

Q12. One patient who has Hyperglycemia, but is resistant to the action of insulin, what is most probable diagnosis

- A. Gestational DM
- B. Adrenal Diabetes
- C. DM type I
- D. DM type II
- E. Diabetes insipidus

Q13. Melanin pigmentation is increased in patients with Addison's disease, the most probable reason is?

- A. ↓ secretion of ACTH
- B. ↑ secretion of cortisol
- C. ↑ secretion of ACTH
- D. ↑ secretion of aldosterone
- E. ↑ secretion of Androgen

Q14. In Hyperparathyroidism?

- A. Bones become strong
- B. Osteoclastic activity is decreased
- C. Plasma conc. of Ca^{++} is decreased
- D. Bones become weak spontaneous fractured
- E. Plasma concentration of phosphate is increased

Q15. A 35 years old patient of rheumatoid arthritis was on corticosteroids for last two years. She developed truncal obesity, moon like face, skin rashes, bone weakness, her B.P is 160/100 mmHg. What is your diagnosis?

- A. Addison's disease
- B. Cushing syndrome
- C. Pheochromocytoma
- D. Hyperthyroidism
- E. Conn's syndrome

Q16. The insulin increases Glucose entry in liver cells by

- A. Increasing gene expression for GLUT4
- B. Increasing gene expression for GLUT2
- C. Stimulating the Glucokinase enzyme
- D. Stimulating Phosphorylase enzyme
- E. Facilitated diffusion

Q17. Insulin promotes Glycogen synthesis by activating liver enzymes

- A. phosphorylase
- B. phosphatase
- C. Glucokinase
- D. Glycogen synthetase
- E. Both C & D

Q18. Insulin promotes the formation of Melanyl Co-A in 1st stage of fatty acids synthesis by activating the enzymes

- A. Lipoprotein Lipase
- B. Acetyl Co-A carboxylase
- C. Hormone sensitive lipase
- D. Increase release of Fatty acids from fat tissue
- E. Kinase

Q19. Release of insulin from beta cells of pancreas is by

- A. Opening of K channel due to excessive ATP
- B. Closure of K channels due to excessive ATP
- C. More entry of Glucose
- D. Closure of voltage gated Ca²⁺ channels
- E. Excessive production of GLUT2 in β cells of pancreas

Q20. The major effect of Glucagon on Glucose metabolism is?

- A. Increased Glycogenolysis & Gluconeogenesis in liver
- B. Inhibition of insulin secretion
- C. Inhibition of somatostatin secretion
- D. Has effect on adipose tissues
- E. Develops insulin resistance

INSTRUCTIONS

1. All objective questions are to be answered on the paper and returned to the invigilator within 20 min.
2. Any cutting and overwriting in objective part will not be accepted.

Q1. Choose the hormone that does not need the Adenylcyclase -cAMP second messenger system

- A. Adrenocorticotrophic hormone
- B. Glucagon
- C. Parathyroid hormone
- D. Thyroid hormone
- E. Follicle stimulating hormone

Q2. Which is the potent stimulator of Growth Hormone secretion?

- A. Somatomedins
- B. Hyperglycemia
- C. Hypoglycemia
- D. Increase free fatty acids
- E. Obesity

Q3. Nauman who is 25 years old is having enlargement of hands & feet, what is this condition called?

- A. Gigantism
- B. Acromegaly
- C. Rickets
- D. Cushing's syndrome
- E. Panhypopituitarism

Q4. Growth Hormone

- A. Exerts its effect on growth by stimulating production of somatomedins
- B. Inhibits protein synthesis
- C. Decreases lipolysis
- D. Increases glycolysis
- E. Enhances glucose transport in cells

Q5. TSH stimulates the release of TSH by activating

- A. Cyclic AMP system
- B. AdenylCyclase System
- C. Phospholipase System
- D. JAK- STAT pathway
- E. Cyclic GMP

Q6. The biologically active form of thyroid hormone is

- A. Moniodotyrosine
- B. Diiodotyrosine
- C. Triiodothyronine(T3)
- D. Thyroxine(T4)
- E. Reverse T3(RT3)

Q7. Which one is the function of thyroid hormone

- A. Decreases cellular metabolic activity
- B. Decrease free fatty acids
- C. Decrease Basal metabolic rate
- D. Increases Basal metabolic rate
- E. Decrease concentration of cholesterol

Q8. Thyroid hormone deficiency in early infancy leads to:

- A. Gigantism
- B. Diabetes Insipidus
- C. Osteoporosis
- D. Marfan's syndrome
- E. Cretinism

Q9. A 40 years old lady is complaining of palpitation, & amenorrhea, decreased body weight, heat intolerance. On examination mild exophthalmos, lab test shows increased TSI, but TSH is low, in your opinion the woman is suffering from

- A. Graves disease
- B. Iodine deficiency
- C. Genetic deficiency of hormone
- D. Hypothyroidism
- E. Myxedema

Q10. Hypothyroidism is associated with increased level of?

- A. Cholesterol
- B. Albumin
- C. Thyroid binding Globulin
- D. Iodine
- E. Ca++

Q11. One person had high BP, went to doctor on lab investigation he was found to have Hypokalemia & Hypernatremia, what is most probable diagnosis

- A. Addisons disease
- B. Graves disease
- C. Cushing's syndrome
- D. Myxedema
- E. Hypothyroidism