyroid produces a hormone called as parathormone which is devoid of iodine.
- (vi) Removal of parathyroid causes tetany or death.
- (vii) Numerous sinusoid blood channels run between the columns.

Study of T.S of Parathyroid gland :-



→ T.S. of Parathyroid gland

3

Study of Parathyroid Gland :-

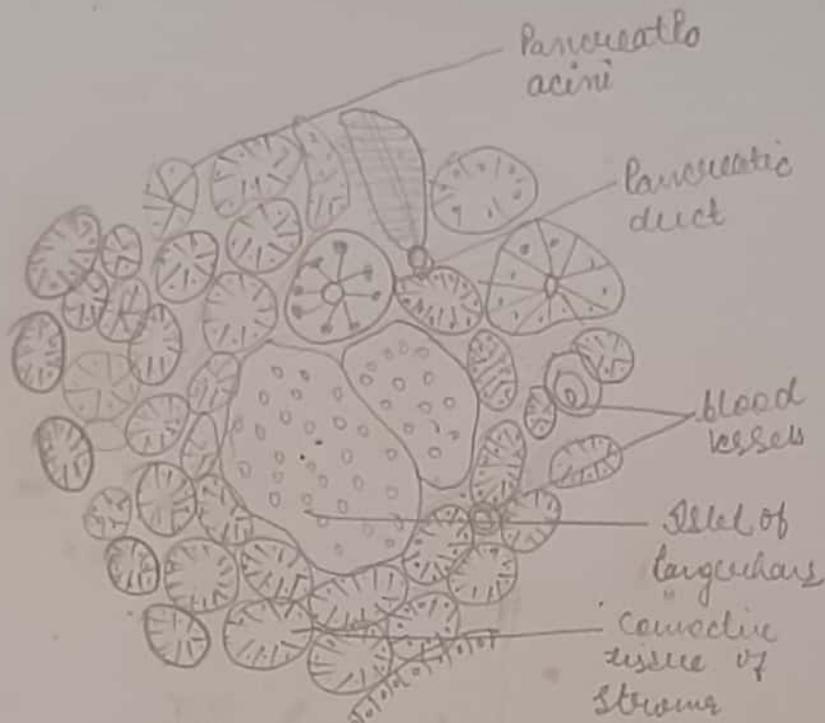
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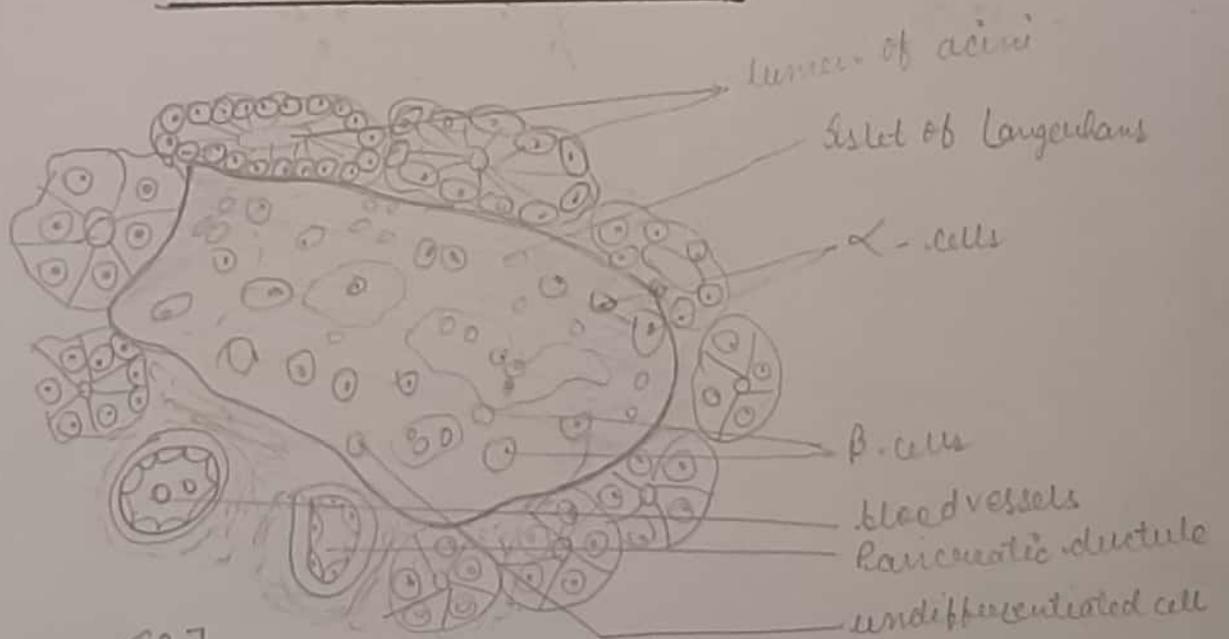
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- (vii) Numerous sinusoid blood channels run between the columns.

Study of I.S. of Pancreas

20



[A] under low magnification



[B] under high magnification

Fig: \Rightarrow I.S. of Pancreas: [A] - Under low magnification
[B] - Under high magnification

5) Study of P.S. of Pancreas:—

P.S. of Pancreas

Comments:—

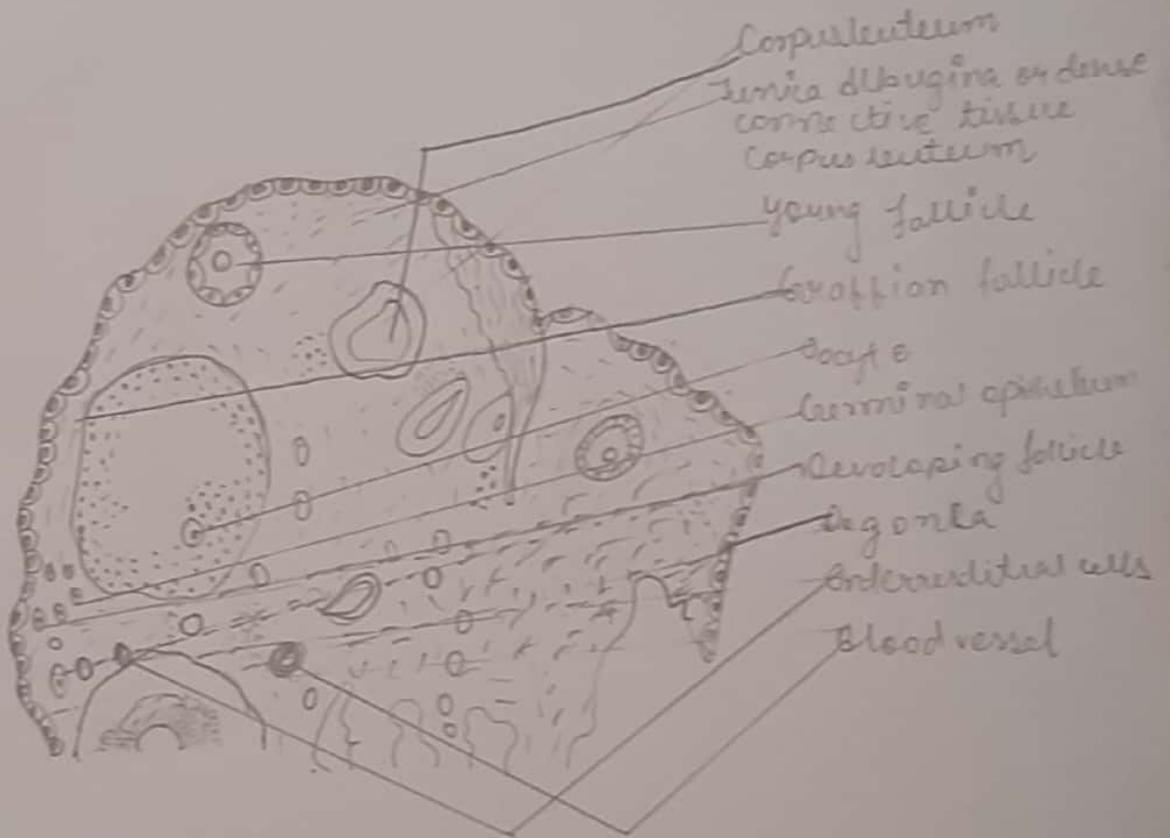
1] Under low magnification:—
(1x eyepiece, +x objective)

1) Pancreas is a very important digestive gland. P.S. passing through pancreas shows that it is composed of various alveolar acini. It is a compound tubular alveolar gland consisting of both exocrine and endocrine parts.

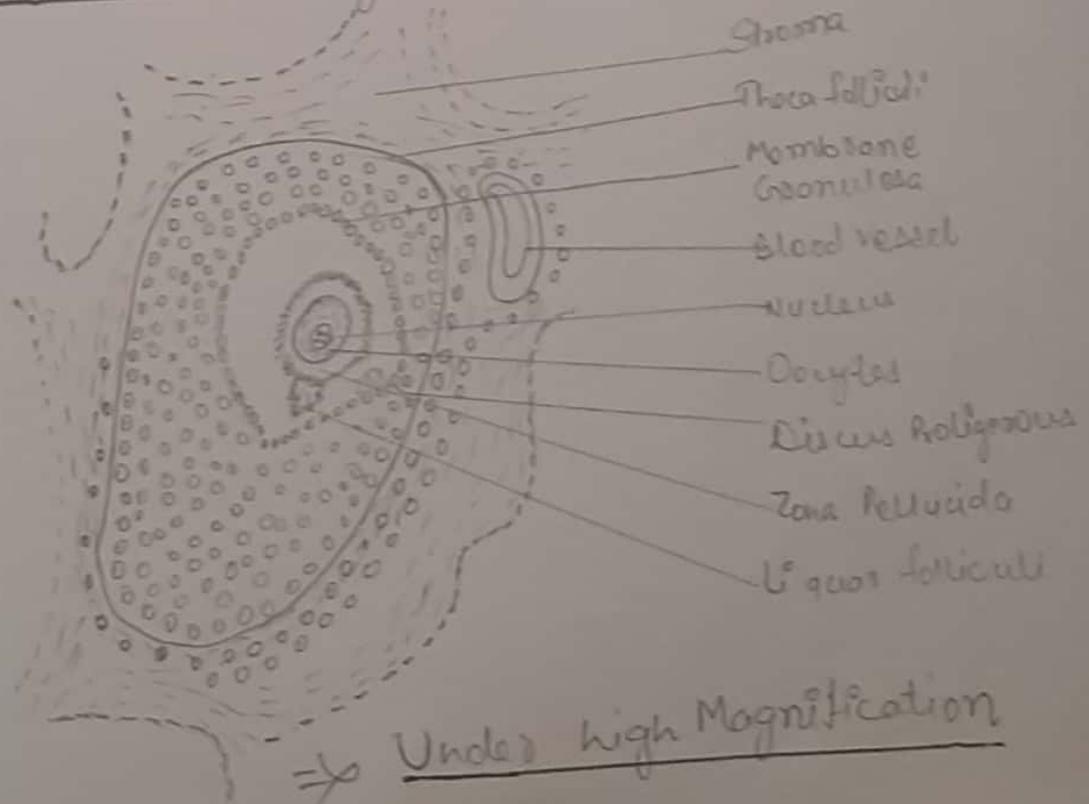
2) The mammalian pancreas can be distinguished from that of frog in having distinct lobulation. Alveoli or pancreatic acini and islet of Langerhans. Pancreas is covered with ectodermic epithelium.

3) Under low magnification several rounded acini and elliptical areas of islet of Langerhans are seen.

Study of T.S. of Ovary



Under low Magnification



BIOCHEMISTRY

7. Study of T.S. of Ovary: -

T.S. of ovary

* Comments: -

[A] Under low magnification: - (7x eyepiece; 4x objective)

1. Ovary is a solid structure lying at the back of the peritoneal cavity. It is covered by peritoneum consisting of cuboidal cells, forming germinal epithelium.

2. Ovary is attached at the hilus by mesovarium with the uterus. Germinal epithelium is bounded by connective tissue called as tunica albuginea.

[B] Under high magnification: - (10x eyepiece; 40x objective)

1. T.S. passing through ovary or Graafian follicle shows following important structure.

2. Fully mature oocyte is single layered in large ones it has 2 layers while in still larger ones the 2 layer formed by several strata of cell.