

PHYSIO ENDOCRINE

2ND YEAR

MCQ L1



Harvard
Printing center



Dr/M.M

Written Endo 1

1. Mention synthesis and release of post pituitary hormones ?
2. Enumerate effect of ADH on kidney , blood vessels ?
3. Give a short note on regulation of ADH ?
4. Def diabetes insipidus ?
5. Enumerate function of oxytocin hormone ?

MCQ Endo 1

<p>6. Deficient secretion of ADH causes:</p> <ul style="list-style-type: none">a) Neurogenic diabetes insipidus.b) Pituitary diabetes.c) Diabetes mellitus.d) Nephrogenic diabetes insipidus.e) Adrenal diabetes.	A
<p>7. The effect of antidiuretic hormone on the kidney is due to:</p> <ul style="list-style-type: none">a) Increased excretion of water.b) Increased the permeability of the distal nephron to water.c) Increased excretion of K⁺.d) Increased excretion of Na⁺.e) Increased the diameter of the renal artery.	B
<p>8. One of the following hormones is secreted from the hypothalamus and stored in the posterior pituitary gland:</p> <ul style="list-style-type: none">a) Thyrotropin releasing hormoneb) Gonadotropin releasing hormone.c) Somatotropin release-inhibiting hormoned) Antidiuretic hormone.e) Corticotrophin releasing hormone.	D

<p>9. Which of the following is correct as regard ADH?</p> <p>a) Reduces the permeability of renal tubules to water</p> <p>b) Its secretion is not affected by changes in plasma osmolality less than 10%</p> <p>c) Causes the osmolality of plasma to rise</p> <p>d) Its secretion increases when plasma volume falls</p> <p>e) Is secreted by the anterior pituitary gland</p>	D
<p>10. Which one of the following hormones is secreted from the supraoptic nucleus of the hypothalamus and stored in the posterior pituitary gland?</p> <p>a) Antidiuretic hormone.</p> <p>b) Corticotrophin releasing hormone.</p> <p>c) Gonadotropin releasing hormone.</p> <p>d) oxytocin.</p> <p>e) Thyrotropin releasing hormone.</p>	A
<p>11. Oxytocin hormone:</p> <p>a) Has powerful pressor effect on the uterus at the end of pregnancy</p> <p>b) Has powerful antidiuretic effect.</p> <p>c) Its deficiency leads to diabetes insipidus.</p> <p>d) Is released by anterior pituitary.</p> <p>e) Secreted mainly from supra optic nuclei of the hypothalamus.</p>	A
<p>12. The effect of antidiuretic hormone on the kidney is due to:</p> <p>a) Increased excretion of water.</p> <p>b) Increased excretion of Na⁺.</p> <p>c) Increased reabsorption of water.</p> <p>d) Increased excretion of phosphate.</p> <p>e) Increased reabsorption of K⁺.</p>	C

<p>13. One of the following hormones reaches posterior pituitary gland by hypothalamic hypophyseal tract:</p> <p>a) Gonadotropin releasing hormone. b) Thyrotropin releasing hormone. c) Corticotrophin releasing hormone. d) Oxytocin. e) Somatostatin.</p>	D
<p>14. The hypothalamo-hypophyseal tract controls the:</p> <p>a) thyroid. b) pancreas. c) parathyroids. d) anterior pituitary. e) posterior pituitary.</p>	E
<p>15. Which of the following hormones increases water reabsorption by the distal nephron?</p> <p>a) ADH b) oxytocin c) FSH d) LH e) ACTH</p>	A
<p>16. Rise of plasma osmolality increases the following Hormones:</p> <p>a) ADH b) oxytocin c) FSH d) LH e) ACTH</p>	A

<p>17. A decrease of 5% to 10% in total circulating blood volume increase the secretion of which of the following hormones:</p> <p>a) ADH b) oxytocin c) FSH d) LH e) ACTH</p>	A
<p>18. The volume of urine is markedly increased and may reach 25 liters/day in which of the following conditions:</p> <p>a) gigantism. b) acromegaly. c) Cushing syndrome d) diabetes mellitus. e) diabetes insipidus.</p>	E
<p>19. Which of the following hormones causes milk letting effect?</p> <p>a) growth Hormone b) oxytocin Hormone c) prolactin Hormone d) LH. e) FSH.</p>	B
<p>20. Which of the following hormones causes contractions of the uterus?</p> <p>a) growth Hormone b) oxytocin Hormone c) prolactin Hormone d) LH e) FSH</p>	B

<p>21. Oxytocin:</p> <ul style="list-style-type: none"> a- has powerful pressor & antidiuretic effect. b- induces myometrial contraction during pregnancy. c- requires the presence of progesterone to induce uterine contraction d- its deficiency leads to polyurea & polydipsia. e- is released by anterior pituitary. 	B
<p>22. Oxytocin hormone:</p> <ul style="list-style-type: none"> a) play an important role in breast development. b) stimulates the formation of milk acini. c) stimulates growth of the duct system. d) activates milk let down. e) none of the above. 	D
<p>23. Milk ejection is stimulated by:</p> <ul style="list-style-type: none"> a- oxytocin. b- estrogen & progesterone. c- prolactin. d- T3 and T4 	A
<p>24. The oxytocin hormone causes:</p> <ul style="list-style-type: none"> a- secretion of milk by the mammary gland. b- inhibition of ADH secretion. c- skeletal muscle contraction. d- uterine contractions. e- RBCs maturation. 	D
<p>25. Concerning the ADH, all the following is true except:</p> <ul style="list-style-type: none"> a- it is secreted by the supraoptic nucleus of the hypothalamus. b- secretion starts when plasma osmotic pressure reaches 250 m.osmole/L. c- its secretion is inhibited by ethanol (alcohol). d- its secretion increases in response to hemorrhage, trauma & surgery. 	B

<p>26. A large dose of ADH causes:</p> <ul style="list-style-type: none"> a- generalized V.D in the body. b- a marked increase of the BMR. c- an increased ECF volume. d- an excessive sensation of thirst. e- excretion of a large volume of urine having a low specific gravity. 	C
<p>27. Which of the following statements about antidiuretic hormone is true?</p> <ul style="list-style-type: none"> a- it is synthesized in the posterior pituitary gland. b- it increases salt & water reabsorption in the collecting tubules and ducts. c- it stimulates thirst. d- it has opposite effects on urine & plasma osmolarity. 	D
<p>28. Diabetes insipidus is characterized by all the following except:</p> <ul style="list-style-type: none"> a- severe polyuria which may reach 20 litres/day. b- colorless urine with a very low specific gravity and almost a neutral PH. c- loss of water-soluble vitamins in the urine. d- an increase in the amount of water intake due to excessive thirst sensation. e- a decrease in the BMR. 	E
<p>29. Oxytocin:</p> <ul style="list-style-type: none"> a- is released mainly from supraoptic nucleus of the hypothalamus. b- causes uterine contractions during normal pregnancy. c- stimulates milk secretion by the acini of the mammary gland. d- secretion during lactation results from a neuro-endocrinal reflex. e- causes squeeze of eccrine sweat glands. 	D

<p>30. Vasopressin:</p> <p>a- is chemically a steroid hormone.</p> <p>b- excess leads to diabetes insipidus.</p> <p>c- performs its actions by activating the adenyl cyclase enzyme.</p> <p>d- secretion is inhibited by morphine and stimulated by alcohol.</p> <p>e- excess is associated with hypotension.</p>	C
<p>31. A 30-year-old woman is breast-feeding her infant. During suckling, which of the following hormonal responses is expected?</p> <p>a- increased secretion of ADH from supraoptic nuclei.</p> <p>b- increased secretion of ADH from the paraventricular nuclei.</p> <p>c- increased secretion of oxytocin from the paraventricular nuclei.</p> <p>d- decreased secretion of neurophysin.</p> <p>e- increased plasma levels of both oxytocin and ADH.</p>	C
<p>32. Release of which of the following hormones is an example of neuroendocrine secretion?</p> <p>a- growth hormone. B- cortisol.</p> <p>b- oxytocin. C- prolactin. E- adrenocorticotrophic hormone.</p>	C
<p>33. A 37-year-old woman suffers a severe head injury in a skiing accident. Shortly thereafter, she becomes polydipsic & polyureic. Her urine osmolarity is 75 mOsmol/L, and her serum osmolarity is 305 mOsm/L. treatment with 1-deamino-8-darginine vasopressin (dDAVP) causes an increase in her urine osmolarity to 450 mOsm/L. which diagnosis is correct?</p> <p>a- primary polydipsia.</p> <p>b- central diabetes insipidus.</p> <p>c- nephrogenic diabetes insipidus.</p> <p>d- water deprivation.</p> <p>e- SIADH.</p>	B

<p>34. A 28-year-old man who is receiving lithium treatment for bipolar disorder becomes polyuric. His urine osmolarity is 90 mOsm/L. it remains at that level when he is given a nasal spray of dDAVP.</p> <p>Which diagnosis is correct?</p> <p>a- primary polydipsia.</p> <p>b- central diabetes insipidus.</p> <p>c- nephrogenic diabetes insipidus.</p> <p>d- water deprivation.</p> <p>e- SIADH.</p>	<p>C</p>
<p>35. Which of the following pituitary hormones has a chemical structure most similar to that of ADH?</p> <p>a- oxytocin.</p> <p>b- adrenocorticotrophic hormone.</p> <p>c- thyroid stimulating hormone.</p> <p>d- follicle stimulating hormone.</p>	<p>A</p>
<p>36. End-organ resistance to which of the following hormones results in polyuria and elevated serum osmolarity?</p> <p>a- ADH.</p> <p>b- aldosterone.</p> <p>c- 1,25 dihydroxycholecalciferol.</p> <p>d- parathyroid hormone (PTH).</p> <p>e- somatostatin.</p>	<p>A</p>
<p>37. Which of the following hormones causes contraction of vascular smooth muscle?</p> <p>a- ADH.</p> <p>b- aldosterone.</p> <p>c- ANP.</p> <p>d- 1,25 dihydroxycholecalciferol</p>	<p>A</p>

<p>38. Which of the following hormones is secreted by posterior pituitary gland:</p> <ul style="list-style-type: none"> a) GH. b) ADH. c) TSH. d) FSH. 	B
<p>39. Anti diuretic hormone:</p> <ul style="list-style-type: none"> a) Is secreted from anterior pituitary gland. b) Leads to vasodilatation. c) Inhibits water reabsorption in collecting ducts. d) Leads to vasoconstriction. e) Is secreted from parathyroid gland. 	D
<p>40. Regarding Antidiuretic hormone:</p> <ul style="list-style-type: none"> a) It helps to reabsorb water from PCT. b) Is released in response to increased Atrial blood pressure. c) Helps in sodium reabsorption from DCT. d) Causes vasoconstriction. 	D
<p>41. Concerning the antidiuretic hormone (ADH):</p> <ul style="list-style-type: none"> a) It increases permeability of DCT to water. b) Its release is stimulated by cold. c) It is synthesized in the posterior pituitary gland. d) Its increase causes diabetes insipidus. 	A
<p>42. Anti diuretic hormone regulates:</p> <ul style="list-style-type: none"> a) Acid base balance during acidosis. b) Blood glucose level during starvation. c) Blood pressure in the event of hemorrhage. d) Sodium plasma level. e) Hemoglobin content in anemic patient. 	C

<p>43. Anti-diuretic hormone:</p> <ul style="list-style-type: none"> a) <i>Helps water reabsorption from proximal convoluted tubules.</i> b) <i>Is released in response to decreased plasma osmolarity.</i> c) <i>Is released in response to increased arterial blood pressure.</i> d) <i>Helps Na⁺ reabsorption from distal convoluted tubule.</i> e) <i>Causes vasoconstriction of blood vessels.</i> 	E
<p>44. Oxytocin:</p> <ul style="list-style-type: none"> a) <i>Is secreted by anterior pituitary gland.</i> b) <i>Causes uterine muscles relaxation.</i> c) <i>Causes milk secretion.</i> d) <i>Causes milk ejection.</i> e) <i>Decreases water reabsorption by the kidney.</i> 	D
<p>45. Oxytocin hormone:</p> <ul style="list-style-type: none"> a) <i>Stimulates milk formation.</i> b) <i>Stimulates uterine growth.</i> c) <i>Stimulates milk ejection.</i> d) <i>Decreases blood glucose.</i> e) <i>Causes hypocalcemia.</i> 	C
<p>46. Oxytocin:</p> <ul style="list-style-type: none"> a) <i>Inhibits uterine contraction.</i> b) <i>Helps milk formation.</i> c) <i>Is inhibited by suckling.</i> d) <i>Helps involution of the uterus after labor.</i> e) <i>Is secreted by anterior pituitary.</i> 	D

MCQ On Physio Endo 2,3

<p>1. About Mechanism of growth hormone action:</p> <ul style="list-style-type: none">a) High Somatomedins induce GH secretionsb) Somatomedins are structurally similar to TSH.c) Somatomedins are formed in the kidney.d) Growth hormone has direct anabolic effects.e) Its growth promoting actions are mediated by somatomedins.	E
<p>2. Which one of the following is an inhibitor for growth hormone secretion?</p> <ul style="list-style-type: none">a) Obesityb) Starvationc) Hypoglycemiad) Stresse) Sleep	A
<p>3. Which of the following is a Manifestation of acromegaly?</p> <ul style="list-style-type: none">a) hypoglycemia.b) Low BMR.c) Protruded mandible.d) Small feet and hand.e) Thinning of the skin.	C
<p>4. Which of the following diseases is caused by excess secretion of growth hormone in adult after union of epiphysis?</p> <ul style="list-style-type: none">a) Acromegaly.b) Cretinism adultsc) Cushing's disease.d) Gigantism.e) Pituitary dwarfism.	A

<p>5. Acromegaly:</p> <ul style="list-style-type: none"> a) Is due to hyper secretion of growth hormone in adult b) Is due to hyposecretion of growth hormone c) Reduced blood glucose level. d) Muscles and viscera are atrophied e) Appears in children 	A
<p>6. Physiological actions of growth hormones include:</p> <ul style="list-style-type: none"> a) It inhibits bone growth b) It induces lipogenesis c) It induces hyperglycemia d) It induces protein breakdown e) Marked decrease of Ca^{++} absorption from GIT 	C
<p>7. One of the following stimulates growth hormone secretion:</p> <ul style="list-style-type: none"> a) Obesity b) Hyperglycemia c) G.H. d) FFA e) Hypoglycemia 	E
<p>8. The hypothalamus doesn't produce release inhibiting hormone for one of the following anterior pituitary hormones:</p> <ul style="list-style-type: none"> a) Growth hormone b) Gonadotropin c) Prolactin d) Melanotropin e) Insulin 	B

<p>9. One of the following not a Manifestation of acromegaly:</p> <ul style="list-style-type: none"> a) Prognathism b) Retarded growth of soft Tissue c) Thickening of the skin d) Raised BMR e) Hyperglycemia 	<p>B</p>
<p>10. Effect of growth hormones on bulk soft tissue except:</p> <ul style="list-style-type: none"> a) Thyroid b) Pituitary c) Breast d) Viscera e) Skin 	<p>A</p>
<p>11. One of Anterior pituitary hormones is:</p> <ul style="list-style-type: none"> a) Growth hormone b) Estrogen c) Prolactin d) ADH e) Oxytocin 	<p>A</p>
<p>12. Decrease growth hormone secretion:</p> <ul style="list-style-type: none"> a) In children, it only causes delayed puberty. b) In children leads to a long stature c) Is associated with Depressed mental functions. d) In children, it causes dwarfism e) Can be treated effectively by giving somatostatin. 	<p>D</p>

<p>13. Growth Hormone increases weight and bulk of soft tissues except:</p> <p>a) gonads, adrenals, thyroid.</p> <p>b) thyroid, supra-renal medulla, pancreas.</p> <p>c) parathyroids, supra-renal cortex, pancreas.</p> <p>d) parathyroids, supra-renal medulla, thyroid.</p> <p>e) parathyroids, supra-renal medulla, pancreas.</p>	<p>A</p>
<p>14. Which of the following stimulates growth hormone secretion?</p> <p>a) hyperglycemia.</p> <p>b) increased plasma FFA.</p> <p>c) obesity.</p> <p>d) increased plasma growth hormone.</p> <p>e) sleep.</p>	<p>E</p>
<p>15. Which of the following hormones causes development of the breast tissue and milk synthesis?</p> <p>a) growth Hormone</p> <p>b) oxytocin</p> <p>c) prolactin</p> <p>d) LH.</p> <p>e) FSH</p>	<p>C</p>
<p>16. High levels of which of the following hormones causes anovulation and amenorrhea:</p> <p>a) growth hormone</p> <p>b) oxytocin</p> <p>c) prolactin</p> <p>d) LH</p> <p>e) FSH</p>	<p>C</p>

<p>17. Suckling increases prolactin level due to inhibition of:</p> <ul style="list-style-type: none"> a) <i>PRIH</i> release. b) <i>PRH</i> release. c) growth <i>H</i> release. d) oxytocin <i>H</i> release. e) cortisol <i>H</i> release. 	A
<p>18. Which of the following diseases is caused by excess secretion of growth hormone before union of epiphysis?</p> <ul style="list-style-type: none"> a) gigantism. b) acromegaly. c) gynecomastia. d) cretinism. e) Graves' disease. 	A
<p>19. Which of the following diseases is caused by excess secretion of growth hormone in adults after union of epiphysis?</p> <ul style="list-style-type: none"> a) cretinism. b) gigantism. c) acromegaly. d) Cushing's disease. e) pituitary dwarfism. 	C
<p>20. Thickening of the vertebrae in the acromegaly causes:</p> <ul style="list-style-type: none"> a) prognathism. b) hirsutism. c) kyphosis. d) visual disturbances. e) headache. 	C

<p>21. The pituitary gland:</p> <ul style="list-style-type: none"> a) regulate the activity of all other endocrine glands. b) secrete anti-diuretic hormone when plasma osmolarity falls. c) prolactin secretion increases when bromocriptine (dopamine agonist) is administered. d) its function is controlled by hypothalamic factors. e) its interior lobe releases the oxytocin hormone. 	D
<p>22. Pressure on the optic chiasm causes:</p> <ul style="list-style-type: none"> a) prognathism. b) hirsutism. c) kyphosis. d) visual disturbances. e) headache. 	D
<p>23. Decreased secretion of growth hormone in children causes:</p> <ul style="list-style-type: none"> a) cretinism. b) gigantism. c) acromegaly. d) Cushing's disease. e) pituitary dwarfism. 	E
<p>24. Impaired growth hormone secretion:</p> <ul style="list-style-type: none"> a) in children causes delayed puberty. b) in children leads short stature with stunting of the limbs than trunk. c) is associated with normal mental functions. d) in adults leads to a reduction in size of viscera e) can be treated effectively by giving somatostatin. 	C

<p>25. Which statement about action of somatomedins is true?</p> <p>a) they inhibit protein synthesis.</p> <p>b) they antagonize the effect of insulin.</p> <p>c) they promote growth of bone & cartilage.</p> <p>d) they mediate the local effects of somatostatin in the brain.</p> <p>e) they stimulate the secretion of hormones by pancreatic islet cells.</p>	<p>C</p>
<p>26. Which of the following is greatly decreased in pituitary dwarfism?</p> <p>a) bone growth.</p> <p>b) mental growth.</p> <p>c) sexual growth.</p> <p>d) blood glucose.</p> <p>e) blood FFA.</p>	<p>A</p>
<p>27. Deficiency of the following hormone in women causes inability to lactate:</p> <p>a) prolactin.</p> <p>b) vasopressin.</p> <p>c) FSH.</p> <p>d) LH.</p> <p>e) growth H.</p>	<p>A</p>
<p>28. Destruction of the anterior lobe of the pituitary gland causes atrophy of:</p> <p>a) gonads.</p> <p>b) thymus.</p> <p>c) pancreas.</p> <p>d) parathyroid.</p> <p>e) supra-renal medulla.</p>	<p>A</p>

<p>29. Growth hormone:</p> <ul style="list-style-type: none"> a) include negative nitrogen balance. b) secretion is reduced during sleep. c) stimulates the liver to release somatomedins which regulate body growth. d) level in blood is higher in adults than children. e) reduced absorption of Ca from intestine 	<p>C</p>
<p>30. All the following are stimuli of growth hormone release except:</p> <ul style="list-style-type: none"> a- decrease in plasma FFA level. b- hypoglycemia. c- stress. d- exercise. e- obesity. 	<p>E</p>
<p>31. Pituitary tumor secreting excess growth hormone in an adult leads to:</p> <ul style="list-style-type: none"> a- loss in vision in one eye. b- gigantism. c- reduced level of somatomedins in blood. d- reduced level of free fatty acids. e- raises blood glucose level 	<p>E</p>
<p>32. Basic effects of growth hormone on body metabolism include:</p> <ul style="list-style-type: none"> a- increasing the rate of protein synthesis. b- increasing the rate of glucose uptake by the tissue. c-decreasing the mobilization of fat d- decreasing the rate of fat for energy. e- none of the above 	<p>A</p>

<p>33. The hypothalamus:</p> <ul style="list-style-type: none"> a) secretes only releasing factors from its median eminence. b) has no control on the suprarenal medulla. c) releases the trophic hormones that control the gonadal functions. d) controls the neuro-hypophysis through a direct nervous connection. e) releases an inhibitory hormone to TSH secretion 	D
<p>34. Gigantism is:</p> <ul style="list-style-type: none"> a) a manifestation of Cushing's disease. b) associated with hyperfunction of the testis. c) due to over secretion of the growth hormone before puberty. d) due to thyroid hypofunction after puberty. e) the normal result of insulin lack. 	C
<p>35. An acidophil cell tumor of anterior pituitary gland in a child 5 years old results in:</p> <ul style="list-style-type: none"> a) a tendency to hypoglycemia and exaggerated sexual activities. b) continued linear growth of long bones. c) a characteristic big size of the hands and feet. d) a lower free fatty acid (FFA) blood level than normal. e) polyuria with low specific gravity urine. 	B
<p>36. About the secretion and functions of the somatotropic hormone:</p> <ul style="list-style-type: none"> a) it is under the control of one hypophysiotropic hormone. b) it is secreted by the basophil chromophil cells of adenohypophysis. c) its growth action is produced through formation of somatomedins. d) its secretion is decreased in hypoglycemia, fasting & exercise. e) its secretion is increased when the FFA blood level is elevated. 	C

<p>37. The secretion of growth hormone is:</p> <ul style="list-style-type: none"> a) <i>increased in stress conditions and after an infusion of arginine.</i> b) <i>more in the morning than in the evening while going to sleep.</i> c) <i>inhibited by hypoglycemia and stimulated by hyperglycemia.</i> d) <i>stimulated by increased secretion of somatostatin from the hypothalamus.</i> e) <i>increased by the effect of the prolactin inhibiting hormone</i> 	A
<p>38. The adeno-hypophyseal basophil cells:</p> <ul style="list-style-type: none"> a- <i>belong to the chromophobe cells.</i> b- <i>have no secretory functions.</i> c- <i>constitutes about 35% of the total cells in the gland.</i> d- <i>secrete glycoprotein and polypeptide hormones.</i> e- <i>secrete mainly somatotropin and prolactin.</i> 	D
<p>39. The growth hormone increases:</p> <ul style="list-style-type: none"> a) <i>the rate of growth by a direct action on the epiphyseal cartilage.</i> b) <i>the protein synthesis by increasing amino acid transport across cell membrane.</i> c) <i>the urinary excretion of electrolytes.</i> d) <i>the rate of glucose utilization by the cells.</i> e) <i>lipogenesis in adipose tissue.</i> 	B
<p>40. An acidophil adenoma of the anterior pituitary gland is associated with:</p> <ul style="list-style-type: none"> a- <i>short stature due to rapid fusion of the epiphysis.</i> b- <i>hypoglycemia.</i> c- <i>galactorrhea.</i> d- <i>dark pigmentation of the skin.</i> e- <i>delayed dentition and walking.</i> 	C

<p>41. Acromegaly is:</p> <ul style="list-style-type: none"> a) due to basophil adenoma in the adenohypophysis during infancy. b) the result of inability of the liver to produce somatomedin. c) accompanied by overgrowth of long bones and increased sensitivity to insulin. d) usually accompanied by depressed sexual functions and signs of increased intracranial tension. e) a main cause of hypoglycemia and decreased FFA blood level. 	D
<p>42. Growth hormone & insulin exert opposite actions on all the following except:</p> <ul style="list-style-type: none"> a- glucose uptake by the skeletal muscles. b- lipid synthesis. c- catabolism of fat. d- synthesis of protein and somatic growth. 	D
<p>43. The adenohypophysis secretes:</p> <ul style="list-style-type: none"> a) a hormone that controls the pancreatic islets of Langerhans. b) a hormone that stimulates milk secretion from the mammary glands. c) the long acting thyroid stimulator (LATS). d) a hormone that controls activity of the parathyroid glands. e) dehydroepiandrosterone (DHEA) 	B
<p>44. Enhanced growth hormone secretion occurs in all the following cases except:</p> <ul style="list-style-type: none"> a- acromegaly and giantism. b- during starvation. c- during exercise. d- after insulin induced hypoglycemia. e- dwarfism & infantilism. 	E

<p>45. Growth hormone secretion would most likely be suppressed under which of the following conditions?</p> <p>a- acromegaly. b- gigantism. c- deep sleep. d- exercise. e- acute hyperglycemia.</p>	E
<p>46. Which of the following metabolic substrates is preferentially metabolized by growth hormone?</p> <p>a- fats. b- proteins. c- glycogen. d- glucose.</p>	A
<p>47. Which of the following conditions or hormones would most likely increase growth hormone secretion?</p> <p>a- hyperglycemia. b- exercise. c- somatomedin. d- somatostatin. e- aging.</p>	B
<p>48. A pituitary tumor secreting excess growth hormone in an adult lead to:</p> <p>a) Loss of vision in one eye. b) Gigantism. c) increased level of somatomedins in blood. d) Reduced level of free fatty acids. e) Reduced blood glucose level.</p>	C

<p>49. Decrease growth hormone secretion:</p> <ul style="list-style-type: none"> a) <i>In children, it only causes delayed puberty.</i> b) <i>In children leads to a long stature</i> c) <i>Is associated with normal mental functions.</i> d) <i>In children, it causes dwarfism</i> e) <i>Can be treated effectively by giving somatostatin.</i> 	D
<p>50. Prolactin secretion is inhibited by:</p> <ul style="list-style-type: none"> a) <i>The thyrotropin releasing hormone (TRH).</i> b) <i>Somatostatin and oxytocin.</i> c) <i>The drugs that increase dopamine formation e.g. L-dopa.</i> d) <i>A decreased blood prolactin level.</i> 	C
<p>51. Which of the following inhibits the secretion of growth hormone by the anterior pituitary?</p> <ul style="list-style-type: none"> a) <i>Sleep.</i> b) <i>Stress.</i> c) <i>Puberty.</i> d) <i>Somatomedins.</i> e) <i>Starvation.</i> 	D
<p>52. Dopamine is inhibitory for secretion of:</p> <ul style="list-style-type: none"> a. <i>Growth hormone.</i> b. <i>Luteinizing hormone (LH).</i> c. <i>Thyroid stimulating hormone (TSH).</i> d. <i>Follicle stimulating hormone (FSH).</i> e. <i>Prolactin hormone.</i> 	E

<p>53. Somatostatin hormone is inhibitory for:</p> <ul style="list-style-type: none"> a. Growth hormone. b. Prolactin hormone. c. Luteinizing hormone (LH). d. Thyrotropin releasing hormone (TRH). e. Follicle stimulating hormone (FSH) 	A
<p>54. Which of the following hormones can inhibit ovulation when present in high concentration?</p> <ul style="list-style-type: none"> a) FSH b) Prolactin. c) LH. d) Estrogen. e) Oxytocin 	B
<p>55. Physiological actions of growth hormones include:</p> <ul style="list-style-type: none"> a) It inhibits bone growth. b) It induces lipogenesis. c) It induces hyperglycemia. d) It induces protein breakdown. e) Marked decrease of Ca⁺⁺ absorption from GIT. 	C
<p>56. Acidophil somatotroph cells secrete the following hormone:</p> <ul style="list-style-type: none"> a. Growth H. b. Prolactin H. c. Luteinizing H (LH). d. Thyrotropin releasing H (TRH). e. Follicle stimulating hormone (FSH). 	A

<p>57. Panhypopituitarism in children causes:</p> <ul style="list-style-type: none"> a. diabetes mellitus b. dwarfism c. Acromegaly d. diabetes insipidus e. infantilism 	E
<p>58. Pallor and light skin color in panhypopituitarism in adults due to decreased:</p> <ul style="list-style-type: none"> a. GH b. PRL c. ACTH d. FSH 	C
<p>59. Acidophil mammatotrop cells secrete the following hormone:</p> <ul style="list-style-type: none"> a. Growth H. b. Prolactin H. c. Luteinizing H (LH). d. Thyrotropin releasing H (TRH). e. Follicle stimulating hormone (FSH). 	B
<p>60. A 45-year-old woman has a mass in the sella turcica that compresses the portal vessels, disrupting pituitary access to hypothalamic secretions. The secretion rate of which of the following hormones would most likely increase in this patient?</p> <ul style="list-style-type: none"> a. Adrenocorticotrophic hormone b. Growth hormone c. Prolactin d. Luteinizing hormone e. Thyroid-stimulating hormone 	C

<p>61. Which of the following is not a neuropeptide?</p> <ul style="list-style-type: none"> a) ADH b) GHRH c) Oxytocin d) Somatomedin e) TRH 	<p>D</p>
<p>62. A neuroscientist is studying communication between the hypothalamus pituitary in a rat model. He interrupts blood flow through the median eminence and then measures circulating levels of pituitary hormones following appropriate physiological stimulation. Secretion of which of the following hormones will be unaffected by the experimental manipulation</p> <ul style="list-style-type: none"> a. Growth hormone b. Prolactin c. Thyroid stimulating hormone d. Follicle-stimulating hormone e. Vasopressin 	<p>E</p>

Written Q ON Physio Endo 4,5

1. *Mention mechanism of action of thyroid hormone at cellular level ?*
2. *Enumerate 4 functions of thyroid hormone ?*
3. *Mention the effect of thyroid hormone on blood glucose ?*
4. *Enumerate control of thyroid hormone ?*
5. *Def wolf chikaff effect ?*
6. *Def cretinism , myxedema ?*
7. *Enumerate 4 manifestation of cretinism , myxedema , hyperthyroidism ?*
8. *Enumerate ocular signs of hyperthyroidism ?*

MCQ ON Physio Endo 4,5

<p>1. Slow thinking and speech occur in which of the following diseases?</p> <ul style="list-style-type: none">a) Acromegaly.b) Cushing's disease.c) Gigantism.d) Graves' disease.e) Myxedema.	E
<p>2. The thyroid gland:</p> <ul style="list-style-type: none">a. secretes only T3 and T4 in equal amounts.b. Decreases in size when dietary iodine is deficient.c. Takes up iodide against its electrochemical gradient.d. Is relatively avascular.e. Does not contain any enzymes.	C

<p>3. Regarding thyroxine, all the following are true except:</p> <ul style="list-style-type: none"> a. Is essential for normal development of the brain. b. Acts more rapidly than triiodothyronine (T3). c. Increases the resting rate of carbon dioxide production. d. Is essential for normal red cell production. 	B
<p>4. Removal of the thyroid gland (without replacement therapy) leads to an increase all the following except:</p> <ul style="list-style-type: none"> a. Blood cholesterol level. b. Tremor of the fingers. c. Response time for tendon reflexes. d. Blood TSH level. 	B
<p>5. Which of the following describes the effect of the level of T3 and T4 in the blood on the thyroid stimulating hormone (TSH) ?</p> <ul style="list-style-type: none"> a. Positive feedback. b. Negative feedback. c. Synergistic effect. d. No affection. e. Stimulation. 	B
<p>6. Which one of the following diseases causes an intolerance to cold weather?</p> <ul style="list-style-type: none"> a) Acromegaly. b) Cushing's. c) Gigantism. d) Graves's. e) Myxedema. 	E

<p>7. Which of the followings is an intracellular function of thyroxin?</p> <p>a) Decrease ATP synthesis</p> <p>b) Decrease Na/K ATPase activity</p> <p>c) Increase the number of mitochondria</p> <p>d) Decrease the activity of mitochondria</p> <p>e) Decrease amino acid cellular uptake</p>	C
<p>8. Disproportionate dwarfism occurs in the following disease:</p> <p>a) gigantism.</p> <p>b) acromegaly.</p> <p>c) myxedema.</p> <p>d) cretinism.</p> <p>e) Graves' disease.</p>	D
<p>9. Increased level of cholesterol & triglycerides occurs in the following disease:</p> <p>a) gigantism.</p> <p>b) acromegaly.</p> <p>c) myxedema.</p> <p>d) Cushing's disease.</p> <p>e) Graves' disease.</p>	C
<p>10. Increased appetite but there is loss of weight occurs in the following disease:</p> <p>a) gigantism.</p> <p>b) acromegaly.</p> <p>c) myxedema.</p> <p>d) Cushing's disease.</p> <p>e) Graves' disease.</p>	E

<p>11. Heat intolerance occurs in the following disease:</p> <ul style="list-style-type: none"> a) diabetes mellitus. b) cretinism. c) myxedema. d) diabetes insipidus. e) Graves' disease. 	E
<p>12. The action of thyroid stimulating immunoglobulin (TSI) on the thyroid is affected by the level of T3 and T4 in the blood in the following manner:</p> <ul style="list-style-type: none"> a) Negative feedback. b) Positive feedback. c) Inhibition. d) Stimulation. e) No feedback. 	E
<p>13. Cabbage decreases I- uptake by the thyroid gland because it contains:</p> <ul style="list-style-type: none"> a) antithyroid agents. b) Thyroid stimulating immunoglobulin (TSI). c) Thyroid stimulating hormone (TSH). d) Human chorionic gonadotropin (hCG). e) Excess iodine. 	A
<p>14. Which of the following hormones binds to a receptor in the nucleus?</p> <ul style="list-style-type: none"> a) TSH. b) TRH. c) Growth hormone. d) Prolactin hormone e) Thyroxin. 	E

<p>15. Failure of conversion of carotenes in the liver to vitamin A causes the skin to be:</p> <p>a) Yellowish. b) Warm. c) Moist. d) Sweaty. e) Thin.</p>	A
<p>16. Regarding the Wolff–Chaikoff effect of excess intake of iodine on the thyroid, which of the following is correct?</p> <p>a. Decreases release of thyroid hormones. b. Increases the activity of thyroid enzymes. c. Increases TSH effect on the thyroid gland. d. Increases proteolysis of thyroid thyroglobulin. e. Increases binding of iodine in the thyroid gland.</p>	A
<p>17. A young woman has puffy skin and a hoarse voice. Her plasma TSH concentration is low but increases markedly when she is given TRH. She probably has:</p> <p>a. Hyperthyroidism due to a thyroid tumor. b. Hypothyroidism due to a primary abnormality in thyroid gland. c. Hypothyroidism due to a primary abnormality in the pituitary gland. d. Hypothyroidism due to a primary abnormality in the hypothalamus. e. Hyperthyroidism due to a primary abnormality in the hypothalamus.</p>	D
<p>18. Tremors of the outstretched hands occur in the following disease:</p> <p>a) Gigantism. b) Acromegaly. c) Myxedema. d) Cushing's disease. e) Graves' disease.</p>	E

<p>19. Physiological goiter is sometimes noticed in:</p> <ul style="list-style-type: none"> a) Pregnancy. b) Grave's disease. c) Iodine deficiency. d) Iodine excess. e) Cretinism. 	A
<p>20. Protruded tongue occurs in the following disease:</p> <ul style="list-style-type: none"> a) gigantism. b) acromegaly. c) myxedema. d) cretinism. e) Graves' disease. 	D
<p>21. Which of the following is inconsistent with the diagnosis of Graves' disease?</p> <ul style="list-style-type: none"> a. Increased heart rate b. Exophthalmos c. Increased plasma levels of triiodothyronine (T3) d. Increased plasma levels of thyroxine (T4) e. Increased plasma levels of thyroid-stimulating hormone (TSH) 	E
<p>22. A patient has a pituitary tumor that secretes large amounts of thyroid-stimulating hormone. Which of the following findings would most likely be reported for this patient?</p> <ul style="list-style-type: none"> a. Goiter b. Enophthalmos c. Decreased respiratory rate d. Normal plasma levels of thyroxine (T4) e. Normal plasma levels of triiodothyronine (T3) 	A

<p>23. Which of the following would likely be reported in a patient with a deficiency in iodine intake?</p> <ul style="list-style-type: none"> a. Weight loss b. Tachycardia c. Nervousness d. Increased sweating e. Increased synthesis of thyroglobulin 	E
<p>24. Which of the following physiological responses is greater for triiodothyronine (T3) than for thyroxine (T4)?</p> <ul style="list-style-type: none"> a. Plasma half-life b. Plasma concentration c. Secretion rate from the thyroid d. Affinity for nuclear receptors in target tissues e. Latent period for onset of action in target tissues 	D
<p>25. Which of the following hormones has anabolic effects in muscle at physiological concentrations but is catabolic at very high levels?</p> <ul style="list-style-type: none"> a. Insulin b. Estrogen c. Thyroxine (T4) d. Testosterone e. Growth hormone 	C
<p>26. A subject takes thyroxine (T4) for several weeks to lose 10 kilograms of his weight. Which of the following would be expected to occur as long as he continues the same dose of thyroxine (T4)?</p> <ul style="list-style-type: none"> a. Goiter b. Exophthalmos c. Myxedema d. Tachycardia e. Lethargy 	D

<p>27. Which of the following has no negative feedback?</p> <ul style="list-style-type: none"> a. Thyroid stimulating hormone (TSH) b. Thyroid stimulating immunoglobulins (TSI) c. Thyrotropin releasing hormone (TRH) d. Growth hormone e. Prolactin hormone 	B
<p>28. Inhibition of the iodide pump would be expected to cause which of the following changes?</p> <ul style="list-style-type: none"> a. Extreme nervousness b. Increased metabolic rate c. Increased synthesis of thyroglobulin d. Increased synthesis of Thyroxine (T4) e. Decreased thyroid-stimulating hormone secretion 	C
<p>29. A patient has hypothyroidism due to a primary abnormality in the thyroid gland. Increased plasma levels of which of the following would most likely be reported?</p> <ul style="list-style-type: none"> a. Iodide b. Cholesterol c. Diiodotyrosine d. Thyroxine-binding globulin e. Reverse triiodothyronine (RT3) 	B
<p>30. Which of the following disease is caused by decreased secretion of thyroid hormone in infants?</p> <ul style="list-style-type: none"> a) Gigantism. b) Acromegaly. c) Myxedema. d) Cretinism. e) Graves' disease. 	D

<p>31. Mental retardation occurs in the following disease:</p> <p>a) Gigantism. b) Acromegaly. c) Myxedema. d) Cretinism. e) Graves' disease.</p>	D
<p>32. Which of the following is a manifestation of lower thyroid activity?</p> <p>a) Exophthalmos. b) Lack of concentration & long reflex time. c) Loss of weight d) Pulse rate of 100/m. e) Silky hair.</p>	B
<p>33. Hyperthyroidism is associated with:</p> <p>a) Increased systolic pressure, increased diastolic pressure and increased pulse pressure. b) Increased systolic pressure, normal diastolic pressure and increased pulse pressure. c) Increased systolic pressure decreased diastolic pressure and decreased pulse pressure. d) Increased systolic pressure, increased diastolic pressure and decreased pulse pressure. e) Decreased systolic pressure decreased diastolic pressure and decreased pulse pressure.</p>	B
<p>34. Which of the following hormones converts carotenes vitamin A in the liver?</p> <p>a) thyroxin. b) TSH. c) TRH. d) growth H. e) prolactin H.</p>	A

<p>35. Lack of thyroid hormones in adults produces:</p> <ul style="list-style-type: none"> a) Hashimoto disease. b) Graves' disease. c) Myxedema. d) Cretinism. e) Autoimmune thyroiditis. 	<p>C</p>
<p>36. One of the following hypophyseal hormones controls thyroid hormone secretion:</p> <ul style="list-style-type: none"> a) TSH b) ACTH c) FSH d) LH e) MSH 	<p>A</p>
<p>37. Cabbage act as goitrogen because it:</p> <ul style="list-style-type: none"> a) Decreases I⁻ uptake by the thyroid gland b) Contains thyroid stimulating immunoglobulin (TSI) c) Inhibits peroxidase enzyme d) Interferes with thyroid receptors. e) Contains excess iodine. 	<p>A</p>
<p>38. Thyroidectomy leads to an increase in the following, except:</p> <ul style="list-style-type: none"> a) Blood TSH level. b) Blood cholesterol level. c) Blood glucose level. d) Response time for tendon reflexes. e) Skin thickness. 	<p>C</p>

<p>39. Thyroxin:</p> <ul style="list-style-type: none"> a) Is stored in the follicular cells as goitrogens. b) Decreases the resting rate of CO₂ production. c) is essential for normal development of the brain. d) Acts more rapidly than triiodothyronine. e) Is not essential for red cell production. 	C
<p>40. Thyroid hormone increase the following :</p> <ul style="list-style-type: none"> a) Peripheral resistance b) Duration of reflex time c) Sleeping hours d) Thickness of skin e) Pulse pressure 	E
<p>41. TSH is secreted at a higher rate :</p> <ul style="list-style-type: none"> a) In primary thyrotoxicosis b) When the diet rich in iodine c) After partial removal of the thyroid gland d) After removal of pituitary gland e) None of the above 	C
<p>42. Increase thyroid gland size can occur as consequence of the following except :</p> <ul style="list-style-type: none"> a) Iodine deficiency b) Pituitary adenoma c) Graves dse d) Excessive intake of exogenous thyroxine e) Excessive intake of cabbage 	D

<p>43. The thyroid hormones act through :</p> <ul style="list-style-type: none"> a. Binding to membrane receptor on target cells b. Reacting with cytoplasmic receptor c. Increasing CAMP in the target cell d. Increasing CGMP in the target cell e. Reacting with nuclear receptor leading to increased mRNA formation 	E
<p>44. Which is true :</p> <ul style="list-style-type: none"> a. In thyrotoxicosis , nervousness and tremors due to increased of consumption of brain b. Thyroid hormone increase cholesterol synthesis in liver c. Dtermination BMR is specific test for thyroid function d. Cretin is an idiot because thyroid hormones are essential for development of nervous system e. Exophthalmus usually encountered in graves dse due to LATS 	D
<p>45. Graves dse is characterized by :</p> <ul style="list-style-type: none"> a. Apathy and mental retardation b. Poor tolerance to heat and frequent exophthalmus c. Bradycardia , decreased BMR and increased serum cholesterol level d. Moon face and dark pigmentation of skin e. Hypercaroteinmia and yellow discoloration of skin 	B
<p>46. Myxedema is characterized by all except :</p> <ul style="list-style-type: none"> a) A low serum cholesterol level b) Poor tolerance to cold and depressed memory c) Slow thinking and puffiness of face d) Dryness of skin and non pitting edema 	A

<p>47. Infantile thyroid deficiency is characterized by all except :</p> <ul style="list-style-type: none"> a) Retarded growth and delayed walking b) Protruded tongue and abdomen c) Moon face and bufflo hump d) A low BMR and inability to tolerate cold weather e) Short stature , mental retardation and bowl incontinence 	<p>C</p>
<p>48. In myxedema , there is :</p> <ul style="list-style-type: none"> a) Increased rate of catabolism b) Low serum cholesterol level c) Reduction of body weight d) Reduced tolerance to heat e) Increased sweating f) Non pitting edema 	<p>F</p>
<p>49. Excessive secretion of thyroid hormone causes :</p> <ul style="list-style-type: none"> a) Marked tachycardia b) Tendency to hypoglycemia c) Decreased appetite d) Decreased BMR e) A marked increase in body weight 	<p>A</p>
<p>50. Which of the following hormones is important for myelination of nerve fibers:</p> <ul style="list-style-type: none"> a) Thyroid. b) Glucagon. c) FSH. d) Oxytocin. 	<p>A</p>

<p>51. Patient has elevated T4 , low TSH , thyroid gland is smaller than normal, the explanation for that is :</p> <p>a) Patient has lesion in ant pituitary that prevent TSH secretion</p> <p>b) Patient is taking propylthiouracil</p> <p>c) Patient is taking thyroid extract</p> <p>d) Patient is consuming large amount of iodine</p> <p>e) Patient has graves dse</p>	C
<p>52. Patient has goiter associated with high plasma level of both TRH and TSH . her heart rate is elevated . this patient most likely has which of the following:</p> <p>a) Edemic goiter</p> <p>b) Hypothalamic tumor secreting TRH</p> <p>c) Pituitary tumor secreting large amounts of TSH</p> <p>d) Graves dse</p>	B
<p>53. Which of the following occurs in patient with myxedema :</p> <p>a) Somnolence</p> <p>b) Palpitation</p> <p>c) Increased respiratory rate</p> <p>d) Increased cardiac output</p> <p>e) Weight loss</p>	A
<p>54. Blood level of which of the following decreased in graves dse:</p> <p>a) T3</p> <p>b) T4</p> <p>c) Diiodothyronine</p> <p>d) TSH</p> <p>e) Iodide</p>	D

<p>55. Which of the following hormones has anabolic effects in muscle at physiological concentrations but is catabolic at very high levels?</p> <p>a) Insulin. b) Estrogen. c) Testosterone. d) Thyroxine (T4) e) Growth hormone.</p>	D
<p>56. The primary effect of T3 and T4 is to:</p> <p>a. Decrease blood glucose. b. Promote the release of calcitonin. c. Promote heat generating metabolic reactions. d. Stimulate the uptake of iodine by the thyroid. e. Stimulate cholesterol synthesis by the hepatocytes</p>	C
<p>57. Which of the following hormones is secreted by the parafollicular cells of thyroid glands?</p> <p>a) Thyroxin. b) Triiodothyronine. c) Calcitonin. d) Cortisol. e) TSH.</p>	C
<p>58. A subject takes thyroxine (T4) for several weeks to lose 10 kilograms of his weight. Which of the following would be expected to occur as long as he continues the same dose of thyroxine (T4):</p> <p>a. Goiter b. Exophthalmos c. Myxedema d. Tachycardia e. Lethargy</p>	D

<p>59. Which of the following is not essential for normal biosynthesis of thyroid hormones?</p> <ul style="list-style-type: none"> a) Iodine b) Ferritin c) Thyroglobulin d) Protein synthesis e) TSH 	B
<p>60. Primary increase in thyroid gland activity leads to:</p> <ul style="list-style-type: none"> a) The follicles enlarge and fill with colloid. b) The blood level of TSH increases. c) It takes up iodine at a slower rate. d) The follicular cells become more columnar. e) The patient develops myxedema. 	D
<p>61. TSH is secreted at a higher rate:</p> <ul style="list-style-type: none"> a) In primary thyrotoxicosis. b) When the diet rich in iodine. c) After partial removal of thyroid gland. d) After removal of pituitary gland. e) non of the above. 	C

MCQ ON Physio Endo 4

<p>1. Main action of glucagon is:</p> <ul style="list-style-type: none">A. activation of liver glycogenolysisB. glycogenesisC. Inhibition of lipolysisD. decrease of cardiac outputE. Increase hepatic cholesterol synthesis	A
<p>2. The major organ of glucostate is :</p> <ul style="list-style-type: none">A. liverB. kidneyC. sk msD. skinE. brain	A
<p>3. Inhibitors of insulin secretion include:</p> <ul style="list-style-type: none">A. SomatostatinB. oral protein,C. Gastric inhibitory polypeptide (GIP)D. cholecystokininE. gastrin	A
<p>4. Diabetes is accompanied by:</p> <ul style="list-style-type: none">A. HypoglycemiaB. Increase body weightC. AcidosisD. ProteinuriaE. Loss of thirst sensation	C

<p>5. Functions of Insulin include:</p> <p>A. transformation of fat into glucose</p> <p>B. gluconeogenesis</p> <p>C. glycogenolysis</p> <p>D. Glycogenesis</p> <p>E. proteolysis</p>	D
<p>6. Preproinsulin is synthesized on the:</p> <p>a) ribosomes.</p> <p>b) golgi apparatus.</p> <p>c) mitochondria.</p> <p>d) endoplasmic reticulum.</p> <p>e) nucleus.</p>	A
<p>7. Diabetes mellitus is caused by decreased:</p> <p>a) antidiuretic hormone ADH.</p> <p>b) growth hormone.</p> <p>c) thyroxine.</p> <p>d) insulin.</p> <p>e) cortisol.</p>	D
<p>8. Insulin is secreted by:</p> <p>a) endocytosis. B) exocytosis.</p> <p>c) phagocytosis. D) receptor-mediated endocytosis.</p> <p>e) pinocytosis.</p>	B
<p>9. In cases of diabetes mellitus:</p> <p>a) Lipogenesis is stimulated</p> <p>b) Glycogen synthesis in the liver is increased.</p> <p>c) There is increased lipolysis with increased blood level of FFA.</p> <p>d) There is marked increase in protein synthesis.</p> <p>e) The PH of the body fluids increases towards the alkaline side.</p>	C

<p>10. Which of the following hormones NOT have a lipolytic effect:</p> <ul style="list-style-type: none"> a) Epinephrine. b) Cortisol. c) Glucagon. d) Insulin. e) Growth hormone. 	D
<p>11. About Glucagon which of the following is NOT decreased:</p> <ul style="list-style-type: none"> a) Conversion of glucose into fat. b) Glycogenesis. c) Glucose uptake by cells. d) Gluconeogenesis. e) The rate of protein synthesis. 	D
<p>12. As regard insulin which of the following is decreased:</p> <ul style="list-style-type: none"> a) Conversion of glucose into fat. b) Glycogenesis. c) Glucose uptake by cells. d) The rate of protein synthesis. e) Lipolysis. 	E
<p>13. Which following is inhibitor to insulin secretion?</p> <ul style="list-style-type: none"> a) ↑ Plasma glucose level. b) Fasting. c) Glucagon. d) Gastric inhibitory polypeptide. e) Arginine. 	B
<p>14. Manifestations of diabetes mellitus include following except:</p> <ul style="list-style-type: none"> a) Polydipsia. b) Polyuria. c) Alkalosis. d) Glycosuria. E) Hyperglycemia. 	C

<p>15. Regarding glucagon:</p> <ul style="list-style-type: none"> a) Increases splenic contraction b) Increases lipogenesis c) Increases glucose uptake in cells d) Increases glycogenolysis e) Increases glycogenesis 	D
<p>16. All the following are actions of insulin except:</p> <ul style="list-style-type: none"> a) Lipogenesis b) Glycogenesis c) Anabolic action on protein d) Increases renal sodium and potassium secretion e) Increases muscle bulk 	D
<p>17. Which following is a stimulator to insulin secretion?</p> <ul style="list-style-type: none"> a) Decrease plasma glucose level. b) Fasting. c) Somatostatin. d) Gastric inhibitory polypeptide. e) Decrease free fatty acids. 	D
<p>18. Glucagon increases:</p> <ul style="list-style-type: none"> a) Gluconeogenesis. b) Conversion of glucose into fat. c) Glycogenesis. d) Glucose uptake by cells. e) The rate of protein synthesis. 	A
<p>19. Insulin is secreted in equimolar amounts with:</p> <ul style="list-style-type: none"> a) glucagon. b) somatostatin. c) pancreatic polypeptide. d) c-peptide. E) growth hormone. 	D

<p>20. Which of the following hormones decreases plasma glucose level?</p> <p>a) glucagon. b) growth hormone. c) glucocorticoids. d) thyroxine. e) insulin.</p>	E
<p>21. Insulin increases the following except</p> <p>a) gluconeogenesis. b) conversion of glucose into fat. c) glycogenesis. d) glucose uptake by cells. e) the rate of protein synthesis.</p>	A
<p>22. The following are stimulants of insulin secretion except:</p> <p>a) ↑ plasma glucose level. b) fasting. c) glucagon. d) gastric inhibitory polypeptide. e) arginine.</p>	B
<p>23. Which of the following is NOT stimulant for Glucagon release:</p> <p>a) Hypoglycaemia. b) Protein meal and by amino acids such as arginine and alanine. c) ↓ In plasma free fatty acids. d) Exercise. e) Somatostatin.</p>	E
<p>24. Which type of the following cells represents the major quantity of cells present in the islet of Langerhans?</p> <p>a) Alpha cells B) Beta cells c) Delta cells D) F cells</p>	B

<p>25. Diabetes is accompanied by :</p> <ul style="list-style-type: none"> a) Hypoglycemia b) Increased body weight c) Acidosis d) Proteinuria e) Loss of thirst sensation 	C
<p>26. What is the glucagon secreting cells?</p> <ul style="list-style-type: none"> a) α cells b) F cells c) δ cells d) β cells e) Ganglion cells 	A
<p>27. One of the following is NOT a usual manifestation of DM:</p> <ul style="list-style-type: none"> a) Delayed wound healing. b) Loss of weight c) Mental retardation. d) Hyperglycemia. 	C
<p>28. Hyperglycemia is induced by all following hormones, except:</p> <ul style="list-style-type: none"> a) Epinephrine. b) Aldosterone. c) Thyroxin. d) ACTH e) Glucagon. 	B
<p>29. Which following is a stimulator to insulin secretion?</p> <ul style="list-style-type: none"> a) Decrease plasma glucose level. b) Fasting. c) Somatostatin. d) Gastric inhibitory polypeptide. e) Decrease free fatty acids. 	D

<p>30. Regarding glucagon:</p> <ul style="list-style-type: none"> a) <i>Increases splenic contraction</i> b) <i>Increases lipogenesis</i> c) <i>Increases glucose uptake in cells</i> d) <i>Increases glycogenolysis</i> e) <i>Increases glycogenesis</i> 	D
<p>31. Insulin:</p> <ul style="list-style-type: none"> a) <i>Increase the rate of triglyceride synthesis in adipose tissue</i> b) <i>Decrease both amino acid and glucose uptake by cell</i> c) <i>Elevate plasma K level</i> d) <i>Stimulate hepatic gluconeogenesis</i> e) <i>Exert protein catabolic effect and marked lipolytic effect</i> 	A
<p>32. Glucagon:</p> <ul style="list-style-type: none"> a) <i>Promote glycogenolysis and gluconeogenesis in liver.</i> b) <i>Excessively secreted during hyperglycemia</i> c) <i>Absent in diabetes mellitus</i> d) <i>Inhibit lipolysis and decrease metabolic rate</i> e) <i>Exert negative inotropic effect on cardiac ms</i> 	A
<p>33. Somatostatin:</p> <ul style="list-style-type: none"> a) <i>Increase formation of somatomedin by liver</i> b) <i>Increase release of growth hormone from adenohipophysis</i> c) <i>Is released by hypothalamic neurons</i> d) <i>Reach the adenohipophysis by hypothalamo-hipophyseal nervous tract</i> e) <i>Release is under negative feedback control by blood growth hormone level</i> 	C

<p>34. Insulin:</p> <ul style="list-style-type: none"> a) Is secreted from pancreatic acinar cell b) Permit glucose transport against conc gradient c) Enhance glucose transport across cell membrane d) Enhance glucose transport in the brain interstitial mucosa and renal tubules e) Inhibit lipogenesis 	C
<p>35. Glucagon perform the following functions except :</p> <ul style="list-style-type: none"> a) It increase glycogenolysis and gluconeogenesis by liver b) Decrease insulin secretion c) Increase lipolysis d) Has calorogenic action by increasing metabolic rate e) Increases cyclic AMP in the target cell 	B
<p>36. Concerning somatostatin , all the following are true except :</p> <ul style="list-style-type: none"> a) It is the growth hormone inhibiting hormone b) Is secreted by hypothalamus c) Secreted by certain pancreatic islet cell d) Stimulate gastrin secretion as well as most other GIT activities e) Present in certain brain areas acting as chemical transmitter 	D
<p>37. Concerning insulin, all are true except :</p> <ul style="list-style-type: none"> a) Its secretion is inhibited by somatostatin b) Its secretion is stimulated by hyperglycemia and amino acid transfusion c) Its release from pancreatic islets is promoted by certain GIT hormones especially GIP d) It decrease protein synthesis and increase hepatic gluconeogenesis e) Its secretion is increased by stimulating the pancreatic parasympathetic nerve supply 	D

<p>38. About glucagon , all are true except :</p> <ul style="list-style-type: none"> a) Its secretion is inhibited by somatostatin and stimulated by catecholamine b) It increases glycogenolysis in both liver and skeletal ms c) It increases myocardial contractility d) It elevates metabolic rate and produce lipolytic and ketogenic action e) It promotes gluconeogenesis in liver 	B
<p>39. Insulin inhibits:</p> <ul style="list-style-type: none"> a) Glycogen synthesis in liver b) Glycogen deposition in skeletal ms c) Lipolysis d) Protein synthesis e) Entry of K into the cell 	C
<p>40. Insulin:</p> <ul style="list-style-type: none"> a) Produced by acinar cell of pancreas b) Stimulate the release of FFA from fat depots c) Inhibit protein synthesis d) Increase glucose uptake by skeletal ms cell e) Facilitate both glycogenolysis and gluconeogenesis 	D
<p>41. Hypoglycemia induced by fasting , causes :</p> <ul style="list-style-type: none"> a) Increased secretion of insulin b) Decreased secretion of glucagon c) Decreased secretion of growth hormone d) Increased secretion of cortisol 	D
<p>42. Which of the following pairs of hormone and action is incorrect :</p> <ul style="list-style-type: none"> a) Glucagon : increase glycogenolysis in liver b) Glucagon : increase glycogenolysis in skeletal ms c) Glucagon : increase gluconeogenesis d) Cortisol : increase gluconeogenesis e) Cortisol : decrease glucose uptake in ms 	B

<p>43. Which of the following would produce greatest increase in insulin secretion:</p> <ul style="list-style-type: none"> a) Amino acids b) Amino acids and glucose c) Amino acids and somatostatin d) Glucose and somatostatin 	B
<p>44. When plasma glucose conc . falls to low levels, a number of different hormones help combact hypoglycemia. After intravenous administration of large dose of insulin, the return of low blood sugar level to normal is delayed in :</p> <ul style="list-style-type: none"> a) Adrenal medullary insufficiency b) Glucagon deficiency c) Combined adrenal medullary insufficiency and glucagon deficiency d) Thyrotoxicosis e) Acromegaly 	C
<p>45. Which of the following finding is most likely to occur in a patient who has uncontrolled type 1 diabetes mellitus :</p> <ul style="list-style-type: none"> a) Decreased plasma osmolarity b) Increased plasma volume c) Increased plasma PH d) Increased release of glucose from liver e) Decreased rate of lipolysis 	D
<p>46. Which of the following would most likely to occur in the earliest stage of type 2 diabetes :</p> <ul style="list-style-type: none"> a) Increased insulin sensitivity b) High circulatory level of C peptides c) Decreased hepatic glucose output d) Metabolic acidosis e) Hypovolemia 	B

<p>47. which of the following would be least likely to be seen 14 days after a rate is injected with a drug that kills all of its pancreatic beta cells :</p> <p>a) a rise in plasma H conc. b) A rise in plasma glucagon conc. c) A fall in plasma HCO₃ conc. d) A fall in plasma amino acid conc. e) A rise in plasma osmolarity</p>	D
<p>48. Insulin increase the entry of glucose into :</p> <p>a) All tissues b) Renal tubular cell c) The mucosa of small intestine d) Most neurons in cerebral cortex e) Skeletal ms</p>	E
<p>49. Insulin:</p> <p>a) Increases the rate of triglyceride synthesis in adipose tissues. b) Decreases both amino acid and glucose uptake by the cells. c) Stimulates hepatic gluconeogenesis. d) Exerts a protein catabolic effect and a marked lipolytic effect.</p>	A
<p>50. Stimuli of glucagon secretion include the followings, except:</p> <p>a) Hyperglycemia. b) GIT hormones. c) Exercise. d) Infections.</p>	A
<p>51. Which of the following are incorrectly paired?</p> <p>a. Aldosterone: increased plasma glucose level. b. Epinephrine: increased glycogenolysis in skeletal muscle. c. Insulin: increased protein synthesis. d. Glucagon: increased gluconeogenesis.</p>	A

<p>e. Growth hormone: increased plasma glucose level.</p>	
<p>52. Hypoglycemia stimulates:</p> <ul style="list-style-type: none"> a) Parathyroid. b) Aldosterone. c) Glucagon. d) Oxytocin. e) Prolactin 	<p>C</p>
<p>53. In the early stages of type 2 diabetes mellitus, which of the following findings is most likely to occur?</p> <ul style="list-style-type: none"> a. Abnormally high postprandial blood levels of insulin b. Abnormally low postprandial blood levels of glucose c. Decreased body mass d. Increased insulin sensitivity e. Ketoacidosis 	<p>A</p>

PHYSIO ENDOCRINE

2ND YEAR

MCQ adrenal cortex



+

Dr/M.M

Written

1. Enumerate function and regulation of aldosterone ?
2. Def Conn's syndrome ?
3. Mention anti-inflammatory effect of cortisol ?
4. Mention 5 functions of cortisol ?
5. Mention role of cortisol in stress ?
6. Def Cushing syndrome ?
7. Give a short note on mechanism and regulation of cortisol secretion ?
8. Mention 4 symptoms of Cushing syndrome ?
9. Mention 4 symptoms of Addison's disease ?
10. Def Virilism with 4 manifestations ?

MCQ

<p>1. Conn's syndrome Manifestations include</p> <ul style="list-style-type: none">a) Hyperkalemiab) hyperkalemic nephropathyc) Hyponatremiad) Hyponatremiae) Metabolic acidosis	C
<p>2. Cortisol regulates the secretion of corticotrophin releasing hormone from the hypothalamus through which of the following?</p> <ul style="list-style-type: none">a) Long loop positive feedback.b) Long loop negative feedbackc) Short loop positive feedback.d) Short loop negative feedback.e) Ultra-short loop feedback.	B

<p>3. Which of the following is the only organ in which Cortisol increases the protein synthesis</p> <p>a) The blood</p> <p>b) The kidney</p> <p>c) The liver.</p> <p>d) The muscles.</p> <p>e) The skin</p>	<p>C</p>
<p>4. Which of the following is considered as one of Addison disease manifestations?</p> <p>a) Hyponatremia</p> <p>b) Hypervolemia</p> <p>c) Hypokalemia</p> <p>d) Increase basal metabolic rate</p> <p>e) Metabolic acidosis</p>	<p>E</p>
<p>5. Cushing syndrome is:</p> <p>a) Due to hypersecretion of aldosterone.</p> <p>b) Due to hypersecretion of thyroid hormone.</p> <p>c) Characterized by an increase in protein synthesis.</p> <p>d) Characterized by hyperglycemia.</p> <p>e) Characterized by lymphocytosis.</p>	<p>D</p>
<p>6. Cushing syndrome is characterized by all the following except:</p> <p>a) Hyperglycemia.</p> <p>b) Hyperkalemia.</p> <p>c) Hypertension and edema.</p> <p>d) Purplish abdominal stria.</p> <p>e) Muscle wasting and weakness.</p>	<p>B</p>

<p>7. Cortisol has a permissive effect to:</p> <ul style="list-style-type: none"> a) Catecholamines b) GH. c) somatomedins d) Insulin e) thyroxin 	A
<p>8. As regard the effect of steroid hormones on protein metabolism, steroid causes:</p> <ul style="list-style-type: none"> a) Muscle wasting and weakness. b) bones become stronger due to increased protein content c) formation of collagenous tissues d) Promotion of healing of wounds. e) Decrease Subcutaneous hemorrhage 	A
<p>9. Addison disease Manifestations include:</p> <ul style="list-style-type: none"> a) Hypokalemia b) Metabolic acidosis c) Hyponatremia d) Hypervolemia e) Increase BMR 	B
<p>10. AS regard metabolic action of cortisol:</p> <ul style="list-style-type: none"> a) It inhibits gluconeogenesis b) it increases rate of glucose utilization c) Steroid decreases plasma amino acids level. d) It increases the capillary permeability. e) It has lipolytic effect. 	E

<p>11. Disorders of the Adrenocortical Function include:</p> <ul style="list-style-type: none"> a) Acromegaly: b) Addison's disease c) Myxoedema d) Acromegaly e) Cretinism 	B
<p>12. ONE of the following not a Manifestation of cushing:</p> <ul style="list-style-type: none"> a) Hypertension b) Osteoporosis c) purplish striae d) Muscle wasting. e) Hypoglycemia 	E
<p>13. Which of the following are associated with adrenocortical hypofunction?</p> <ul style="list-style-type: none"> a) Hyperglycemia. b) High BMR. c) Redistribution of body fat. d) Increased muscle bulk. e) Dark pigmentation. 	E
<p>14. Aldosterone hormone:</p> <ul style="list-style-type: none"> a) Is secreted from zona fasciculata of suprarenal cortex. b) Is secreted from the anterior pituitary gland. c) Increases plasma calcium level. d) Acts through cAMP. e) Increases K⁺ secretion by DCT. 	E
<p>15. Aldosterone secretion is increased by:</p> <ul style="list-style-type: none"> a) Hypernatremia. 	C

<p>b) Hypokalemia. c) Angiotensin II. d) hypercalcemia.</p>	
<p>16. Aldosterone:</p> <p>a) Promotes excretion of K^+ in distal renal tubules. b) Secretion is controlled by plasma free fatty acid level. c) Produces hair growth in females. d) Causes Na^+ reabsorption in the PCT. e) Is secreted from the placenta.</p>	A
<p>17. Aldosterone hormone:</p> <p>a) Stimulates K^+ reabsorption by renal tubules. b) Inhibits Na^+ reabsorption by renal tubules. c) Stimulates Ca^{++} reabsorption by renal tubules. d) Is secreted by adrenal medulla. e) Is stimulated by angiotensin II.</p>	E
<p>18. Regarding aldosterone:</p> <p>a) It is secreted from zona glomerulosa of suprarenal cortex. b) It decreases K^+ and H^+ secretion in the kidney. c) It decreases Na^+ reabsorption in the kidney. d) It releases is stimulated mainly by ACTH. e) It decreases plasma Na^+ concentration.</p>	A
<p>19. Glucocorticoids:</p> <p>a) Decrease blood glucose level. b) Are released mainly under the effect of angiotensin II. c) Increase protein synthesis. d) Are controlled by TSH. e) Decrease lymphocytes.</p>	E

<p>20. Glucocorticoids:</p> <ul style="list-style-type: none"> a) <i>Inhibit histamine release by mast cells and basophils.</i> b) <i>Stimulate ACTH secretion from anterior pituitary.</i> c) <i>Stimulate lipogenesis.</i> d) <i>Increase capillary permeability.</i> e) <i>Decrease the number of RBCs and neutrophils.</i> 	A
<p>21. Excess glucocorticoids (cortisol) lead to:</p> <ul style="list-style-type: none"> a) <i>Stimulation of lymphocytes.</i> b) <i>Increased allergy.</i> c) <i>Increased inflammatory response to allergic reaction.</i> d) <i>Osteoporosis.</i> e) <i>Decreased RBCs.</i> 	D
<p>22. A decrease in cortisol secretion would produce:</p> <ul style="list-style-type: none"> a) <i>Increased cellular protein catabolism in the liver.</i> b) <i>High systolic arterial blood pressure.</i> c) <i>Increased secretion of ACTH.</i> d) <i>Hyperglycemia.</i> e) <i>A fall in serum potassium level.</i> 	C
<p>23. Which of the following is not produced by hypersecretion of cortisol:</p> <ul style="list-style-type: none"> a) <i>Increased rate of protein breakdown in the skin.</i> b) <i>A major fall in plasma protein level.</i> c) <i>Atrophy of skeletal muscles.</i> d) <i>Increased tubular reabsorption of sodium.</i> e) <i>Decreased formation of antibodies.</i> 	B

<p>24. Cortisol hormone is:</p> <ul style="list-style-type: none"> a) <i>Mainly a lipolytic hormone.</i> b) <i>Stimulated by angiotensin II.</i> c) <i>Inhibited by ACTH.</i> d) <i>Mainly an anabolic hormone.</i> e) <i>A hypoglycemic hormone.</i> 	A
<p>25. Cortisol:</p> <ul style="list-style-type: none"> a) <i>Destroys the inflammatory agents.</i> b) <i>Inhibits the action of histamine.</i> c) <i>Lowers the blood pressure.</i> d) <i>Stimulates antibodies production.</i> e) <i>Prevents the release of histamine.</i> 	E
<p>26. A patient having addison's disease will have:</p> <ul style="list-style-type: none"> a) <i>Hypotension, hyperglycemia and skin pigmentation.</i> b) <i>Hypertension, hypoglycemia and skin pigmentation.</i> c) <i>Hypotension, hypoglycemia and skin pigmentation.</i> d) <i>Hypotension, hypoglycemia and hypernatremia.</i> e) <i>Hypotension, hyperglycemia and hyponatremia.</i> 	C
<p>27. Hyper secretion of cortisone leads to:</p> <ul style="list-style-type: none"> a) <i>Hypoglycemia.</i> b) <i>Lipolysis.</i> c) <i>Increased muscle bulk.</i> d) <i>Increased BMR.</i> e) <i>Increased protein synthesis in most tissues.</i> 	D

<p>28. The secretion of adrenal androgens is controlled by:</p> <ul style="list-style-type: none"> a) ACTH. b) LH. c) FSH. d) ketosteroids. e) Estrogens. 	A
<p>29. Cortisol increases blood glucose by:</p> <ul style="list-style-type: none"> a) Increasing gluconeogenesis alone. b) Increasing gluconeogenesis and decreasing glucose utilization. c) Increasing gluconeogenesis and glucose utilization. d) Decreasing glucose utilization alone. e) Decreasing gluconeogenesis and glucose utilization. 	B
<p>30. A 45-year-old male with cushingoid appearance, elevated serum and urinary cortisol, very low serum ACTH, no suppression of cortisol with small amount of Dexamethasone, the most likely diagnosis is:</p> <ul style="list-style-type: none"> a) Pituitary adenoma. b) Hypothalamic tumor. c) pheochromocytoma. d) Adrenal tumor. e) Addison syndrome. 	D
<p>31. The cells secreting mineralocorticoids are present in:</p> <ul style="list-style-type: none"> a) Zona interna b) Zona glomerulosa c) Zona reticularis d) Zona pellucida e) Zona fasciculata 	B
<p>32. One of the following hypothalamic hormone control adrenal cortex</p>	E

<p>secretion:</p> <ul style="list-style-type: none"> a) TSH b) FSH c) LH d) MSH e) ACTH 	
<p>33. Conn's syndrome Manifestations include:</p> <ul style="list-style-type: none"> a) Hyperkalemia b) hyperkalemic nephropathy c) Hyponatremia d) Hyponatremia e) Metabolic acidosis 	C
<p>34. The most inner zone of adrenal cortex is:</p> <ul style="list-style-type: none"> a) Zona fasciculata b) Zona glomerulosa c) Zona interna d) Zona pellucida e) Zona reticularis 	E
<p>35. Hyperkalemia stimulates the secretion of:</p> <ul style="list-style-type: none"> a) Glucagon. b) Cortisol c) Aldosterone. d) Epinephrine. e) Insulin 	C,E

<p>36. Regarding aldosterone:</p> <ul style="list-style-type: none"> a) <i>It is secreted from zona glomerulosa of suprarenal cortex.</i> b) <i>It decreases K⁺ and H⁺ secretion in the kidney.</i> c) <i>It decreases Na⁺ reabsorption in the kidney.</i> d) <i>It releases is stimulated mainly by ACTH.</i> e) <i>It decreases plasma Na⁺ concentration.</i> 	A
<p>37. Primary hyperaldosteronism characterized by :</p> <ul style="list-style-type: none"> a) <i>Decreased Na and increased K conc in blood</i> b) <i>Expansion of ECF volume</i> c) <i>Muscle weakness due to hypotention</i> d) <i>Metabolic acidosis</i> e) <i>Depressed sexual function</i> 	D
<p>38. The secretion of ACTH :</p> <ul style="list-style-type: none"> a) <i>Mainly from adrenal cortex</i> b) <i>Inhibited in stress conditions</i> c) <i>Controlled by hypothalamic inhibitory hormones</i> d) <i>In excessive amounts is the cause of skin pigmentation in Addison dse</i> e) <i>If absent , aldosterone is completely inhibited</i> 	D
<p>39. About aldosterone :</p> <ul style="list-style-type: none"> a) <i>Most important glucocorticoid</i> b) <i>Play a major role in regulating ECF volume</i> c) <i>Help Na secretion and K reabsorption from renal tubules</i> d) <i>Control the synthesis of 1,25 di-hydroxy-cholicaciferol</i> e) <i>Essential for milk ejection from mammary gland</i> 	B

<p>40. Which of the following is associated with parallel changes in cortisol and aldosterone secretion :</p> <ul style="list-style-type: none"> a) Addison dse b) Cushing syndrome (adrenal tumor) c) A low sodium diet d) Administration of converting enzyme inhibitor 	A
<p>41. 59 year old woman develop osteoporosis , hypertention , hirstism and hyperpigmentation . magnetic resonance imagining indicate that pituitary gland not enlarged , which of the following is most consistent with these finding :</p> <ul style="list-style-type: none"> a) Pituitary ACTH secreting tumor b) Ectopic ACTH secreting tumor c) Inappropriate high secretion rate of CRH d) Adrenal adenoma e) Addison dse 	B
<p>42. Selective destruction of zona glomerulosa would produce deficiency of :</p> <ul style="list-style-type: none"> a) Aldosterone b) Androstendiones c) Cortisol d) Dehydroepiadresterone e) Testosterone 	A
<p>43. 46 year old woman has hirstism , hyperglycemia and obesity. muscle wasting and increased circulating level of ACTH , the most appropriate cause of these symptoms is :</p> <ul style="list-style-type: none"> a) Addison dse b) Pheochromocytoma c) Primary overproduction of ACTH =Cushing dse d) Treating with exogenous glucocorticoid e) Hypophysectomy 	C

<p>44. Cushing syndrome is characterized by:</p> <ul style="list-style-type: none"> a) Hypotension. b) Hypoglycemia. c) Tremors of the hand. d) Moon face. 	D
<p>45. Cushing syndrome is characterized by all the following EXCEPT:</p> <ul style="list-style-type: none"> a) Muscle wasting and weakness. b) Purplish abdominal stria. c) Hypertension and edema. d) Hyperglycemia. e) Hyperkalemia. 	E
<p>46. An adrenal tumor secreting DHEA (dehydroepiandrosterone) leads to:</p> <ul style="list-style-type: none"> a) True hermaphroditism in a newly born girl b) Virilization (virilism) in an adult female c) Precocious pseudopuberty in a female child d) Feminization of an adult male. e) Early true puberty in a male child 	B
<p>47. A 40- year- old woman is placed on a high-potassium diet for several weeks. Which of the following hormonal changes is most likely to occur?</p> <ul style="list-style-type: none"> A) Increased secretion of dehydroepiandrosterone B) Increased secretion of cortisol C) Increased secretion of aldosterone D) Increased secretion of adrenocorticotrophic hormone E) Decreased secretion of corticotropin-releasing hormone 	C
<p>48. virilization is caused by excessive secretion of:</p> <ul style="list-style-type: none"> a) Glucagon 	D

<p>b) Aldosterone</p> <p>c) Melanocyte stimulating hormone</p> <p>d) Dehydroepiandrosterone from the adrenal cortex</p>	
<p>49. Regarding adrenal androgens all following are correct except:</p> <p>a) Promote physical growth in pubertal phase</p> <p>b) Stimulate the appearance of pubic and axillary hair in females.</p> <p>c) Include dehydro-epiandrosterone and andro-steredione.</p> <p>d) Their secretion is controlled by pituitary gonadotropins.</p> <p>e) Their androgenic activity is weaker than that of testosterone.</p>	D
<p>50. Which of the following would be associated with parallel changes, in aldosterone and cortisol secretion?</p> <p>A) Addison's disease</p> <p>B) Cushing's disease</p> <p>C) Cushing's syndrome (adrenal tumor)</p> <p>D) A low sodium diet</p> <p>E) Administration of a converting enzyme inhibitor</p>	A
<p>51. Adrenal androgen is responsible for :</p> <p>a. appearance of acne</p> <p>b. breast development</p> <p>c. enlargement of testis</p> <p>d. ovulation</p> <p>e. spermatogenesis</p>	A

PHYSIO ENDOCRINE

2ND YEAR
MCQ

adrenal medulla



Dr/M.M

Written

1. *Mention control of catecholamine secretion ?*
2. *Def pheochromocytoma ?*
3. *Mention the effect of catecholamine on CHO metabolism ?*

MCQ

<p>1. Regarding the physiological action of catecholamine, which of the following is TRUE?</p> <ul style="list-style-type: none">a) <i>It inhibits all the cardiac properties</i>b) <i>It decreases the O₂ consumption</i>c) <i>It increases the glomerular filtration rate</i>d) <i>It increases the central nervous system excitability</i>e) <i>It constricts the blood vessels in the skeletal muscles and the liver</i>	D
<p>2. Which one of the following hormone (s) bind(s) to cell membrane receptor?</p> <ul style="list-style-type: none">a) <i>catecholamines</i>b) <i>estrogen</i>c) <i>progesterone</i>d) <i>testosterone</i>e) <i>thyroxine</i>	A
<p>3. Which one is the effect of Catecholamine on smooth muscles?</p> <ul style="list-style-type: none">a) <i>Bronchodilatation</i>b) <i>Contraction of the walls in the gastro-intestinal tract)</i>c) <i>Relaxation of sphincters in the gastrointestinal tract.</i>d) <i>Relaxation of the internal urethral sphincter</i>e) <i>Constriction of the pupil</i>	A

<p>4. Manifestations Pheochromocytoma include:</p> <ul style="list-style-type: none"> a) Hypertension b) Hypoglycemia c) Dry skin d) Red skin e) Bradycardia 	A
<p>5. As regarding the secretion of catecholamines from the adrenal medulla, which of the following is not true?</p> <ul style="list-style-type: none"> a) The adrenal medulla secretes epinephrine more than norepinephrine. b) Conversion of norepinephrine to epinephrine needs high local concentration of cortisol. c) Catecholamine secretion is low in basal states. d) Catecholamine secretion is controlled by the adrenaline secreting center in mid brain. e) Catecholamine secretion is increased by stimulation of the peripheral chemoreceptors. 	D
<p>6. Physiological action of Catecholamine includes:</p> <ul style="list-style-type: none"> a) Inhibits metabolic process b) Decreases O₂ consumption c) Produces bronchconstriction d) Produces Coronary vasoconstriction e) Dilates the blood vessels in skeletal muscles 	E
<p>7. As regard effect of adrenaline on skeletal muscle, Orbelli phenomenon:</p> <ul style="list-style-type: none"> a) Adrenaline increases the strength of skeletal muscle contraction b) Adrenaline facilitates muscle fatigue c) Adrenaline decreased blood flow to the muscles d) Adrenaline increase lactic acid in muscle e) Adrenaline decrease energy. 	A

<p>8. Adrenaline is a hyperglycemic hormone because it:</p> <ul style="list-style-type: none"> a- Stimulates glycogenesis in the liver. b- Stimulates glycogenolysis in muscle c- Inhibits glucagon secretion, d- Inhibits ACTH secretion e- Directly stimulates glucose uptake. 	B
<p>9. Hyposecretion of the Adrenomedullary Hormones is characterized by:</p> <ul style="list-style-type: none"> a) Severe headache. b) No symptoms c) Pale skin d) Palpitations e) Hypertension 	B
<p>10. Catecholamine secretion is stimulated by:</p> <ul style="list-style-type: none"> a) Increased activity of rennin angiotensin system. b) Hyperkalemia. c) Hyponatremia. d) Stress condition. e) Hyperglycemia. 	D
<p>11. Effects of Catecholamine on metabolism include:</p> <ul style="list-style-type: none"> a) It stimulates lipogenesis b) It Inhibits glycogenolysis in muscle, c) It stimulates glycogenolysis in the liver d) It Inhibits glucagon secretion e) It Inhibits lipolysis 	C

<p>12. One of the following areas does not send impulses to the adrenaline secreting center:</p> <ul style="list-style-type: none"> a) <i>The Hypothalamus</i> b) <i>The baroreceptors in the aortic arch and carotid sinus</i> c) <i>The central chemoreceptors</i> d) <i>The peripheral chemoreceptors</i> e) <i>The volume receptors in the atria and pulmonary vessels.</i> 	C
<p>13. Manifestations of Pheochromocytoma include:</p> <ul style="list-style-type: none"> a) <i>Dry skin.</i> b) <i>Red skin.</i> c) <i>Bradycardia.</i> d) <i>Hypertension.</i> e) <i>Hypoglycemia.</i> 	D
<p>14. Effects of Catecholamine on metabolism include:</p> <ul style="list-style-type: none"> a) <i>It Inhibits glycogenolysis in the liver</i> b) <i>It stimulates lipolysis</i> c) <i>It Inhibits glycogenolysis in muscle</i> d) <i>It Inhibits glucagon secretion</i> e) <i>It Inhibits glucagon secretion</i> 	B
<p>15. Physiological action of Catecholamine includes:</p> <ul style="list-style-type: none"> a) <i>Inhibits metabolic process</i> b) <i>Decreases O₂ consumption</i> c) <i>Produces bronchconstriction</i> d) <i>Produces Coronary vasoconstriction</i> e) <i>Dilates the blood vessels in skeletal muscles</i> 	E

<p>16. Hyperkalemia stimulate the secretion of : L4</p> <ul style="list-style-type: none"> a) Glucagon b) Cortisol c) Aldosterone d) Epinephrine e) Insulin 	E
<p>17. Adrenalin secretion from the adrenal glands decreases the:</p> <ul style="list-style-type: none"> a) Blood free fatty acid level. b) Blood flow to skeletal muscles. c) Blood flow to the kidneys. d) Release of renin in the kidneys. 	C
<p>18. Epinephrine predominately causes:</p> <ul style="list-style-type: none"> a) Glycogenolysis. b) Gluconeogenesis. c) Glycogenesis. d) Glycolysis. 	A
<p>19. Noradrenaline mainly stimulates:</p> <ul style="list-style-type: none"> a) Alpha receptors. b) Beta receptors. c) Predominately beta receptors. d) Both receptors equally. 	A
<p>20. Pheochromocytoma:</p> <ul style="list-style-type: none"> a) Is a tumor of adrenal cortex. b) Is manifested by hypotension. c) Is manifested by hyperglycemia. d) a and c are correct. 	C

21. Pheochromocytoma predominately secretes:

- a) Epinephrine.
- b) Nor Epinephrine.
- c) Serotonin.
- d) Dopamine.

A

Written

1. *Mention effects of PTH on ca ?*
2. *Mention role of estrogen in protection of osteoporosis ?*
3. *Mention effect of chronic high dose of glucocorticoid on Ca ?*
4. *Def and causes of tetany ?*
5. *Mention carpopedal spasm ?*
6. *Mention manifestation of hyperparathyroidism ?*

MCQ

<p>1. The solubility product means that:</p> <ul style="list-style-type: none">a) $Na^+ \times PO_4^{--} = K$ (constant).b) $K^+ \times PO_4^{--} = K$ (constant).c) $Ca^{++} \times HCO_3^- = K$ (constant).d) $Ca^{++} \times PO_4^{--} = K$ (constant).e) $Cu^{++} \times PO_4^{--} = K$ (constant).	D
<p>2. Which of the following would you expect to Find in a patient whose diet has been low In calcium for 2 months?</p> <ul style="list-style-type: none">a) Increased formation of 24,25-dihydroxycholecalciferol.b) Decreased amounts of calcium-binding protein in intestinal epithelial cellsc) Increased parathyroid hormone secretion.d) A high plasma calcitonin concentratione) Increased plasma phosphate.	C

<p>3. Which of the following hormones is secreted by the parafollicular cells of thyroid glands?</p> <p>a) Thyroxin. b) Triiodothyronine. c) Calcitonin. d) Cortisol. e) TSH</p>	C
<p>4. The parathormone is secreted by which of the following?</p> <p>a) Para-follicular cells of the thyroid gland. b) Chief cells of the thyroid gland. c) Oxyphil cells of the thyroid gland. d) Chief cells of the parathyroid gland. e) Oxyphil cells of the parathyroid gland</p>	D
<p>5. 1,25-Dihydroxycholecalciferol affects intestinal Ca²⁺ absorption by:</p> <p>a. Includes alterations in the activity of genes. b. activates adenylyl cyclase. c. decreases cell turnover. d. changes gastric acid secretion. e. involves degradation of apical calcium channels.</p>	A
<p>6. Which of the following is not Involved in regulating plasma Ca²⁺ levels?</p> <p>a. Kidneys b. Skin c. Liver d. Lungs e. Intestine</p>	D

<p>7. Which of the following results from the action of parathyroid hormone (PTH) on the renal tubule?</p> <p>a) Inhibition of 1alpha-hydroxylase</p> <p>b) Stimulation of Ca²⁺ reabsorption in the distal tubule</p> <p>c) Stimulation of phosphate reabsorption in the proximal tubule</p> <p>d) Interaction with receptors on the luminal membrane of the proximal tubular cells</p> <p>e) Decreased urinary excretion of cyclic adenosine monophosphate (cAMP)</p>	B
<p>8. The primary physiological stimulus for parathyroid hormone parathormone secretion:</p> <p>a) Decrease vitamin</p> <p>b) Decrease in plasma calcium.</p> <p>c) Increase blood phosphate.</p> <p>d) Decrease thyroid secretion.</p> <p>e) Increase bone resorption</p>	B
<p>9. In hyperparathyroidism which of the following is Correct?</p> <p>a) Low serum calcium</p> <p>b) High serum phosphorus</p> <p>c) Low serum calcium and high serum phosphorus</p> <p>d) High serum calcium and low serum phosphorus</p> <p>e) None of the above</p>	D
<p>10. As regard parathormone which of the following is false?</p> <p>a) Raise lowered Ca level</p> <p>b) inc. absorption of Ca from the small intestine</p> <p>c) inc. reabsorption of Ca from the kidney</p> <p>d) inc. reabsorption of Pi from the kidney</p> <p>e) Stimulates α-1-hydroxylase enzyme</p>	D

<p>11. The normal plasma calcium concentration is:</p> <ul style="list-style-type: none"> a) 9 mg%. b) 9 gm%. c) 9 mg/ml. d) 9 ml%. 	A
<p>12. Parathyroid hormone:</p> <ul style="list-style-type: none"> a) Helps in deposition of Ca⁺⁺ in bones. b) Increases plasma phosphates. c) Decreases phosphate reabsorption from the PCT. d) Stimulates osteoblasts. e) Is stimulated by TSH. 	C
<p>13. Parathyroid hormone (PTH):</p> <ul style="list-style-type: none"> a) Stimulates phosphate reabsorption in DCT. b) Inhibits osteoclasts. c) Increases synthesis of active vitamin D. d) Stimulates osteoblasts. e) Decreases calcium reabsorption from DCT. 	C
<p>14. Which of the following is NOT correct for PTH:</p> <ul style="list-style-type: none"> a) It is secreted from the parathyroid gland. b) It causes excretion of calcium in the renal tubules. c) It is secreted in response to hypocalcemia. d) It causes activation of vitamin D in the kidney. e) It helps in resorption of calcium from bones. 	B
<p>15. Parathyroid hormone:</p> <ul style="list-style-type: none"> a) Secretion is regulated by a pituitary feedback control system. b) Acts directly on bone to increase bone resorption. c) Decreases absorption of calcium from the intestines. d) Decreases phosphate excretion. 	B

<p>16. All the following statements regarding Parathormone (PTH) are correct EXCEPT:</p> <ul style="list-style-type: none"> a) <i>It stimulates bone resorption.</i> b) <i>It decreases phosphate reabsorption in PCT.</i> c) <i>It inhibits formation of 1,25 dihydroxy vitamin D.</i> d) <i>It inhibits osteoblasts.</i> 	<p>C</p>
<p>17. Parathyroid hormone (PTH):</p> <ul style="list-style-type: none"> a) <i>Inhibits osteoclasts.</i> b) <i>Stimulates osteoblasts.</i> c) <i>Stimulates phosphate reabsorption in DCT.</i> d) <i>Increases synthesis of active vit D.</i> e) <i>Decreases calcium reabsorption from DCT.</i> 	<p>D</p>
<p>18. Calcitonin:</p> <ul style="list-style-type: none"> a) <i>Is secreted from follicular cells of thyroid gland.</i> b) <i>Is secreted from parathyroid gland.</i> c) <i>Increases plasma calcium level.</i> d) <i>Decreases plasma calcium level.</i> e) <i>Leads to lipolysis.</i> 	<p>D</p>
<p>19. Patient with parathyroid deficiency 10 days after thyroidectomy will show:</p> <ul style="list-style-type: none"> a- <i>Low plasma phosphate and Ca²⁺ levels and tetanus</i> b- <i>Low plasma Ca²⁺ levels, increased muscular excitability and Trousseau's sign</i> c- <i>High plasma phosphate and Ca²⁺ and bone demineralization</i> d- <i>Increased muscular excitability, high plasma Ca²⁺ and bone dimerization</i> 	<p>B</p>

<p>20. All the following hormones increase plasma calcium level EXCEPT:</p> <p>a) 1,25 DHCC. b) PTH. c) Calcitonin. d) growth hormone</p>	C
<p>21. Which of the following is correct:</p> <p>a) Calcitonin is secreted from parathyroid gland. b) PTH decreases Ca^{++} level in blood. c) PTH increases Ca^{++} reabsorption from renal tubules (DCT & CD). d) Calcitonin increases Ca^{++} absorption from the intestine. e) Calcitonin stimulates mobilization of calcium from bones.</p>	C
<p>22. Which of the following resorb bone?</p> <p>a) Osteoblasts. b) Osteocytes. c) Osteoclasts. d) Osteoid. e) Periosteum.</p>	C
<p>23. Concerning vitamin D. all the following is true except:</p> <p>a) it can be formed in the body. b) It increases the intestinal absorption of Ca c) It is essential for the calcification of cartilage at the epiphyses of bones d) It is activated in the kidney by conversion to 1,25 di-hydroxy-cholecalciferols. e) The formation of its active form is inhibited by the PTH.</p>	E
<p>24. Where is calcitonin produced in the body?</p> <p>A) Parathyroid glands B) Thyroid gland C) Adrenal glands D) Pancreas</p>	B

<p>25. The normal plasma calcium level is:</p> <ul style="list-style-type: none"> a) 5-7 mg%. b) 7-9 mg%. c) 9-11 mg%. d) 11-13 mg%. e) 13-15 mg%. 	C
<p>26. High levels of PTH are not consistent with one of the following:</p> <ul style="list-style-type: none"> a) Parathyroid tumors. b) Recurrent formation of renal calculi. c) Frequent occurrence of spontaneous fractures. d) Osteoporosis. e) A low serum Ca level associated with muscle stiffness. 	E
<p>27. PTH produces one of the following actions?</p> <ul style="list-style-type: none"> a) ↓ osteoclastic activity. b) ↑ urinary excretion of Ca^{2+} and PO_4^{3-}. c) ↓ intestinal absorption of Ca^{2+} and PO_4^{3-}. d) Formation of active vitamin D3 (calcitriol) in the kidneys. 	D
<p>28. Thyrocalcitonin:</p> <ul style="list-style-type: none"> a) Reduces blood $[\text{Ca}^{++}]$. b) Increases BMR. c) Stimulates osteoclastic activity. d) Is secreted by the follicular cells. 	C
<p>29. Active absorption of calcium occurs in:</p> <ul style="list-style-type: none"> a) Duodenum. b) Ileum. c) Colon. d) Stomach. e) Jejunum. 	A

<p>30. The intestine adapts to a low..... in diet by increasing the absorbed proportion:</p> <ul style="list-style-type: none"> a) Calcium. b) Phosphate. c) Magnesium. d) Cobalt. e) Cupper 	A
<p>31. Ca⁺⁺ absorption is increased by:</p> <ul style="list-style-type: none"> a) Hypercalcemia. b) Oxalate in diet. c) Iron overload. d) 1,25dihydroxycholecalciferol. e) Increase Na⁺ absorption. 	D
<p>32. As regard parathormone which of the following statements is false?</p> <ul style="list-style-type: none"> a) Raise lowered Ca⁺⁺ level b) Inc. absorption of Ca⁺⁺ from the small intestine c) Inc. reabsorption of Ca⁺⁺ from the kidney d) Inc. reabsorption of Pi from the kidney e) Stimulates α-1-hydroxylase enzyme 	D
<p>33. Regarding the effects of chronic excess glucocorticoids on calcium homeostasis, which of the following is not correct?</p> <ul style="list-style-type: none"> a. Decrease renal calcium reabsorption. b. Decrease intestinal calcium absorption. c. Decrease osteoblastic bone formation. d. Decrease estrogen and testosterone production e. Decrease parathormone release. 	E

<p>34. The biologically active form of calcium is that present in:</p> <ul style="list-style-type: none"> a) Ionized form. b) Bound to proteins. c) Complexed to anions. d) Bone. e) Teeth. 	A
<p>35. As regard parathormone, which of the following statements is false?</p> <ul style="list-style-type: none"> a. Raise the lowered Ca^{++} level. b. \uparrow the absorption of Ca^{++} from the small intestine. c. \uparrow the reabsorption of Ca^{++} from the kidney. d. \uparrow the number and level of activity of osteoblasts of bone. e. \downarrow secretion of Ca^{++} in milk. 	D
<p>36. Calcitonin is secreted by the:</p> <ul style="list-style-type: none"> a) Para-follicular cells of the thyroid gland. b) Chief cells of the thyroid gland. c) Oxyphil cells of the thyroid gland. cd) Chief cells of the parathyroid gland. e) Oxyphil cells of the parathyroid gland. 	A
<p>37. A patient with parathyroid deficiency 10 days after involuntary damage to the parathyroid glands during thyroid surgery would probably have:</p> <ul style="list-style-type: none"> a) low plasma phosphate and Ca^{2+} levels and tetany. b) low plasma phosphate and Ca^{2+} levels and tetanus. c) a low plasma Ca^{2+} level, increased muscular excitability, and spasm of the muscles of the upper extremity (Trousseau sign). d) high plasma phosphate and Ca^{2+} levels and bone demineralization. e) increased muscular excitability, a high plasma Ca^{2+} level, and bone demineralization. 	C

<p>38. Which of the following causes bone resorption?</p> <ul style="list-style-type: none"> a) Vitamin D. b) Calcitonin. c) Parathormone. d) Growth hormone. e) Sex hormones (estrogens and androgens). 	<p>C</p>
<p>39. What factor controls the rate of formation of 1,25-dihydroxy-cholecalceferol?</p> <ul style="list-style-type: none"> a. Amount of calcium in the diet b. Concentration of parathyroid hormone in the plasma c. Concentration of 25-hydroxycholecalceferol in the plasma d. Rate of formation of vitamin D3 in the skin e. All of the above 	<p>B</p>
<p>40. The primary site of 1,25-Dihydroxycholecalciferol formation from its immediate precursor is the:</p> <ul style="list-style-type: none"> a) Bone b) Liver c) Skin d) Nephron e) Bloodstream 	<p>D</p>
<p>41. Parathormone secretion is usually increased:</p> <ul style="list-style-type: none"> a) In patients with chronic renal failure. b) In people taking excessive amount of vitamin D. c) In hyperfunction of adenohipophysis. d) When blood phosphate level falls. e) In hypoproteinemia. 	<p>A</p>

<p>42. Hyperparathyroidism is associated with all following except:</p> <ul style="list-style-type: none"> a) Osteitis fibrosa cystica and spontaneous fractures. b) Muscle weakness and flaccidity (decreased muscle tone). c) Recurrent formation of renal calculi d) Decreased blood level of the alkaline phosphatase enzyme. e) Polyuria and polydipsia 	D
<p>43. Removed of the parathyroid glands:</p> <ul style="list-style-type: none"> a) Causes skeletal muscle spasms b) May lead to death if no treatment is given c) Can be compensated by repeated i.v. injections of Ca gluconate d) If treated by A.T 10 and repeated doses of vitamin D 	B
<p>44. Tetany tends to occur when:</p> <ul style="list-style-type: none"> a) There is respiratory failure b) The anterior pituitary gland is removed c) The plasma Ca level rises d) The plasma HCO₃ rises 	D
<p>45. Why is osteoporosis much more common in elderly women than in elderly men?</p> <ul style="list-style-type: none"> A. Men continue to produce testosterone throughout their lifetime, whereas women cease estrogen production after menopause B. Women consume less dietary calcium than men C. Gastrointestinal absorption of calcium is more effective in men than in women D. The bones of women contain less calcium than those of men even before menopause 	A

Written

1. Enumerate function of sertoli cell?
2. Describe briefly hormones of spermatogenesis?
3. Def spermiogenesis?
4. Mention effect of FSH and LH in male ?
5. Mention why and how there is low temperature in testis?
6. Mention how to maintain high conc of testosterone inside seminiferous tubule ?
7. Give a short account on metabolic effect of testosterone?
8. Compare () pre and post pubertal hypogonadism ?

MCQ

<p>9. During spermatogenesis, which of the following cell is first to be haploid:</p> <ul style="list-style-type: none">a) Primary spermatocyteb) Secondary spermatocytec) Spermatidd) Spermatozoae) Spermatogonia	B
<p>10. Blood testis barrier is formed by tight junction of:</p> <ul style="list-style-type: none">a) Sertoli cellb) Primary spermatogoniac) Leydig celld) Primary spermatogonia	A
<p>11. Major trophic hormone for sertoli cell:</p> <ul style="list-style-type: none">a) FSHb) LHc) Inhibind) CRH e) ACTH	A

<p>12. In male foetus, secretion of testosterone is controlled by:</p> <ul style="list-style-type: none"> a) Inhibin b) HCG c) Relaxin d) LH e) FSH 	B
<p>13. Man castrated before puberty, grow taller than normal because:</p> <ul style="list-style-type: none"> a) Release of growth hormone is increased b) Level of estradiol is increased c) Decrease androgen delay union of epiphyseal plate d) Increase resistance to IGF 1 e) Increase androgen deposition of CA and phosphate in bone 	C
<p>14. Secondary male sex organs include the following except the:</p> <ul style="list-style-type: none"> a) Testes b) Epididymis. c) Vas deferens. d) Seminal vesicle e) Prostate. 	A
<p>15. Leydig cells secrete:</p> <ul style="list-style-type: none"> a) Inhibin hormone. b) Testosterone. c) Mullerian duct inhibiting factor. d) Androgen binding protein. e) Estrogen. 	B
<p>16. Full development and function of seminiferous tubules require:</p> <ul style="list-style-type: none"> a) Somatostatin. b) LH. c) Oxytocin. d) FSH e) Androgen and FSH. 	E

<p>17. In human male, testosterone is produced mainly by the:</p> <ul style="list-style-type: none"> a) Leydig cells. b) Sertoli cells c) Seminiferous tubules d) Epididymis. e) Vas deferens. 	A
<p>18. H-Y antigen is secreted by:</p> <ul style="list-style-type: none"> a) Sertoli cells. b) Leydig cells. c) Seminiferous tubules. d) Epididymis e) Vas deferens. 	A
<p>19. Maturation of sperm occurs in the:</p> <ul style="list-style-type: none"> a) Epididymis. b) Vas deferens. c) Seminiferous tubules. d) Prostate e) Seminal vesicles. 	A
<p>20. Mature sperms are stored in the:</p> <ul style="list-style-type: none"> a) Epididymis b) Vas deferens c) Seminiferous tubules d) prostate e) Seminal vesicles 	B
<p>21. In the male fetus, secretion of testosterone is controlled by:</p> <ul style="list-style-type: none"> a) Relaxin b) Inhibin c) LH d) FSH. e) HCG 	E

<p>22. In the male fetus, descent of the testes from the abdominal cavity into the scrotum is controlled by:</p> <ul style="list-style-type: none"> a) Prostaglandins. b) Adrenal androgen c) Growth hormone d) Testoserone. 	D
<p>23. Leydig cells:</p> <ul style="list-style-type: none"> a) Appear-7-9th week of gestation. b) Secretes inhibin hormone. c) Secrete mullerian duct- inhibiting substance. d) All of the above. e) None of the above. 	A
<p>24. Concerning testicular androgens all following is true except:</p> <ul style="list-style-type: none"> a) They are essential for maturation of the external genitalia and appearance of the secondary sex characteristics in males b) They are essential for spermatogenesis c) They increase the secretion of the sebaceous glands d) They produced marked negative nitrogen balance e) They exert a negative feedback control on LH secretion 	D
<p>25. About the FSH, all the following is true except:</p> <ul style="list-style-type: none"> a) It is secreted by the basophil chromophil cells of the adenohipophysis. b) It is essential of the development of Graafian follicles. c) It is required for the last stages of spermatogenesis d) It stimulates the growth of the Sertoli cells. e) Its secretion occurs by a +ve feedback control by the blood estrogen level 	E

<p>26. Testosterone produces all the following effects except:</p> <ul style="list-style-type: none"> a) Depression of LH secretion by the adenohipophysis. b) An increase in the scalp hair c) Union of the epiphyses of long bones d) A positive nitrogen balance e) Changes in the body configuration at puberty 	B
<p>27. About spermatozoa all the following is true except:</p> <ul style="list-style-type: none"> a) They become infertile if separated from the other constituents of semen. b) They require both FSH & testosterone for normal development c) They are normally stored in seminal vesicles before ejaculation. d) They require several hours in the female genital tract to become able to fertilize the ova e) Their development is inhibited in cases of cryptorchidism. 	C
<p>28. Testosterone:</p> <ul style="list-style-type: none"> a) Is secreted by the spermatogonia b) Secretion shows a circadian rhythm c) Administration to healthy adults increases the sperms count in their semen. d) Causes fat deposition in the abdomen below the umbilicus e) Secretion increases at puberty because the blood LH level markedly rises. 	E
<p>29. Which of the following cell contain 23s:</p> <ul style="list-style-type: none"> a) type A spermatogonia b) spermatid c) 2ry spermatocyte d) 1ry spermatocyte 	B
<p>30. Which of the following cells undergo meiotic division:</p> <ul style="list-style-type: none"> a) Primordial germ cells. b) Primary spermatocytes. c) Secondary spermatocytes. 	B

<p>d) Spermatids.</p> <p>e) Spermatozoa.</p>	
<p>31. Testosterone hormone is:</p> <p>a) Secreted by sertoli cells.</p> <p>b) Secreted by leydig cells.</p> <p>c) Secreted from pituitary gland.</p> <p>d) Secreted under effect of FSH.</p> <p>e) Secreted under effect of inhibin hormone.</p>	B
<p>32. Testosterone hormone:</p> <p>a) Decreases body hair.</p> <p>b) Decreases BMR.</p> <p>c) Stimulates erythropoiesis.</p> <p>d) Inhibits spermatogenesis.</p> <p>e) Exerts positive feedback on LH.</p>	C
<p>33. Which of the following is Not true for spermatogenesis:</p> <p>a) Takes about 70 days to develop from spermatogonia.</p> <p>b) Occurs under the control of FSH and LH.</p> <p>c) Occurs normally in cryptorchidism.</p> <p>d) Requires 2 to 3oC lower than body temperature.</p> <p>e) Requires vitamin A, B and E.</p>	C
<p>34. Testosterone hormone:</p> <p>a) Decreases basal metabolic rate.</p> <p>b) Is a catabolic hormone.</p> <p>c) Is controlled mainly by FSH.</p> <p>d) Is controlled mainly by LH.</p> <p>e) Is controlled mainly by inhibin hormone.</p>	D

<p>35. Which one of the following statements about spermatogenesis is correct?</p> <ul style="list-style-type: none"> a. Luteinizing hormone (LH) acts directly on Sertoli cells to promote cell division b. Sertoli cells are required for survival of germ cells. c. Spermatogenesis requires continuous release of gonadotropin-releasing hormone d. Leydig cell secretion of testosterone requires follicle-stimulating hormone (FSH) 	B
<p>36. Testosterone secretion from the testis:</p> <ul style="list-style-type: none"> a- Increases at puberty because FSH levels increase b- Is responsible for growth of facial hair c- Has a negative feedback effect on FSH secretion by the anterior pituitary gland d- Peaks in the early evening 	B
<p>37. All about secretion of testosterone is correct, except:</p> <ul style="list-style-type: none"> a- Depresses pituitary secretion of LH b- Causes the epiphysis of long bones to unite c- May lead to positive nitrogen balance d- Stimulates growth of scalp hair 	D
<p>38. Fall of scalp hair and bilateral temporal recession of frontal scalp hairline are functions of which of the following hormones:</p> <ul style="list-style-type: none"> A. Dihydrotestosterone D. Progesterone B. Estrogen C. Inhibin E. Testosterone 	A

<p>39. Which of the following best describes spermatogenesis?</p> <p>A. Leydig cell secretion of testosterone requires FSH</p> <p>B. LH acts directly on Sertoli cells to promote cell division</p> <p>C. Mature spermatozoa are present at birth, but cannot be released until puberty is reached</p> <p>D. Spermatogenesis requires a temperature lower than internal body temperature</p>	D
<p>40. In the testis, which of the following is not a sertoli cell function?</p> <p>a- Phagocytosis</p> <p>b- Blood-testis barrier</p> <p>c- Secretion of testosterone</p> <p>d- Secretion of inhibin</p>	C
<p>41. Which hormone initiates spermatogenesis?</p> <p>A. FSH</p> <p>B. Testosterone</p> <p>C. LH D. DHEA-S</p>	A
<p>42. What is the primary function of Leydig cells?</p> <p>A. Regulate pituitary secretion of prolactin</p> <p>B. Testosterone synthesis.</p> <p>C. Nitric oxide release</p> <p>D. Inhibin secretion</p>	B
<p>43. Which of the following statements is correct?</p> <p>A. Males have all their germ cells present at the time of birth</p> <p>B. Dihydrotestosterone is the major regulator of LH secretion in the male</p> <p>C. Testosterone decreases the frequency of GnRH pulses in the hypothalamus</p> <p>D. Testosterone inhibits FSH release, but not LH release, through hypothalamic-pituitary feedback mechanisms</p>	C

<p>44. This hormone in males triggers Sertoli cells to synthesize androgen binding globulin (ABG)</p> <p>(a) Gonadotropin releasing hormone (GnRH) (b) Luteinizing hormone (LH) (c) Oxytocin (d) Follicle-stimulating hormone (FSH)</p>	D
<p>45. Sertoli cells have the following functions except:</p> <p>a) Spermiogenesis. b) Spermiation. c) Spermatogenesis. d) Secretion of estradiol. e) Secretion of androgen-binding protein.</p>	C
<p>46. Sertoli cells secrete the following except:</p> <p>a) Mullerian duct- inhibiting factor. b) Inhibin hormone. c) Testosterone. d) Androgen- binding protein. e) Estrogen.</p>	C
<p>47. Sertoli cells produce:</p> <p>a) Testosterone. b) Androstenedione. c) Mullerian duct stimulating hormone. d) Follicle stimulating hormone. e) Androgen binding protein.</p>	E
<p>48. Formation of mature sperm cells from primitive germ cells takes an average of:</p> <p>a) 50 days. b) One week. c) One month. d) 70 days. e) 100 days.</p>	D

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<p>1. During the proliferative phase of menstrual cycle:</p> <p>A. Sloughing of the superficial endometrial layers occurs.</p> <p>B. The blood progesterone level reaches its peak.</p> <p>C. The endometrium becomes 6 mm thick and decidual cells appear.</p> <p>D. The uterine glands increase in length but do not secrete.</p> <p>E. This phase coincides with the luteal phase of the ovarian cycle.</p>	D
<p>2. Which of the following hormones is responsible for the luteal phase of menstrual cycle?</p> <p>A) Estradiol b) Estrogen</p> <p>C) Prolactin d) Progesterone e) Oxytocin</p>	D
<p>3. An 18-year-old emaciated woman who has been on a strict diet regimen and training for a marathon presents with amenorrhea. Exogenous pulsatile administration of GnRH restores ovulation and menses. Ovulation is caused by a sudden increase in the secretion of which of the following hormones?</p> <p>A) LH.</p> <p>B) FSH.</p> <p>C) GnRH.</p> <p>D) Estrogen.</p> <p>E) Progesterone</p>	A
<p>4. Concerning the menstrual cycle:</p> <p>A) Full maturation of the corpus luteum occurs on the 28th day of the cycle</p> <p>B) Ovulation occurs due to LH surge that results from a +ve feedback mechanism</p> <p>C) The last cycle (before the menopause) is called menarche</p> <p>D) It normally occurs every 2 weeks</p> <p>E) It is always accompanied by ovulation</p>	B

<p>5. In normal menstrual cycle:</p> <p>A. Estrogen secretion increases over the second half of the cycle</p> <p>B. The endometrium is thickest in proliferative phase</p> <p>C. The body temperature increases in the first half of the cycle</p> <p>D. The proliferative phase depends on estrogen secretion</p> <p>E. Over 14th-28th days of the cycle, the endometrium secretes HCG</p>	D
<p>6. About ovulation:</p> <p>a) It occurs normally on the 20th day of the ovarian cycle.</p> <p>b) It occurs as a result of LH surge.</p> <p>c) It does not affect body temperature.</p> <p>d) It is due to rupture of corpus luteum.</p> <p>e) It is not associated with lower abdominal pain.</p>	B
<p>7. The follicle stimulating hormone (FSH):</p> <p>a) Is secreted from the hypothalamus.</p> <p>b) Is the name that refers to prolactin.</p> <p>c) Is the main cause of ovulation.</p> <p>d) Stimulates the development of mature Graafian follicle.</p> <p>e) Stimulates the development of female secondary sex characteristics.</p>	D
<p>8. A 32-year-old woman develops nausea and breast tenderness after missing her menstrual period. She discovered that she is 4 weeks pregnant. With respect to hormonal changes during pregnancy, which of the following is the source of estrogen and progesterone during the first 2 months of pregnancy?</p> <p>a) Anterior pituitary.</p> <p>b) Corpus luteum.</p> <p>c) Ovary.</p> <p>d) Placenta.</p> <p>e) Posterior pituitary.</p>	B

<p>9. Estrogens produce:</p> <ul style="list-style-type: none"> a) Growth of pubic and axillary hair at puberty. b) Development of lobules and alveoli of mammary glands. c) Delaying in union of the epiphysis of long bones. d) The luteal phase of ovarian cycle. e) The secondary sex characteristics in females. 	E
<p>10. The female secondary sex characteristics depend on:</p> <ul style="list-style-type: none"> a) Secretion of large amounts of progesterone. b) Increased secretion of growth hormone. c) Presence of sufficient amounts of estrogens. d) Inhibition of LH secretion. e) A normal function of the parathyroid glands. 	C
<p>11. Concerning the hormonal control of ovarian cycle:</p> <ul style="list-style-type: none"> a) Complete follicular maturation is FSH independent. b) The development of Graafian follicles requires both FSH and LH. c) Ovulation and corpus luteum formation are FSH dependent. d) More than one Graafian follicle usually develops each cycle. e) In the post ovulatory phase, LH secretion is increased. 	B
<p>12. About FSH:</p> <ul style="list-style-type: none"> a) It is secreted by the acidophil chromophil cells of the adenohypophysis. b) It is not essential for the development of mature Graafian follicle. c) Its secretion occurs by a +ve feedback control by the blood estrogen level. d) Stimulates the secretion of estrogen and progesterone from the corpus luteum. e) It stimulates estrogen secretion by the granulosa cells of the growing ovarian follicles. 	E

<p>13. The corpus luteum:</p> <ul style="list-style-type: none"> a) Is responsible for the proliferative phase of uterine cycle. b) Is under the control of neurohypophysis. c) Begins to atrophy as soon as the fertilized ovum is implanted. d) Secretes both progesterone and estrogens. e) Continues to secrete during early pregnancy due to excess pituitary GTHs. 	D
<p>14. A couple presents at the fertility center concerned that they have not been able to conceive a child. The reproductive endocrinologist evaluates the wife to be certain that she is ovulating. Which of the following is an indication that ovulation has taken place?</p> <ul style="list-style-type: none"> a) An increase in serum FSH levels. b) A drop in body temperature. c) An increase in serum LH levels. d) An increase in serum progesterone levels. e) An increase in serum estrogen levels. 	D
<p>15. The ovaries:</p> <ul style="list-style-type: none"> a) Function is only the production of mature ovum. b) Discharge 5-10 ova during each menstrual cycle. c) Are essential for the cyclic uterine cavity. d) Contain ova only at the time of puberty. e) Are not influenced by any of the placental hormones. 	C
<p>16. A 26-year-old woman purchases an ovulation predictor kit at her local pharmacy. Assuming a regular menstrual cycle of 28 to 30 days, ovulation would be expected to occur between which of the following days?</p> <ul style="list-style-type: none"> a) Days 6 and 8 b) 10 and 12. c) Days 14 and 16. D) Days 18 and 20. e) Days 22 and 24. 	C

<p>17. On the 21st day of the menstrual cycle:</p> <ul style="list-style-type: none"> a) The development of the Graafian follicle is maximal. b) The body temperature is lower than normal c) The thickness of the myometrium is greater than in proliferative phase. d) There is marked increase in the blood progesterone level. e) The corpus luteum is converted to corpus albicans. 	D
<p>18. In the postovulatory phase of the menstrual cycle:</p> <ul style="list-style-type: none"> a) The cervical mucous becomes thick and viscid. b) The plasma level of LH is maximal. c) The plasma level of progesterone is minimal. d) The thickness of the uterine endometrium is about 2mm. e) Estrogen secretion from the ovary stops. 	A
<p>19. During a normal menstrual cycle:</p> <ul style="list-style-type: none"> a) The lifetime of the corpus luteum is about 30 days. b) The rising concentration of estrogen secreted by the ripening follicle triggers the LH peak. c) Ovulation will occur exactly 14 days after the last vaginal bleeding. d) The corpus luteum is controlled by the FSH concentration in the blood. e) The thickness of endometrium is greatest during proliferative phase. 	B
<p>20. If the patient presents with a very regular 29-day menstrual cycle, ovulation should occur in day:</p> <ul style="list-style-type: none"> a) 5 b) 15 c) 18 d) 20 e) 29 	B

<p>21. In the last few hours before ovulation one of these items doesn't occur:</p> <ul style="list-style-type: none"> a. The 2ry oocyte begins the 2nd meiotic division. b. The proteolytic enzymes cause dissolution and weakening of the follicular wall under the effect of high estrogen level. c. Degeneration of the stigma. d. Rapid growth of new blood vessels into the follicular wall with local secretion of PGs. e. Follicle rupture from the stigma. 	B
<p>22. About diagnosis of ovulation: one of these items is not true:</p> <ul style="list-style-type: none"> a. On the day of ovulation: there is an increase in basal bod temperature by 0.2 – 0.5 C. b. Detection of pregnanediol, the progesterone metabolite in urine. c. Endometrial biopsy shows the proliferative phase of the endometrium. d. Examination of the cervical mucus in the preovulatory phase show spinbarkeit and ferning phenomenon. e. There is increase in vaginal discharge. 	C
<p>23. About fate of corpus luteum, all are true except:</p> <ul style="list-style-type: none"> a. If fertilization occurs, the corpus luteum is called corpus luteum of pregnancy. b. Its function in pregnancy is maintained by human chorionic gonadotropin. c. If fertilization does not occur, it is called corpus luteum of menstruation. d. It continues to function till the end of pregnancy. e. It degenerates and stops its function 4 days before the next cycle. 	D
<p>24. About the proliferative phase of the menstrual cycle one of these items is not true:</p> <ul style="list-style-type: none"> a. It coincides from the 5th day up to 14th day of the cycle. b. It coincides with the follicular phase of the ovarian cycle. 	C

<p>c. The endometrial glands grow with excessive secretion.</p> <p>d. There is regeneration of the stromal and epithelial cells.</p> <p>e. There is development of endometrium blood vessels rich in leucocytes and Igs.</p>	
<p>25. About the secretory phase of the menstrual cycle one of these items is not true:</p> <p>a. It coincides from the 5th day up to 10th day of the cycle.</p> <p>b. Endometrial glands become tortuous with increased secretions.</p> <p>c. The blood vessels become highly tortuous and dilated.</p> <p>d. The stromal cells exhibit increase in cytoplasm, lipid & glycogen deposits.</p> <p>e. It is mainly produced under the effect of progesterone and to lesser extent under the effect of estrogen, both from the corpus luteum.</p>	A
<p>26. Regarding the ovulatory cycles, which of the following is not true?</p> <p>a) They start at puberty and stop at menopause.</p> <p>b) The duration of the cycle averages 28 days.</p> <p>c) At puberty, two ovaries contain about 400,000 follicles.</p> <p>d) During each cycle, only one follicle starts to grow and reaches maturity.</p> <p>e) The follicles secrete estrogens and progesterone.</p>	D
<p>27. LH surge:</p> <p>a) Occurs one week before ovulation.</p> <p>b) Is produced by a positive long loop feedback effect of estrogen on anterior pituitary.</p> <p>c) Is produced by a positive short loop feedback effect of estrogen on anterior pituitary.</p> <p>d) Means increased LH secretion up to 2-3 folds and FSH up to 10 folds</p> <p>e) Is produced by a negative long loop feedback effect of estrogen on anterior pituitary.</p>	B

<p>28. The ovarian follicles:</p> <ul style="list-style-type: none"> a) Secrete estrogens from theca interna and externa. b) Secrete estrogens from theca externa and granulosa cells. c) Secrete estrogens from theca interna and granulosa cells. d) Secrete large amount of progesterone. e) Secrete large amount of estrogens at the beginning of the ovarian cycle. 	C
<p>29. In a 35 days ovarian cycle, ovulation occurs in the day:</p> <ul style="list-style-type: none"> a) 14 of the cycle. b) 18 of the cycle. c) 25 of the cycle. d) 16 of the cycle. e) 21 of the cycle. 	E
<p>30. In a 28 days ovarian cycle, ovulation occurs in the day:</p> <ul style="list-style-type: none"> a) 21 of the cycle. b) 18 of the cycle. c) 16 of the cycle. d) 17 of the cycle. e) 14 of the cycle. 	E
<p>31. The corpus luteum:</p> <ul style="list-style-type: none"> a) Is formed under the control of FSH. b) Secrete large amounts of estrogen and small amounts of progesterone. c) If fertilization occurs, it degenerates after the 7th week of gestation. d) If fertilization does not occur, it degenerates two days before the onset of the next cycle. e) Is formed just before ovulation. 	D
<p>32. In a 22 days ovarian cycle, ovulation occurs in the day:</p> <ul style="list-style-type: none"> a) 14 of the cycle. B) 10 of the cycle. c) 8 of the cycle d) 12 of the cycle. e) 6 of the cycle. 	C

<p>33. The following symptoms and signs occur after ovulation except:</p> <ul style="list-style-type: none"> a) Pelvic pain. b) Increased the basal body temperature. c) Detection of pregnanediol in urine. d) Increased urinary output of 17-ketosteroids. e) Increased vaginal discharge. 	D
<p>34. The proliferative phase of the endometrial cycle:</p> <ul style="list-style-type: none"> a) is controlled by progesterone secreted by the corpus luteum. b) is controlled by estrogens secreted by the corpus luteum. c) is controlled by estrogens secreted by the ovarian follicles. d) all the above e) none of the above 	C
<p>35. Corpus luteum:</p> <ul style="list-style-type: none"> a) is formed under the effect of FSH. b) if fertilization does not occur, it degenerates after the 26th day of the cycle. c) if fertilization occurs, it degenerates at the 8th week of gestation. d) all the above e) none of the above 	B
<p>36. Hormone produced by the ovary is:</p> <ul style="list-style-type: none"> a) HCG. b) Estrogen. c) HCS. d) Prolactin. e) Oxytocin. 	B

<p>37. Which of the following hormones would best indicate if the cycle is ovulatory or not?</p> <p>a) LH. b) FSH. c) Estrogen. d) Progesterone. e) Prolactin.</p>	D
<p>38. Luteinizing hormone:</p> <p>a) Is secreted from corpus luteum. b) Is secreted from posterior pituitary gland. c) Stimulates growth of follicles. d) Stimulates ovulation. e) Stimulates proliferative phase of endometrial cycle.</p>	D
<p>39. Proliferative phase of uterine cycle is under the control of:</p> <p>a) LH. b) Progesterone. c) Estrogen from corpus luteum. d) Estrogen from growing follicles. e) Estrogen and progesterone.</p>	D
<p>40. In the 40 day menstrual cycle, ovulation is likely to occur on:</p> <p>a) 14th day. b) 16th day. c) 20th day. d) 26th day. e) 30th day.</p>	D

<p>41. Concerning corpus luteum in early pregnancy:</p> <ul style="list-style-type: none"> a) <i>Is maintained under control of human chorionic gonadotropin.</i> b) <i>Is maintained under control of LH.</i> c) <i>It secretes estrogen and oxytocin.</i> d) <i>It secretes estrogen only.</i> e) <i>Is maintained under control of FSH.</i> 	A
<p>42. The ovarian follicles:</p> <ul style="list-style-type: none"> a) <i>secrete steroids from the theca externa.</i> b) <i>are grown under the effect of FSH</i> c) <i>their number increased throughout the reproductive age.</i> d) <i>all of the above</i> e) <i>none of the above</i> 	B
<p>43. Secretory phase of menstrual cycle is:</p> <ul style="list-style-type: none"> a) <i>About 5 days in duration normally.</i> b) <i>Controlled by FSH.</i> c) <i>Controlled by estrogen from growing follicles.</i> d) <i>Controlled by progesterone from corpus luteum.</i> e) <i>Characterized by presence of thinner endometrium than proliferative phase.</i> 	D
<p>44. The preovulatory surge of LH:</p> <ul style="list-style-type: none"> a) <i>Occurs only during sleep.</i> b) <i>Is due to positive feedback action of estrogen on pituitary.</i> c) <i>Can be induced by estrogen during the luteal phase.</i> d) <i>Is due to negative feedback action of estrogen on hypothalamus.</i> e) <i>Is induced by removal of negative feedback effects of progesterone.</i> 	B

<p>45. The occurrence of LH surge is essential for the:</p> <ul style="list-style-type: none"> a) Development of secondary sex characters. b) Implantation of fertilized ovum. c) Atrophy of corpus luteum. d) Shedding off endometrial functional layer. e) Ovulation. 	E
<p>46. Which of the following phases shows a well-developed secretory endometrium:</p> <ul style="list-style-type: none"> a) Early follicular. b) Late follicular. c) Ovulatory. d) Mid luteal. e) Last days of menses. 	D
<p>47. Which of the following hormones causes rise in the basal body temperature after ovulation:</p> <ul style="list-style-type: none"> a) Androgen. b) Estrogen. c) Progesterone. d) Prolactin. e) LH. 	C
<p>48. Which of the following events occur about a day before ovulation:</p> <ul style="list-style-type: none"> a) High rate of progesterone secretion. b) Formation of corpus luteum. c) Very low plasma level of LH. d) Increase release of proteolytic enzymes from theca externa. e) Increase release of proteolytic enzymes from theca interna. 	D

<p>49. Ovulation is indicated by the:</p> <ul style="list-style-type: none"> a) Presence of ovarian hormones in the urine. b) Development of pigmentation in the areola. c) Appearance of vaginal inflammation. d) Increase plasma level of oxytocin. e) Increase in basal body temperature. 	E
<p>50. Estrogen hormone:</p> <ul style="list-style-type: none"> a) Is secreted from anterior pituitary. b) Stimulates milk ejection from the breast. c) Is a catabolic hormone. d) Stimulates growth of pubic and axillary hair. e) Stimulates duct formation in breast. 	E
<p>51. As regard action of estrogen action which of following is false:</p> <ul style="list-style-type: none"> a) Increased osteoblastic activity. b) Decreased myometrial contractility. c) Change of vaginal epithelium into stratified squamous. d) Deposition of fat in the breast. e) Cervical fernning and spinbarkeit phenomena. 	B
<p>52. Progesterone hormone:</p> <ul style="list-style-type: none"> a) Is secreted from the growing follicle. b) Is secreted from the corpus luteum. c) Stimulates release of LH. d) Is secret under effect of FSH. e) Control the proliferative phase of menstrual cycle. 	B

<p>53. Progesterone:</p> <ul style="list-style-type: none"> a) Decreases sensitivity of myometrium to oxytocin. b) Is not essential for implantation of the fertilized ovum. c) Is secreted from the anterior pituitary gland. d) Stimulates ovulation. e) Stimulates LH secretion. 	A
<p>54. Progesterone:</p> <ul style="list-style-type: none"> a) Is not essential for implantation of the fertilized ovum. b) Is responsible for proliferative phase of endometrium. c) Is secreted mainly from corpus luteum. d) Decreases body temperature. e) Is secreted mainly from the growing follicle. 	C
<p>55. The hormones most responsible for the LH surge and ovulation in a normal woman are:</p> <ul style="list-style-type: none"> a) Estradiol and progesterone b) Activin and inhibin c) GnRH and inhibin d) Estradiol and GnRH 	D
<p>56. When do progesterone levels rise to their highest point during the female hormonal cycle?</p> <ul style="list-style-type: none"> a) Between ovulation and the beginning of menstruation b) Immediately before ovulation c) When the blood concentration of LH is at its highest point d) When 12 primary follicles are developing to the antral stage 	A
<p>57. During the week after ovulation, the endometrium increases in thickness to 5 to 6 millimeters. What stimulates this increase in thickness?</p> <ul style="list-style-type: none"> a) LH b) Estrogen from the corpus luteum 	C

<p>c) Progesterone from the corpus luteum d) FSH</p>	
<p>58. Ideal time to evaluate ovulation in young female in cycle day:</p> <p>a) 2 b) 1 c) 3 d) 16 e) 21</p>	D
<p>59. Which of the following has a natriuretic effect:</p> <p>a) Estrogen. b) Progesterone. c) Aldosterone. d) Renin. e) Oxytocin.</p>	B
<p>60. One of these items is not considered a function of the estrogen hormone:</p> <p>a) Growth, development and maintenance of 2ry sex organs. b) It facilitates growth of the ovarian follicles c) Controls the secretory phase of the menstrual cycle and help implantation and formation of the placenta. d) It is responsible for development of 2ry sex characters. e) It stimulates LH surge</p>	C
<p>61. which of the following is false about functions of estrogen</p> <p>a) Increased osteoblastic activity. b) Decreased myometrial contractility. c) Change of vaginal epithelium into stratified squamous. d) Deposition of fat in the breast. e) Cervical ferning and spinnbarkeit phenomena.</p>	B

<p>62. One of these items is not considered a metabolic function of estrogen:</p> <ul style="list-style-type: none"> a) <i>It has a protein anabolic effect.</i> b) <i>It produces V.D.</i> c) <i>It increases osteoblastic activity.</i> d) <i>It increases cholesterol level in blood.</i> e) <i>In large doses it increases hepatic production of clotting factors.</i> 	D
<p>63. About the degenerative (menstrual phase) of the menstrual cycle, what is false?</p> <ul style="list-style-type: none"> a) <i>There is sudden decrease in estrogens and progesterone levels.</i> b) <i>If no fertilization occurs the corpus luteum degenerates.</i> c) <i>There is vasodilatation of tortuous spiral endometrial arteries.</i> d) <i>There is ischemia and necrosis of functional endometrial mucosal layer.</i> e) <i>It is affected by the thickness of endometrium and disease affecting the clotting mechanisms.</i> 	C
<p>64. Which of the following is a steroid hormone?</p> <ul style="list-style-type: none"> a) <i>thyroxine.</i> b) <i>adrenaline.</i> c) <i>melatonin.</i> d) <i>prolactin.</i> e) <i>estrogen.</i> 	E
<p>65. Which of the following hormones is responsible for follicular phase of menstrual cycle?</p> <ul style="list-style-type: none"> a) <i>Androgen</i> b) <i>Estrogen</i> c) <i>Oxytocin</i> d) <i>Progesterone</i> e) <i>Prolactin</i> 	B

<p>66. Which characterizes proliferative phase of the endometrium:</p> <p>a) Followed immediately by menstrual flow.</p> <p>b) Occurs under the effect of progesterone hormone.</p> <p>c) Rebuilding of the endometrial glands.</p> <p>d) The endometrial glands are tortuous and full of secretions.</p> <p>e) Timing: second half of the cycle</p>	<p>C</p>
<p>67. Birth control pills containing combinations of synthetic estrogen and progesterone compounds that are given for the first 21 days of the menstrual cycle are effective in preventing pregnancy. What is the explanation for their efficacy?</p> <p>a) Prevention of the preovulatory surge of LH secretion from the pituitary gland</p> <p>b) Prevention of development of the ovarian follicles</p> <p>c) Suppression of the function of the corpus luteum soon after it forms</p> <p>d) Prevention of normal development of the endometrium</p>	<p>A</p>
<p>68. At beginning of the ovulatory cycle, the hormone which stimulates ovarian follicle to mature is:</p> <p>a) FSH</p> <p>b) LH</p> <p>c) LTH</p> <p>d) Estrogen</p> <p>e) Progesterone</p>	<p>A</p>
<p>69. About ovulation all the following is true except:</p> <p>a) It normally occurs on the 13th -17th day of the uterine cycle</p> <p>b) It occurs as a result of the LH surge</p> <p>c) It is associated with a lower abdominal pain</p> <p>d) It is due to rupture of the corpus luteum</p> <p>e) It leads to a rise in the body temperature of about 0.3-0.5 ° C</p>	<p>D</p>

<p>70. As menstruation ends estrogen levels in the blood rise rapidly. What is the source of the estrogen?</p> <p>a) Corpus luteum b) Developing follicles c) Endometrium d) Stromal cells of the ovaries e) Anterior pituitary gland</p>	B
<p>71. Follicle Stimulating Hormone (FSH) is secreted from:</p> <p>a) Anterior pituitary gland. b) Posterior pituitary gland. c) Ovary. d) Corpus luteum.</p>	A
<p>72. Regarding Ovarian cycle, which is INCORRECT:</p> <p>a) During Luteal phase, Estrogen & Progesteron inhibit gonadotropins release. b) During Follicular phase, Estrogen is secreted from growing grafian follicle. c) LH has 2 peaks, before ovulation and midluteal. d) All of the above.</p>	C
<p>73. Corpus Luteum maintains pregnancy up to:</p> <p>a) 8 weeks. B) 12 weeks. c) 20 weeks. d) 28 weeks.</p>	B
<p>74. Which of the following statements regarding Luteal phase of menstrual cycle is true:</p> <p>a) LH level is high in this phase. b) Progesterone is high in this phase. c) HCG is responsible for this phase. d) It varies depending on duration of menstrual cycle.</p>	B

<p>75. Progesterone inhibits the secretion of :</p> <ul style="list-style-type: none"> a) LH. b) HCG. c) Relaxin. d) None of the above. 	<p>A</p>
<p>76. Progesterone:</p> <ul style="list-style-type: none"> a) Increases sensitivity of myometrium to oxytocin. b) Inhibits the growth of secretory alveoli. c) Causes myometrial depolarization (Contraction). d) Causes Na⁺ and water Excretion 	<p>D</p>
<p>77. Progesterone:</p> <ul style="list-style-type: none"> a) Decreases sensitivity of myometrium to oxytocin. b) Is secreted from anterior pituitary. c) Stimulates LH secretion. d) Stimulates ovulation. 	<p>A</p>

MCQ Physio Repro (pregnancy)

<p>1. The endometrium is transformed into decidua under the effect of which one of the followings?</p> <p>A. Estrogen. B. HCG. C. Progesterone. D. Relaxin. E. TSH.</p>	C
<p>2. During pregnancy, the rate of which one following is maximally secreted during the first trimester?</p> <p>a) Chorionic gonadotrophin. b) Estrogen. c) Hydrocortisone. d) Oxytocin. e) Pregnanediol.</p>	A
<p>3. After implantation into the uterus, nutrition of the blastocyst comes from:</p> <p>A. corpus luteum B. endometrial secretion C. glomerulosa cells D. placenta. E. tubal secretion.</p>	B
<p>4. The Placenta secretes all of the following hormones except:</p> <p>a. Human chorionic gonadotropin. b. Estrogen. c. Progesterone. d. Human chorionic Somatomammotropin. e. Glucagon.</p>	E

<p>5. About the effect of estrogen on the uterus one of these items is not true:</p> <ul style="list-style-type: none"> a) It increases the contractile proteins b) It increases number and sensitivity of oxytocin receptors c) It induces proliferation, growth and maturation of the endometrium d) It increases excitability and spontaneous contractility e) It decreases uterine blood flow 	E
<p>6. Concerning Human chorionic somatomammotropin, all is true except:</p> <ul style="list-style-type: none"> a) It has lipolytic action in mother. b) It has a protein anabolic effect. c) It has a lipid forming action in fetus. d) It has a lactogenic effect. e) It spares high glucose for fetus. 	C
<p>7. 32-year-old woman medical student develop nausea and vomiting after missing her period. she discovered that she is 4 week pregnant. which of the following is the source of estrogen and progesterone during first 2 months of pregnancy:</p> <ul style="list-style-type: none"> a) Placenta b) Posterior pituitary c) Corpus luteum d) Anterior pituitary e) Ovary 	C
<p>8. Zona pallucida is present around:</p> <ul style="list-style-type: none"> a. ovum. b. theca interna. c. membrana granulosa. d. corpus luteum. 	A

<p>9. Placenta secretes:</p> <ul style="list-style-type: none"> a) testosterone b) oxytocin c) LH d) human chorionic gonadotropin 	D
<p>10. When of the following not produced by placenta:</p> <ul style="list-style-type: none"> a) Human chorionic gonadotropin b) prolactin c) estrogen d) progesterone 	B
<p>11. During pregnancy, estrogen enlarge breast by affecting:</p> <ul style="list-style-type: none"> a) Duct b) Alveoli c) Nipple d) Zreola e) Fat 	A
<p>12. Fertilization of the human ovum normally:</p> <ul style="list-style-type: none"> a) Occurs in the uterus. b) occurs 3-5 days after ovulation. c) occurs 6-10 days before implantation. d) Leads to secretion of HCG within hours. e) Accompanied by polyspermy. 	C
<p>13. Human chorionic gonadotropin:</p> <ul style="list-style-type: none"> a) Is a steroid. b) Acts directly on the uterus to maintain the endometrium. c) Is formed in the anterior pituitary. d) Its blood level rises steadily throughout pregnancy. e) Can be detected in the urine 2 weeks after fertilization. 	E

<p>14. The placenta does not:</p> <ul style="list-style-type: none"> a) Transport glucose into the fetal blood. b) Convert glucose into glycogen. c) Store iron and calcium d) Actively transports O₂ into fetal blood. e) Allow certain proteins to pass from maternal to fetal blood. 	D
<p>15. The placenta secretes:</p> <ul style="list-style-type: none"> a) Estrogen. b) Prolactin. c) Inhibin. d) All of the above. e) None of the above. 	A
<p>16. Human chorionic somatomammotropin:</p> <ul style="list-style-type: none"> a) Is secreted by the anterior pituitary. b) Has a strong anabolic effect on protein. c) Causes contraction of myoepithelial cells in mammary glands. d) All of the above. e) None of the above. 	E
<p>17. Hormonal changes during pregnancy include:</p> <ul style="list-style-type: none"> a) increased secretion of aldosterone. b) increased secretion of parathormone. c) inhibited secretion of pituitary gonadotropins. d) all the above e) none of the above 	D
<p>18. Human chorionic gonadotropin is structurally and functionally similar to:</p> <ul style="list-style-type: none"> a) LH. b) FSH. c) GNRH. d) Estrogen. e) Progesterone. 	A

<p>19. Concerning corpus luteum in early pregnancy:</p> <ul style="list-style-type: none"> a) Is maintained under control of human chorionic gonadotropin. b) Is maintained under control of LH. c) It secretes estrogen and oxytocin. d) It secretes estrogen only. e) Is maintained under control of FSH. 	A
<p>20. Fertilization of the ovum is confirmed by:</p> <ul style="list-style-type: none"> a) Increased frequency of urination. b) Swelling of the breast. c) Presence of HCG in plasma. d) Rise in the basal body temperature. e) Occurrence of next menstruation on date. 	C
<p>21. Estrogen hormone:</p> <ul style="list-style-type: none"> a) Is secreted from anterior pituitary. b) Stimulates milk ejection from the breast. c) Is a catabolic hormone. d) Stimulates growth of pubic and axillary hair. e) Stimulates duct formation in breast. 	E
<p>22. As regard action of estrogen action which of the following is false:</p> <ul style="list-style-type: none"> a) Increased osteoblastic activity. b) Decreased myometrial contractility. c) Change of vaginal epithelium into stratified squamous. d) Deposition of fat in the breast. e) Cervical ferning and spinbarkeit phenomena. 	B
<p>23. Progesterone:</p> <ul style="list-style-type: none"> a) Decreases sensitivity of myometrium to oxytocin. b) Is not essential for implantation of the fertilized ovum. c) Is secreted from the anterior pituitary gland. 	A

<p>d) <i>Stimulates ovulation.</i></p> <p>e) <i>Stimulates LH secretion.</i></p>	
<p>24. Which of the following hormones does the placenta does not secrete:</p> <p>a) <i>Estrogen.</i> b) <i>Progesterone.</i></p> <p>c) <i>HCG.</i> d) <i>HCS.</i> e) <i>Inhibin.</i></p>	E
<p>25. Maintenance of pregnancy requires all the following except:</p> <p>a) <i>Secretion of large amount of LH</i></p> <p>b) <i>Secretion of the human chorionic gonadotropins</i></p> <p>c) <i>Development of the corpus luteum of pregnancy</i></p> <p>d) <i>Formation of the placenta</i></p>	A
<p>26. Sperm capacitation:</p> <p>a) <i>Occurs when the sperms are embedded in the sertoli cells</i></p> <p>b) <i>Is accompanied by a decreased activity of the sperms.</i></p> <p>c) <i>Is followed by the acrosomal reaction.</i></p> <p>d) <i>Includes disappearance of the sperm's head.</i></p> <p>e) <i>Requires a few minutes in the female genital tract.</i></p>	C
<p>27. Fertilization of the human ovum:</p> <p>a) <i>Normally occurs in the uterine cavity.</i></p> <p>b) <i>Can be performed by more than one sperm</i></p> <p>c) <i>May occur up to 5 days after ovulation.</i></p> <p>d) <i>Occurs 3-4 days after implantation.</i></p> <p>e) <i>Is facilitated by a trypsin like protease released from the sperm's head</i></p>	E
<p>28. The human chorionic gonadotropin hormone (HCG):</p> <p>a) <i>Is a steroid hormone secreted by the myometrium.</i></p> <p>b) <i>Acts on the uterus to maintain the integrity of the endometrium.</i></p> <p>c) <i>Detection in the urine of a woman is evidence of pregnancy.</i></p> <p>d) <i>Production is greatest in the last 3 months of pregnancy</i></p> <p>e) <i>Causes marked growth of the graafian follicles</i></p>	C

<p>29. Where does fertilization normally take place?</p> <ul style="list-style-type: none"> a) Uterus b) Cervix c) Ovary d) Ampulla of the fallopian tubes 	D
<p>30. Concerning the placenta, all the following true except:</p> <ul style="list-style-type: none"> a) It transports glucose into the fetal blood by facilitated diffusion. b) It transports protein molecules into the fetal blood by active transport c) It secretes a hormone that relaxes the pelvic joints d) It exerts important protective and endocrine functions e) The maternal and fetal blood mix together in its tissue 	E
<p>31. Which of the following is produced by the trophoblast cells during the first weeks of pregnancy?</p> <ul style="list-style-type: none"> a) Estrogen b) Luteinizing hormone c) Oxytocin d) Human chorionic gonadotropin e) None of the above 	D
<p>32. The placenta does which of the following?</p> <ul style="list-style-type: none"> a) Develops from the granulosa cells b) Secretes luteinizing hormone c) Secretes estrogen d) Allows direct mixing of maternal and fetal blood 	C
<p>33. Estrogen action includes all the following EXCEPT:</p> <ul style="list-style-type: none"> a) Increased osteoblastic activity. b) Decreased myometrial contractility. c) Development of ducts of mammary gland. d) Increased fat deposition in buttocks and thighs. 	B

<p>34. During pregnancy, the placenta is NOT the primary source of which hormone in maternal blood :</p> <p>a) Estrogen. b) Prolactin. c) HCG. d) Progesterone</p>	B
<p>35. What is the result of capacitation on the acrosome of sperm?</p> <p>A) It becomes more rigid. B) It releases enzymes necessary for penetrating the egg. C) It is completely removed. D) It remains unchanged.</p>	B
<p>36. What is capacitation?</p> <p>A) The process of sperm production B) The maturation of sperm in the epididymis C) The physiological changes that sperm undergo in the female reproductive tract to gain the ability to fertilize an egg D) The transport of sperm through the male reproductive tract</p>	C
<p>37. Which structure forms around the egg to prevent additional sperm from entering after fertilization?</p> <p>A) Zona pellucida B) Follicular fluid C) Amniotic sac D) Blastocyst</p>	A
<p>38. Which part of the blastocyst is involved in the implantation process?</p> <p>A) ICM (Inner Cell Mass) B) Trophoblast C) Blastocoel D) Zona pellucida</p>	B
<p>39. Which hormone's action is similar to that of human chorionic somatomammotropin (hCS)?</p> <p>A) Insulin B) Prolactin C) Estrogen D) Progesterone</p>	B

Written (labor)

1. Give a short account on mechanism of labor?
2. Mention role of estrogen and progesterone on breast development ?
3. Mention role and control of oxytocin secretion ?
4. Mention positive feedback mechanism of labor?
5. Discuss suckling reflex?

MCQ

<p>1. The initiation of lactation after labor is caused by:</p> <ul style="list-style-type: none">a) An increased secretion of thyroxine.b) An increased secretion of FSH.c) Release of oxytocin from the neurohypophysis.d) Excitation of the zona reticularis of the adrenal cortex.e) The sudden drop in the blood estrogen level.	E
<p>2. Which of the following is the basic function of Oxytocin?</p> <ul style="list-style-type: none">a) Stimulate contraction of smooth muscle during birth and breast feedingb) Stimulate restriction of blood flow to the brain during sleepc) Inhibit the production of sweat during extreme temperaturesd) Inhibit the production of salivae) Stimulates milk production	A
<p>3. Which of the following could inhibit the initiation of labor?</p> <ul style="list-style-type: none">a) Administration of an antagonist of the actions of progesteroneb) Administration of LHc) Administration of an antagonist of PGE2 effectsd) Mechanically dilating and stimulating the cervixe) Administration of oxytocin	C

<p>4. Which of the following hormones stimulates the mammary glands to produce milk?</p> <ul style="list-style-type: none"> a) Luteinizing hormone b) Growth hormone c) Thyroid-stimulating hormone. d) Prolactin e) Antidiuretic hormone 	D
<p>5. Increasing oxytocin level in labor, may be due to:</p> <ul style="list-style-type: none"> a. uterine relaxation b. cervical stretch c. increased progesterone level d. insertion of sperms in vagina e. increased estrogen level 	B
<p>6. Oxytocin is primarily used for which one of the following situations?</p> <ul style="list-style-type: none"> A. Control antepartum hemorrhage B. Decreasing breast milk production C. Increasing sperm count D. Inducing labor contractions E. Treating hypotension 	D
<p>7. Hormonal changes in initiation of labor:</p> <ul style="list-style-type: none"> a. increasing progesterone hormone b. increasing oxytocin secretion c. increasing relaxin release d. increasing oxytocin receptor e. increasing relaxin receptor 	D

<p>8. In the mammary glands, which of the following is not correct?</p> <p>a) Milk formation is stimulated by estrogen and progesterone.</p> <p>b) Milk formation can be depressed by hypothalamic activity.</p> <p>c) Maintenance of lactation depends on suckling.</p> <p>d) Lactation ceases if the anterior pituitary gland is destroyed.</p> <p>e) Milk ejection ceases if the posterior pituitary gland is destroyed.</p>	A
<p>9. Milk ejection is stimulated by:</p> <p>a) Oxytocin</p> <p>b) Estrogen and progesterone.</p> <p>c) Prolactin.</p> <p>d) T3 and T4</p> <p>e) Insulin.</p>	A
<p>10. The following hormone has no effect on the breast development and milk formation:</p> <p>a) Oxytocin</p> <p>b) Ovarian steroids.</p> <p>c) prolactin.</p> <p>d) Thyroid hormones.</p> <p>e) Insulin.</p>	A
<p>11. Which of the following inhibits lactation:</p> <p>a) Prolactin.</p> <p>b) Human chorionic somatomammotropin.</p> <p>c) Estrogen.</p> <p>d) Oxytocin.</p> <p>e) Relaxin.</p>	C

<p>12. Which of the following hormones can inhibit ovulation and down regulate GnRH release when present in high concentration?</p> <p>a) FSH b) Prolactin. c) LH. d) Estrogen. e) Oxytocin.</p>	D
<p>13. During pregnancy lactating action of prolactin is inhibited by:</p> <p>a) Estrogen. b) Progesterone. c) Epinephrine. d) HCG. e) HCS.</p>	A
<p>14. In labor:</p> <p>a) Estrogen increases the level of plasma oxytocin. b) Estrogen decreased and progesterone increased. c) Estrogen decreases the myometrial gap junction. d) Estrogen increases the uterine sensitivity to oxytocin. e) Estrogen blocks the lactating effect of prolactin.</p>	D
<p>15. Pregnancy:</p> <p>a) is about 270 days from fertilization. b) is associated with increased secretion of pituitary gonadotropins. c) is associated with increased secretion of prolactin from the placenta. d) all of the above e) non of the above</p>	A

<p>16. Hormonal changes during labor include:</p> <ul style="list-style-type: none"> a) increased estrogen / progesterone. b) increased secretion of relaxin. c) decreased secretion of prostaglandins. d) all of the above 	A
<p>17. All the following factors contribute to normal parturition except:</p> <ul style="list-style-type: none"> a) Decreased placental progesterone secretion b) Presence of normally functioning ovaries c) Secretion of oxytocin by a+ ve feedback mechanism d) Uterine distension and increased prostaglandin formation in the deciduas. e) Presence of estrogens. 	B
<p>18. In girls, enlargement of the breasts at puberty is stimulated by:</p> <ul style="list-style-type: none"> a) FSH b) Prolactin. c) Estrogen d) Progesterone e) Estrogen and progesterone in combination 	E
<p>19. Milk formation by the mammary glands:</p> <ul style="list-style-type: none"> a) Is stimulated by estrogens and progesterone b) Is inhibited by the suckling reflex c) Is stimulated by both TRH and human chorionic somatomammotropin d) Is not affected by hypophysectomy e) Ceases if the posterior pituitary gland is destroyed. 	C
<p>20. Prolactin secretion is inhibited by:</p> <ul style="list-style-type: none"> a) The thyrotropin releasing hormone (TRH). b) Somatostatin and oxytocin. c) The drugs that increase dopamine formation e.g L-dopa. d) A decreased blood prolactin level e) All of the above 	C

<p>21. Why is milk produced only after delivery, not before?</p> <p>a) Levels of luteinizing hormone and follicle-stimulating hormone are too low during pregnancy to support milk production</p> <p>b) High levels of progesterone and estrogen during pregnancy suppress milk production</p> <p>c) The alveolar cells of the breast do not reach maturity until after delivery</p> <p>d) High levels of oxytocin are required for milk production to begin, and oxytocin is not secreted until the baby stimulates the nipple</p>	B
<p>22. In order for milk to flow from the nipple off the mother into mouth of the nursing infant, which of following must occur?</p> <p>a) Myoepithelial cells must relax</p> <p>b) Prolactin levels must fall</p> <p>c) Oxytocin secretion from the posterior pituitary must take place</p> <p>d) The baby's mouth must develop a strong negative pressure over nipple</p> <p>e) all of above</p>	C
<p>23. The posterior pituitary gland secretes which of the following?</p> <p>a) Prolactin b) Oxytocin</p> <p>b) FSH d) LH</p> <p>e) ACTH</p>	B
<p>24. If a woman hears her baby cry, she may experience milk ejection from the nipples even before the baby is placed to What is the explanation for this?</p> <p>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</p> <p>b) The sound of the hungry baby's cry causes a reflex relaxation of the myoepithelial cells, allowing the milk to flow</p> <p>c) The sound of the hungry baby's cry elicits sympathetic nervous system discharge that causes contraction of the myoepithelial cells</p>	A

<p>25. During pregnancy, estrogen enlarges the breast by affecting:</p> <ul style="list-style-type: none"> a) Ducts b) Alveoli c) Nipple d) Areola e) Fat 	A
<p>26. During pregnancy, Progesterone and prolactin enlarges the breast by affecting:</p> <ul style="list-style-type: none"> a) Ducts b) Alveoli c) Nipple d) Areola e) Fat 	B
<p>27. A 30-year-old woman is breast-feeding her infant. During suckling, which of the following hormonal responses is expected?</p> <ul style="list-style-type: none"> A) Increased secretion of antidiuretic hormone (ADH) from the supraoptic nuclei B) Increased secretion of ADH from the paraventricular nuclei C) Increased secretion of oxytocin from the paraventricular nuclei D) Decreased secretion of neurophysin E) Increased plasma levels of both oxytocin and ADH 	C
<p>28. Suppression of lactation during pregnancy is caused by:</p> <ul style="list-style-type: none"> a. low levels of plasma prolactin that can stimulate milk synthesis b. high levels of estrogen and progesterone c. the mammary tissue is not prepared for action of prolactin d. high level of inhibin 	B

<p>29. Which one of the following statements about prolactin is correct?</p> <p>a. Prolactin initiates ovulation</p> <p>b. Prolactin causes milk ejection during suckling</p> <p>c. Prolactin inhibits the growth of breast tissue</p> <p>d. Prolactin secretion is tonically inhibited by the hypothalamus</p>	D
<p>30. Suckling reflex is an example of:</p> <p>a. Short loop positive feedback.</p> <p>b. Ultra-short loop feedback.</p> <p>c. Short loop negative feedback.</p> <p>d. Long loop negative feedback.</p> <p>e. Long loop positive feedback.</p>	E
<p>31. LH surge before ovulation is an example of:</p> <p>a) Long loop positive feedback.</p> <p>b) Long loop negative feedback.</p> <p>c) Short loop positive feedback.</p> <p>d) Short loop negative feedback.</p> <p>e) Ultra short loop feedback.</p>	A
<p>32. Excessive secretion of oxytocin during labor is an example of:</p> <p>a) Long loop negative feedback.</p> <p>b) Short loop positive feedback.</p> <p>c) Long loop positive feedback.</p> <p>d) Short loop negative feedback.</p> <p>e) Ultra short loop feedback.</p>	C
<p>33. Which of the following hormones causes milk letting effect?</p> <p>a. Growth H. b. Oxytocin H.</p> <p>c. Prolactin H. d. Luteinizing H (LH).</p> <p>e. Follicle stimulating hormone (FSH).</p>	B