



# ENDOCRINE

## FINAL-021-PAST-PAPERS



Done by:

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# **PHARMACOLOGY**

- 1) Which drug of the following causes b12 deficiency?
  - a. Metformin
  - b. Sulfonylureas
  - c. Epalrestat
- 2) First activation of vitamin D occurs in one of the following:
  - a. Skin
  - b. Intestines
  - c. Liver
  - d. Kidney
- 3) Mecasermin drug is:
  - a. Insulin drug
  - b. recombinant human IGF-1
- 4) Beta blocker aren't used in hypertension diabetics patients due to:
  - a. It can mask hypoglycemia effects.
  - b. N
- 5) Which of the following is a peak-less insulin drug?
  - a. Glargine
  - b. Insulin aspart
  - c. Isophane insulin suspension

**Answers: A, C, B, A, A**

**6) What is the major Side effects to Insulin therapy:**

- a. Hyperglycemia**
- b. Hypoglycemic**

**7) Choose the Mismatch:**

- a. Stigaliptin ... GLP-1 synthetic analog**
- b. Epalrestat...Aldose reductase inhibitors**
- c. Linagliptin ...selective DPP-4 inhibitors.**

**8) Cinacalcet Is calcimimetic**

**9) Sulfonylureas mechanism:**


- a. High affinity sulfonylurea receptors found on alpha cells linked to ATP-ase sensitive K<sup>+</sup> ion channel**
- b. Increase insulin release.**

**10) Which drug isn't effective for hypocalcemia in pseudohypoparathyroidism case?**

- a. Ca<sup>2+</sup> chloride**
- b. Vitamin D**
- c. Ca<sup>2+</sup> gluconate**
- d. Teriparatide**

**Answers: B, A, 9-B, D**

- 11) Cortisol is an immunosuppressant for.
- Prostaglandin
  - Leukatrienes
  - A & B
- 12) Increase cAMP levels in urine indicate:
- Increase PTH activity.
  - Decrease PTH activity.
- 13) True about TSH?
- Alpha chain in TSH is different from other glycoproteins.
  - TSH contains alpha & beta chain.
- 14) Best treatment for hyperthyroidism is:
- Surgery
  - Iodide Radio therapy
- 15) Which of the following glucocorticoids has the best anti-inflammatory effect without affecting the hypothalamic-pituitary-adrenal axis:
- dexamethasone
  - Cortisol
  - None

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Answers: C, A, B, B, C

# **BIOCHEMISTRY**

**1) hydrophilic hormones:**

- a. require transport protein.**
- b. require intracellular receptor.**
- c. short half life**
- d. delayed action**
- e. all of the above**

**2) The most common type of second messengers:**

- a. cAMP**
- b. cGMP**
- c. IP3**
- d. DAG**

**3) The relationship between FSH and testosterone is:**

- a. Antagonism**
- b. Synergism**
- c. Integration**
- d. permissiveness**
- e. b+d**

**4) Calcium can introduce a conformational change through all of the following except:**

- a. binding to protein kinase C**
- b. binding to troponin c**
- c. binding to calmodulin**
- d. binding to  $Ca^{++}$ / ATPase pump**
- e. binding to Parvalbumin**

**Answers: C, A, B, D**

- 5) True about steroids rate limiting synthesis step:
- cholesterol is the substrate
  - yields progesterone.
  - yield 19 c molecule.
  - B+D
- 6) The Enzyme which gives adrenaline from nor-Adrenaline:
- Decarboxylase
  - Methyltransferase
- 7) All of the following are wrong about cholera toxin except:
- It activates K<sup>+</sup> channels.
  - Causes depletion in cAMP.
  - It causes unregulated activity of adenylate cyclase.
- 8) All of the following is domain of protein kinase C except:
- DAG binding domain (C1).
  - G protein domain
  - calcium binding domain
  - catalytic domain
  - All of above is true.
- 9) Insulin receptor is?
- Monomer
  - Tetramer
  - Hexamer

Answers: A, B, C, B, B

## **PATHOLOGY**

- 1) One of the following isn't a symptom of Cushing syndrome:
  - a. Hypertension
  - b. Poor wound healing
  - c. Osteoporosis
  - d. Hirsutism
- 2) About Craniopharyngioma tumor, which one is true?
  - a. Rapidly progressive
  - b. Slowly growing tumor
  - c. Cause dwarfism in adults
- 3) CTLA4 mutation exists in what type of diabetes?
  - a. Diabetes mellitus 2
  - b. Gestational diabetes
  - c. Type 1 diabetes
- 4) Cushing cells appear in what type of adenomas?
  - a. Prolactinoma
  - b. Somatotroph adenoma
  - c. Corticotrophs adenoma
- 5) Which of the following is wrong about adrenal neoplasm:
  - a. Increase activity of renin
  - b. Can cause Hyperglycemia.
- 6) Which factor is the main one to increase the risk of thrombosis in DM patients?
  - a. AGE
  - b. Protein kinase C

**Answers: C, B, C, C, A, B**

**7) Carcinoid syndrome can be treated by:**

- a. Protirelin**
- b. Octreotide**

**8) Zollinger Ellison syndrome can causes increase in:**

- a. Gastrin secretion**
- b. T3/T4 secretions**

**9) All of the following are true about prolactinoma except:**

- a. Amenorrhea**
- b. Galactorrhea**
- c. infertility**
- d. Increase libido.**
- e. All are true.**

**10) Which of the following isn't a thyrotoxicosis disease:**

- a. Multi nodular goiter**
- b. Hashimoto syndrome**
- c. Graves' disease**

**11) Medullary carcinoma:**

- a. p53 is a sign of bad prognosis.**

**Answers: B, A, D, B, A**



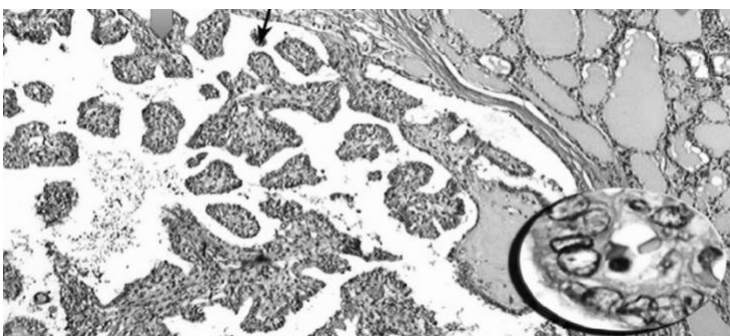
- 12) One of the following statements is wrong:
- a. Cells with pleomorphic nuclei (atypia) must be taken as a sign of malignancy.
  - b. One gland only is usually affected and the other three are normal or atrophic in parathyroid adenoma.
- 13) True about papillary carcinoma:
- a. Metastasis to liver is common.
  - b. One metastatic spread to lump nodes doesn't affect its prognosis.
  - c. Deletion of BRAF oncogene

Ans: A, B

- 14) Which of the following true about subacute lymphocytes Thyroiditis Autoimmune:  
Increase WBCs in serum.
- 15) True about follicular adenoma:  
Encapsulated

### Lab – pathology

The following histology section shows what type of cancer?



Ans: papillary carcinoma

## **CLINICAL**

**1) Which type of diabetes can't develop insulin resistance?**

- a. DM 2**
- b. DM1**
- c. Gestational diabetes**
- d. All can develop insulin resistance.**

**Ans: B**

**2) Which of the following can't be considered as a threaten factor to develop diabetes?**

**Ans: Olive oil**

**3) A patient has come to your clinic with fasting blood sugar 240, he tests for A1C is 14%, what should you initiate him with?**

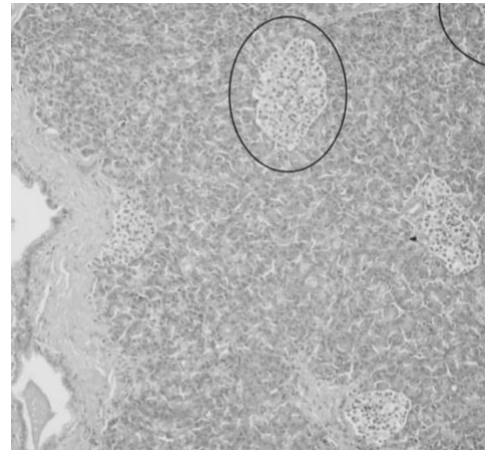
**Ans: lifestyle modification & insulin therapy**

# ANATOMY

Lab pic

1) What is the origin for this tissue?

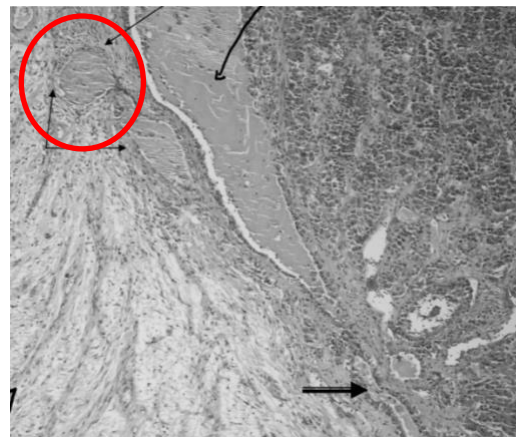
- a. Ectoderm
- b. Endoderm
- c. third pharyngeal pouch.



Ans: B

2) What is this structure?

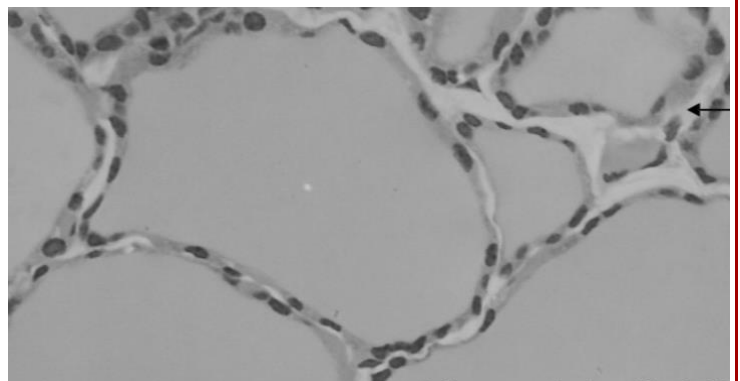
- a. infundibulum
- b. Colloid cyst
- c. follicles of thyroid gland



Ans: B

3) Which of the following is true for this tissue:

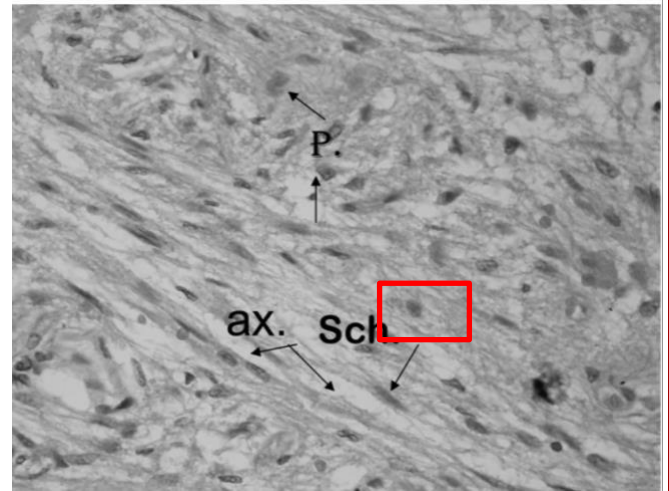
- a. It has been taken from old patient.
- b. It has been taken from inactive thyroid gland.
- c. It has been taken from active thyroid gland.



Ans: B

4) What is the following structure?

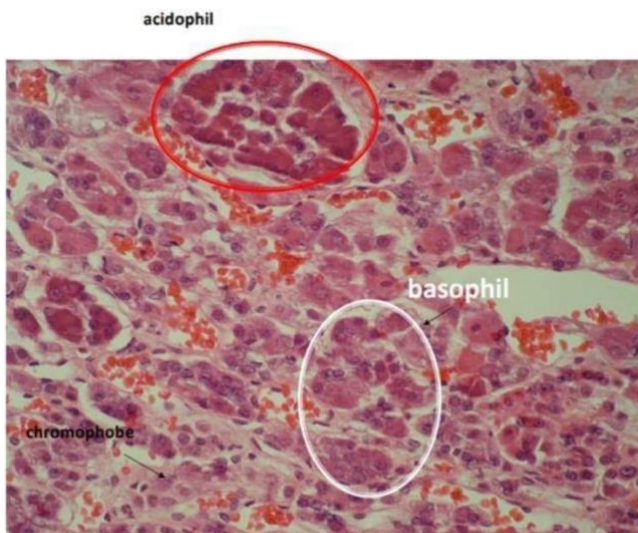
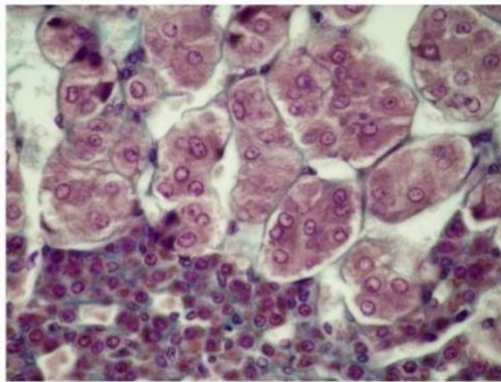
- a. Herring body-pars nervosa
- b. Parafollicular cells
- c. Somatotrophs



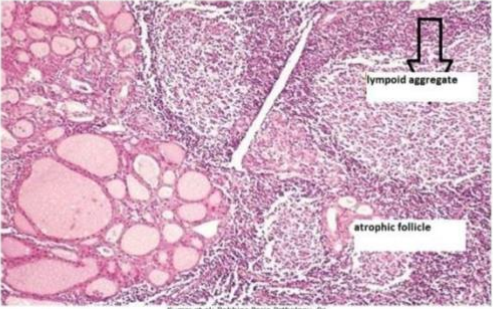
Ans: A

Lab section, but we don't remember the questions.

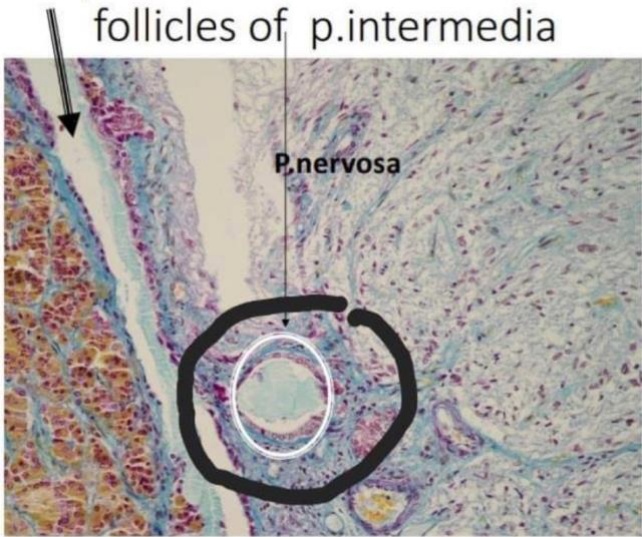
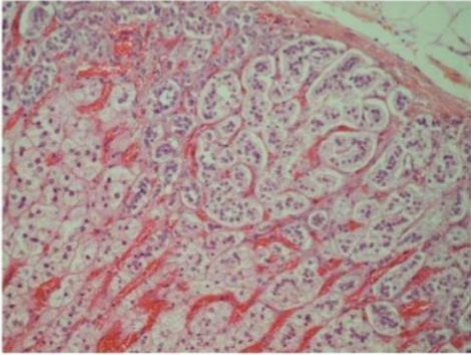
Chromaffin cells in adrenal medulla



Hashimoto thyroiditis: lymphoid follicles and atrophic follicles



Zona Glomeulosa



=) Good luck



MADYAN