

ENDOCRINE SYSTEM

ROUH- FINAL

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1. Hyperprolactinemia is ?

Pharmacology

Bromocriptine

2. Duration of rapid insulin ?

Physiology 5



- A. 10 min
- B. 20 min
- C. 10 sec
- D. 30 min
- E. 20 sec

Answer: A

3. Which of the following is wrong about rapid action insulin?

Pharmacology 4

- A. soluble form
- B. given SC, IM, IV
- C. its action begins within 10 mins
- D. for controlling DM
- E. given in cases of diabetic ketoacidosis

Answer: C

4. Which of the following not produced by anterior pituitary ?

Physiology 1

- A. TSH
- B. FSH
- C. GH
- D. Prolactin
- E. ADH

Answer: E

5. Which of the following not secreted by anterior pituitary ?

Physiology 1

- A. TSH
- B. ACTH
- C. FSH
- D. Oxytocin
- E. PRL

Answer: D

6. A 40 years old pregnant woman has a sugar craving, Her serum glucose increases which cause release of insulin which is known to increase the activity of acetyl Co carboxylase, the rate limiting step in fatty acid biosynthesis. Which of the following best describes this regulatory enzyme? *Metabolism Fatty acid*

Select one:

- A. It catalyzes a reaction that requires biotin and ATP
- B. It is activated by malonyl CoA
- C. It catalyzes a reaction that condenses acetyl group with malonyl group
- D. It is activated by carboxylation
- E. It converts malonyl CoA to acetyl CoA

Answer: A

7. The final product for complete oxidation of odd chain fatty acids yields which of the following? *Metabolism Fatty acid*

Select one:

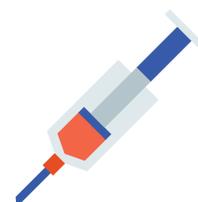
- A. Acetyl CoA and propionyl CoA
- B. Acetyl CoA only
- C. Succinyl CoA
- D. Propionyl CoA only
- E. Palmitoyl CoA

Answer: A

8. H2 connect with H3 by? *Biochem 2*

- A. C1
- B. C2
- C. E1
- D. E2
- E. E3

Answer: C



9. False about medullary carcinoma ? *Q - histology*

- A. Associated with pituitary adenoma
- B. Flushing and diarrhea

Answer:A

10. The hypothalamo - hypophysial portal system carries hormones from the? *Histology + Physiology*

Select one:

- A. Brain to thyroid gland
- B. Anterior pituitary to the hypothalamus
- C. Hypothalamus to the posterior pituitary
- D. Posterior pituitary to the hypothalamus
- E. Hypothalamus to the anterior pituitary

Answer:E

11) the origin of adrenal cortex is: *Histology*

- A. endoderm
- B. neuroectoderm
- C. coelomic epithelium
- D. surface ectoderm

Answer:C

12) the cause of presence of craniopharyngeal canal: *Embryology*

- A. failure of degeneration of thyroglossal duct
- B. Failure of degeneration of the Rathke's pouch
- C. anterior pituitary is on upper oropharynx

Answer:B

13. All true except related to colloid ? *Histology*

- A. Iodination occur inside lumen
- B. In parathyroid cell

Answer:B

14. Conn disease ? *Physiology 7*

- A. Hyperkalemia and hypertension
- B. Hypocalcemia and hypotension
- C. Hypokalemia and hypertension



Answer:C

15. which structure related to pituitary gland superiorly? *anatomy 1*

- A. Diaphragm sella
- B. Intercavernous sinuses.
- C. Cavernous sinus
- D. Dorsum sellae
- E. Sphenoidal sinuses.

Answer:A

16. predominantly mineralocorticoids? *pharma 5*



- A. Betamethasone
- B. cortisol
- C. Triamcinolone
- D. Fludrocortisone

Answer:D

17. which enzyme used to diagnosis thiamin deficiency? *metabolism PPP*

- A. Transaldose
- B. Transketolase

Answer:B

18. If a woman hears her baby cry, she may experience milk ejection from the nipples even before the baby is placed to the breast. What is the explanation for this? *Physiology 3*

- A. The sound of the hungry baby's cry elicits secretion of oxytocin from the posterior pituitary, which reaches the breast and causes contraction of the myoepithelial cells
- B. The sound of the hungry baby's cry causes a reflex relaxation of the myoepithelial cells, allowing the milk to flow
- C. The sound of the hungry baby's cry elicits a surge of prolactin from the anterior pituitary, which promptly stimulates milk production from the breast.
- D. The sound of the hungry baby's cry elicits sympathetic nervous system discharge that causes contraction of the myoepithelial cell

Answer:A

19. according to accelerated atherosclerosis all is true except (Mechanisms for vascular disease in diabetes ALL True except? *Pathology P m*)

- A. impaired vasodilatory response attributable to nitric oxide inhibition
- B. smooth muscle cell dysfunction
- C. Decrease of endothelial growth factors.

Answer:C

20. Defined of diabetes insipidus? *Physiology 5*

A) large amount of dilute urine

21. The glycolysis and gluconeogenesis linked by which enzyme? *Metabolism*

- A. Phosphoglycerate kinase
- B. hexokinase
- C. pyruvate kinase
- D. PFK -2/FBPase-2

Answer:D

22. the enzyme that regulates glycolysis/gluconeogenesis positively (39.

Enzyme/s is considered as a positive regulator for both glycolysis/gluconeogenesis?) *Metabolism Glycolysis 2*

- A. Phosphoglycerate kinase
- B. hexokinase
- C. pyruvate kinase
- D. PFK -2/FBPase-2

Answer:D

23. ALL these sentences related to drug used to treatment osteoporosis except? *Pharmacology 7*

- A. Estrogen enhance PTH
- B. Alendronate



Answer::A

24. in glucogenolysis and glucogenesis the enzyme used in both is ? *Metabolism*

A. Phosphoglucomutase

B. Pyruvate kinase

Answer::A

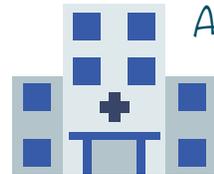
25. carbohydrate and fat metabolism linked by ? *Metabolism glycolysis 2*

A. DHAP

B. 1.3Bisphosoglucerate

26. side effect of rhGH ? *Pharmacology 1-2*

A) Acromegaly



Answer:A

27. hypercalcemia all true except ? *Physiol = 6*

A. diuresis with a loop diuretic such as furosemide

B. Bisphosphonates

C. Phosphate

D. 1,25 (OH)₂ D (calcitriol)

E. Rehydration with saline solution

Answer::D

28. Adrenal gland anatomy?

Anatomy

A) Right adrenal is related to cealomic ganglion medially

29. Antimycin A block between cytochrome c , then? *Metabolism ETC*

A)Inhibition of all ATP synthesis

30. NADH complex site blockage, what heppens to P:O ratio generated by fatty acyl Co? *Metabolism ETC*

A) The same energy generated by normal fatty acyl co

31. Enzymes in heptobiliary diseases? *metabolism enzyme*

A) Nucleotidase 5 and Alkaline phosphatase*



32. What is wrong about cholinesterase? *Metabolism Enzyme*

A) Used in liver function test

33. Wrong about pyruvate carboxylase? *Metabolism Krebs*

A) Its action in inner mitochondrial space

34. All of the following are inhibitors of glutamate dehydrogenase except? *Metabolism amino acid*

A) ADP*

35. True about prostacyclin PGI₂? *Metabolism Eicosanoid*

A) Its action opposed by TXA₂

36. Glucagon and epinephrin action in liver? *Biochem 8*

A) Activate glycogen phosphorelase ,inhibit glycogen synthase*

37. Cox 1/PGHS 1 needs? *Metabolism Eicosanoid*

A) Gamma glutamyl cysteine glycine*

38. Why does muscle use PPP pathway in little amount? *Metabolism PPP?*

A) No dehydrogenases in the muscles*

39. NAPH is generated by action of? *Metabolism PPP?*

A) Glucose_6_phosphate dehydrogenase*

40. Enzyme act on both pathways glycogenesis and glycogenolysis? *Metabolism Glycolysis 2*

A) Phosphoglucomutase

41. The strongest stimulus on aldosterone? *Physiology*

A. Low blood pressure

B. Hyperkalemia

Answer:A

42. increase of steroid cause all of the following except ? *Pharmacology*

A) Hypotension

43. Which of the following is not involved in regulation of plasma Ca^{++} levels? *Physiology 6*

A. Kidneys

B. Skin

C. Liver

D. Intestine

E. Lungs

Answer::E

44. If we remove hormone's receptor from organs what happens? *Biochem 1*

A. continue responding to hormone without any change

B. continue responding to hormones but randomly

C. no response to hormones

D. continue responding to hormones but need more concentration

Answer:C

Pharmacology 6

45) a female patient of 36 age years old, is suffering from severe pain and inflammation. Her doctor has prescribed for her prednisone as pain management, noting that she already has other medications for that purpose. Prednisone tablets are likely to be consumed at all after 2 months of use. What will happen if the patient is unable to refill her prescription?

A. cardiovascular collapse (adrenal crisis)

B. risk of infection

C. insomnia

D. osteoporosis

E. fatigue

Answer::A



biochem 2

46. The wrong about IP3 is:

- A. a second messenger
- B. contain 3 phosphate groups
- C. it is inositol 1,4,5-phosphate
- D. bind to IP3 gated channels on cell membrane

Answer: D

47. All of the following can treat hypercalcemia except: pharmacology 7

- A. calcitonin
- B. furosemide
- C. rehydration with saline
- D. alendronate
- E. all of the above

Answer: E

biochem 2

48) what happens when the binding of hormone to plasma proteins increase?

- A. increasing the negative feedback inhibition on releasing hormones
- B. increases the action resulted from hormone
- C. reduces half life of hormone
- D. increases renal excretion of hormone
- E. increase store of active form for quick replenishment

Answer: E

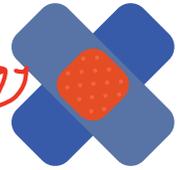
Pharmacology

1+2
49) which of the following is not an indication for mecaseerin?

- A. acromegaly
- B. chronic renal failure
- C. prader willi syndrome
- D. terber syndrome
- E. idiopathic short stature



Answer: A



50) all of the following occurs with corticosteroids except: *Pharmacology*

- A) hirsutism
- B) Hypotension
- C) virilization
- D) striated abdomen

Answer: B

51) PGHS/COX utilizes _____ for synthesis of PGH₂ *Metabolism Eicosanoid*

- A) glutamate
- B) glycine
- C) gamma glutamyl cysteinyl glycine
- D) gamma glutamyl cysteine
- E) byutric acid

Answer: C

52) a patient with defective NADH dehydrogenase of ETC is now depending on fatty acyl utilization for ^{text}energy production. What is the correct change regarding P/O ratio? *Metabolism ETC*

- A) decrease by 1 value
- B) remains constant (zero)
- C) increase by 1 value
- D) no energy production at all

Answer: B

53) a patient is poisoned with antimycin A that inhibits cytochrome c of ETC, what changes occur to energy production? *Metabolism ETC*

- A) no energy production at all
- B) energy is produced in less amounts
- C) energy is produced in slower rate
- D) energy is produced for short period of time
- E) energy production is not affected due to increased rates of ETC

Answer: A

Physiology 4

54) thyrocalcitonin is secreted by:

- A) anterior pituitary
- B) hypothalamus
- C) thyroid
- D) parathyroid
- E) adrenal



Answer::C

55) which of the following is incorrectly matched? Pathology 2

- A) hashimoto = oncocytic change
- B) de quervain thyroiditis = preserved follicular epithelium with dense lymphocytic infiltrate **

Answer:B

56) Why is pentose phosphate pathway is not processed in muscular tissues? Metabolism

- A) muscle do not need NADPH for their activity
- B) muscles do not require the produced pentoses
- C) muscles have small amount of non-oxidative phase of the pathway
- D) muscles have small number of dehydrogenases

Answer::D

57) The DNA binding domain? (except) Biochem 4

- A. mediates dimerization
- B. Contain zink finger motifs if 10-20 a.a
- C. have the nuclear localization signal which recruits coactivator
- D. stabilize binding HRE to the receptor

Answer::C

58) Conn disease is : Physiology 7

- A. Diabetes Insipidus which release a large of concentrated urine
- B. Diabetes Insipidus which release a large of diluted urine

Answer::B

59) The goiter : *Pathology 2*

- A. increase the function of thyroid gland
- B. increase the size of thyroid gland *
- C. increase the function and size of thyroid gland

Answer: B

60) Which of the following doesn't need plasma protein :

- A. dopamine
- B. progesterone
- C. vitamins D
- D. monoiodotyrosine

Answer: A

61) The wrong about adrenal gland: *زواج استرنا*

- A. has Chromaffin cells
- B. spinal ganglion cells
- C. Lymphocyte like cells
- D. highly blood vessel

Answer: B

62) Which of the following about suprarenal gland is correct : *anatomy 2*

- A. The left gland relates medially to celiac ganglion.
- B. the posterior surface of right gland relates to IVF

Answer: A

Anatomy 2

63) The muscles that cover thyroid gland:

- A. Sternothyoid ,sternothyoid
- B. thyrohyoid & sternothyroid

Answer: A

Physiology 3

64) All stimulation ADH except ?

- A) Alcohol



65) What is wrong about the mechanism of action of insulin ?

Increased Intracellular ATP activates ATP sensitive potassium pump *

66) All of the following are therapeutic uses of insulin except ? *Pharmacology 4*

A. Hypokalemia

B. Hyperkalemia

Answer: ~~B~~
D

Physiology 5 67) Insulin deficiency causes?

Increased ketogenesis

68) Wrong about estrogen receptors? *Physiology*

Bind to direct repeats

69) All of the following are differences between aldolase a and aldolase b except? *Metabolism 17*

A. They are used in splitting, condensation reaction (الصياغه غير دقيقه)

B. tissue

C. substrate

Answer: A

D. product

E. the way of act

Metabolism ETC

70) DIFFERENCES In ATP production is due to?

A. Shuttling of NADH molecules

Metabolism Glycolysis 2

71) Which of following is true about acetyl coA formation?

A) Pyruvate is oxidized by oxidizing agent NAD^{+} *

(مش اكيد)



72) All of the following are correct about diabetes except? *Community*

A) Both patients of diabetes type 1 and 2 should screen about complication at the time of diagnosis

73) Which of following is diagnostic of threshold of diabetes? *Community*

A) Fasting glucose ≥ 140

Community

74) According to America's committee of diabetes which of the following is used to confirm prediabetes?

A) Glycated haemoglobin $>5.7 <6.4^*$

75) What is the most potent stimulator of aldosterone? *Physiology*

A) Hyperkalemia

76) All are Adverse effect of antithyroid drugs except? *Pharmacology*

A) Myalgia

77) All of the following is affected by inhibitory and stimulatory hormones of hypothalamus except? *Physiology*

A) Thyrotropic hormones

Physiology 3

78) Baby cry causes?

A) Increased secretion of oxytocin

