## Multichoice Questions

| 1.  | In conn's disease, there is an excess of:   |      | Dr. Vinay Gupta   |
|-----|---|------|---|
| 1.  | a) Adrenaline b) Aldosterone  | 14   | Iodine is primarily important in the biochemical                                  |
|     | c) Cortisol d) Noradrenalione   | 1 1. | synthesis of:   |
| 2.  | Which of the following hormones is released from the  |      | a) ACTH b) Thyroxine  |
|     | posterior pituitary?  |      | c) Adrenaline d) Calcitonin   |
|     | a) ACTH b) Antidiuretic hormone   | 15.  | Function of ADH is:   |
|     | c) Growth hormone d) Luetinizing hormone  |      | a) Water reabsorption b) Water excretion  |
| 3.  | In children, hypothyroidism causes  |      | c) Na+absorption d) K+secretion   |
|     | a) Acromegaly b) Cretinism  | 16.  | Changes in biological activity occuring daily are                                 |
|     | c) Gigantism d) Myxoedema   |      | referred as rhythm:   |
| 4.  | Which of the following associated with a low  |      | a) Circadian b) Circa triginatan  |
|     | concentration of ionized calcium in the serum?  |      | c) Circa sestin d) Circannual   |
|     | a) Hypothyroidism   | 17.  | Calcitonin is released by:  |
|     | b) Osteogenesis imperfecta  |      | a) Parafollicular cells of thyroid  |
|     | c) Paget's disease of the bone  |      | b) Chief cells of thyroid   |
| _   | d) Tetany   |      | c) Granular cells of adrenal gland  |
| 5.  | Which hormone is released when serum calcium  |      | d) Stratum fasciculata of adrenal gland   |
|     | decrease:   | 18.  | Bone metabolism is controlled by:   |
|     | a) Parathormone b) Calcitonin   |      | a) Vit-D & Calcium b) Parathormone  |
| _   | c) Thyroxine d) Adrenaline  | 10   | c) Calcitonin d) All of the above   |
| 6.  | A phaeochromocytoma is a tumour of the:   | 19.  | Which of the following hormones does not affect                                   |
|     | <ul><li>a) Adrenal cortex</li><li>b) Parathyroids</li><li>c) Pituitary</li><li>d) None of the above</li></ul> |      | growth?   |
| 7.  | c) Pituitary d) None of the above  Due to fear which of the following hormones                                |      | a) Oxytocin b) Somatotropins  |
| /.  | increases rapidly:  | 20   | c) Thyroid hormone d) Estrogen<br>Which of the following results due to excessive |
|     | a) Growth hormones b) Epinephrine   | 20.  | parathormone secretion:   |
|     | c) Corticosteroid d) Thyroid hormone  |      | a) Increased excretion of phosphates  |
| 8.  | Aldosterone   |      | b) Increased serum calcium  |
| ٥.  | a) Increases reabsorption of sodium   |      | c) Decrease excretion of calcium  |
|     | b) Increases excretion of potassium   |      | d) Increase excretion of calcium  |
|     | c) Increases retention of sodium  | 21.  | Which of the following hormones exerts the least                                  |
|     | d) Both 'A' and 'B'   |      | effect on calcium metabolism of bone tissue?                                      |
| 9.  | Deficiency of cortisol causes:  |      | a) Androgen b) Estrogen   |
|     | a) Cushing syndrome b) Graves disease   |      | c) Nor epinephrine d) Thyroid hormone   |
|     | c) Addison disease d) Acromegaly  | 22.  | Hormones, which stimulate spermatogenesis are:                                    |
| 10. | Vasopressin is synthesized in the:  |      | a) Insulin and glucagon   |
|     | a) Anterior pituitary   |      | b) Thyroxine and parathormone   |
|     | b) Hypothalamus   |      | c) A.D.H. and Oxytocin  |
|     | c) Juxtaglomerular apparatus  |      | d) Testosterone and F.S.H.  |
|     | d) Vasomotor centre   | 23.  | Which of the following anterior pituitary hormones is                             |
| 11. | A child with stunted growth with a stuffedbelly, and  |      | primarily under inhibitory control of hypothalamus.                               |
|     | short stature with mental retardation is suffering from   |      | a) TSH b) GRH   |
|     | the deficiency of which of the following:   | 2.4  | c) Somatostatin d) Prolactin  |
|     | a) Thyroxine b) Growth hormone c) Rickets d) Parathyroid  | 24.  | Aldosterone production is controlled by:  |
| 12  | c) Rickets d) Parathyroid Trousseau's sign and chovstek's signs are positive in:                              |      | a) Anterior pituitary gland   |
| 12, | a) Hyperparathyroidism  |      | b) Posterior pituitary gland  |
|     | b) Hypothyroidism   |      | <ul><li>c) Hypothalamus</li><li>d) Adrenal gland</li></ul>                        |
|     | c) Hypoparathyroidism   | 25   | Low calcium level will cause:   |
|     | d) Hyperthyroidism  | 23.  | a) Hyper excitability of wrist muiscle  |
| 13. | Which hormone, together with the catecholamines,  |      | b) Weak heart action  |
|     | enhances the tone of vascular smooth musle and  |      | c) Tetanus  |
|     | assists in elevating blood pressure?  |      | d) All of the above   |
|     | a) Parathyroid hormone  | 26.  | Hypercalcemia results from the excess production of:                              |
|     | b) Glucagon   |      | a) Parathormone b) Calcitonin   |
|     | c) Thyroxine d) Cortisol  |      | c) Both of the above d) None of the above   |

- 27. Edocrine disorder is the primary cause of:
  - Acromegaly
- b) Albright's syndrome
- Paget's disease c)
- d) Fibrous dysplasia
- 28. The decreased phosphate levels seen in hyper parathyroidism is due to:
  - Decreased intestinal phosphate absorption a)
  - Increased calcium excretion b)
  - Decreased renal phosphate absorption c)
  - Increased loss of phosphate in urine d)
- 29. Enzymes, which play an important role in calcification, are:
  - Enolase and Calcitonin a)
  - Alkaline phosphatase and catalase b)
  - Alkaline phosphatase and pyrophophatase c)
  - Pyrophosphatase and carbonic anhydrase d)
- 30. The primary effect of calcitonin is;
  - Bone deposition b) Bone resorption a)
  - Increases intestinal absorption of calcium c)
  - Decreases intestinal absorption of calcium
- 31. Adrenal gland has two parts; cortex and meduall. Which of the following is correct.
  - Cortex is under the control of ACTH a)
  - Both cortex and medulla are under the control of b) autonomic nervous system
  - c) Cortex is exocrine and medulla is endocrine
  - d) All of the above.
- 32. Adrenaline used for controlling of bleeding during surgery may result in
  - a) Syncope
  - b) Cardiac arrhythmias
  - Drastic fall in blood pressure c)
  - Production of parathyroid hormone and bone resorption.
- 34. The blood glucose level in diabetes mellitus is decreased by removal of the:
  - Thyroid
- b) Parathyroids
- c) Anterior pituitary d) Posterior pituitary
- 35. Excess of cortisol causes:
  - Conn's syndrome b) Cushing's syndrome a)
- d) Diabetes insipidus c) Acromegaly
- 36. Posterior pituitary insufficiency leads to:
  - Diabetes mellitus b) Diabetes insipidus a) Dwarfism d) Cretinism c)
- 37. Glucocorticoids have all the following actions except:
  - a) Increase in blood glucose level
  - b) Increase in protein catabolism
  - c) Anti-insulin action in peripheral tissues
  - Decrease in glucose uptake by the heart d)
- Which of the following is called hunger hormone
  - Epinephrine a)
- b) Glucagon
- Pituitary c)
- d) Thyroxine
- 39. Negative BMR is observed with:
  - Pituitary disturbance a)
  - Thyroid disturbance b)
  - Parathyroid c)
  - All of the above
- 40. Which of the following hormones increases the sensitivity of heart to epinephrine:
  - Parathyroid
- b) Insulin

- Thyroid
- d) Glucagon
- 41. Thyroxine causes all the following except:
  - Decreased cell metabolism a)
  - Increased oxygen consumption h)
  - Increased pulmonary ventilation c)
  - d) Increased basal metabolism
- 42. The receptors for parathyroid hormone are present in:
  - Osteoblasts a)
- b) Osteoclasts
- Periosteum c)
- Cartilage
- 43. Glucagon is secreted by:
  - Alpha cells of pancreas a)
  - Beta cells of pancreas b)
  - Gamma cells of pancreas c)
  - None of the above d)
- 44. Parathytoid hormone acts in the body to:
  - Decrease calcium absorption from the intestinal a)
  - Accelerates the removal of the calcium and b) phosphate from the skeleton but not the teeth.
  - Stimulates liver gluconeogenesis c)
  - Decreases excretion of sodium and chloride d)
- 45. Endocrine glands that are not influenced by the pituitary gland include the:
  - a) Thyroid gland, testes, and adrenal medulla
  - b) Adrenal medulla, parathyroids, and the islets of Langerhans
  - Adrenal cortex, parathyroids and ovaries c)
  - Pancreas, adrenal medulla and thyroid gland d)
- 46. The hormone, which stimulates uterus contraction and lets down milk, is:
  - Progesterone
- b) Prolactin
- Prostaglandin c)
- d) Oxytocin
- 47. The hormone having the maximum effect on granulation wound healing is:
  - Thyroxine
- b) Cortisone
- c) Parathormone
- d) Epinephrine
- 48. The primary site of action of antidiuretic hormone is on the:
  - Distal tubules and collecting ducts in the kidney a)
  - Afferent arterioles of the glomeruli b)
  - Thirst center in the hypothalamus c)
  - d) Osmoreceptors in the hypothalamus
- 49. Which of these following is not an effect of insulin?
  - a) Decreased gluconeogenesis
  - Increased glycogenolysis b)
  - Increased transport of glucose into cells c)
  - Induction of lipoprotein lipase
- 50. Features of hypothyroidism does not include:
  - Obesity a)
  - b) Hypertension
  - High TSH levels
  - Increased risk of infections
- 51. Glucagon is secreted by:
  - Alpha cells of pancreas Liver lobules
  - b) Spleen c)
  - Delta cells of pancreas d)
- 52. Hormone released during increased stress is:
  - Cortisol a)
- b) Thyroxine





- c) Growth hormone d) Somatostatin
- 53. Acromegaly is a disorder of:
  - a) Excess growth hormone secretion
  - b) Excess thyroxine secretion
  - c) Excess ACTH secretion
  - d) Excess FSH secretion
- 54. Which of the following statements about the action of the somatomedin is true?
  - a) They inhibit protein synthesis
  - b) They antagonize the effect of insulin
  - c) They promote growth of bone and cartilage
  - d) They mediate the local effects of somatostatin
- 55. Steroid hormones are believed to enter target cells via:
  - a) Facilitated diffusion
  - b) Carrier-mediated endocytosis
  - c) Cholesterol lined pores in the plasma membrane
  - d) Simple diffusion
- 56. The supraoptic nucleus of the hypothalamus is believed to control secretion of which of the following hormones?
  - a) Antidiuretic hormone
  - b) Oxytocin
  - c) Growth hormone
  - d) Adreno corticotrophic hormone
- 57. Epinephrine is most closely related in structure to:
  - a) Niacin
- b) Tyrosine
- c) Methionine d) Glycerol
- 58. Glucocorticoids decrease inflammatory reaction by reducing:
  - a) Activity of histamine
  - b) Release of histamine
  - c) Fibroblastic activity
  - d) Neutrophils
- 59. Contraceptive action of combined pill is mainly due to:
  - a) Decrease in tubal motility
  - b) Prevents the fertlization
  - c) Prevents the implantation of fertilized egg
  - d) Inhibits ovulation
- 60. The following hormones increase the blood glucose level except:
  - a) Thyroxine
- b) Parathormone
- c) Growth Hormone d) Epinephrine
- 61. All the following hormones are secreted by adrenal cortex except:
  - a) Estriol
- b) Cortisol
- c) Corticosterone
- d) Aldosterone
- 62. The reabsorption of sodium chloride in kidneys is controlled by the hormones:
  - a) Adrenaline
  - b) Aldosterone
  - c) A.D.H.and vasopressin
  - d) All of the above
- 63. Progesterone production in the ovary is primarily by:
  - a) Stroma
- b) Corpora albicans
- c) Corpora lutea d)
- d) Mature follicles
- 64. Ovulation is associated with sudden rise in
  - a) Prolactin
- b) Testosterone
- c) L.H.
- d) Oxytocin
- 65. In Thyrotoxicosis, there is:

- a) Decrease in calcium excretion
- b) Increase in serum proteins which bind thyroxine
- c) Potentiation of catecholamine action
- d) Increase in calcium excretion
- 66. Not true about T3 and T4 is:
  - a) T3 more potent than T4
  - b) T4 binds to prealbumin
  - c) Absorption of T4 is more than T3
  - d) Concentration of T4 is more than T3
- 67. The catecholamines secreted by adrenal medulla:
  - a) Increases the blood glucose level by favoring glycogenolysis in blood and muscle cells.
  - b) Decrease the level of free fatty acids and ketone bodies.
  - c) Increases the splanchnic blood flow
  - d) Are under the control of parasympathetic nerves.
- 68. Menopausal hormonal relations are:
  - a) LH/FSH increase
  - b) Gonadotropins increase, estrogens decrease
  - c) Estrogens and gonadotrpins decrease
  - d) Both increase
- 69. Regarding Myxoedema the following are true except:
  - a) Swollen, oedematous look of the face
  - b) Impotency, amenorrhoea
  - c) B.M.R. increased by 30%-45%
  - d) Dullness, loss of memory
- 70. Reverse T3 is:
  - a) Synthetic derivative
  - b) Isomerisation product of T3 and active
  - c) Isomerisation product of T3 and inactive
  - d) Reverse of T3
- 71. Human choronic gonadotrophin hormone (HCG):
  - a) Acts on the uterus to maintain integrity of endometrium in early pregnancy.
  - b) Production is greatest in the last three months of pregnancy
  - c) Can be identified in the urine of pregnant women by immunolgical technique
  - d) Is a steroid hormone.
- 72. FSH is secsreted by:
  - a) Chromophobes b) Basophils
  - c) Acidophils
- d) Theca intern cells
- 73. Which is false regarding insulin:
  - a) Secreted by Beta cells
  - b) Glycopeptide
  - c) Causes lipogenesis
  - d) Promotes glycogenesis
- 74. In the adrenal gland, androgens are produced by the cells in the:
  - a) Zona glomerulosa b) Zona reticularis
  - c) Zona fasciculata d) Medulla
    - u) ivicuuita
- 75. All are seen in cushing's syndrome except:a) Truncal obesity b) Hypertensiion
  - c) Hypoglycemia d) Poor wound healing
- 76. Cortisol levels are maximum during:
  - a) Sleep
- b) Early morning
- c) Evening
- d) Have no change
- 77. Cortisol:
  - a) Secsretion increases following injury

Favours protein synthesis Tumour necrosis factor b) Enhances antigen-antibody reactions 91. which one of the following is a precursor of both c) Tends to lower blood pressure gonadal and adrenocortical hormones? d) 78. Oxytocin causes all accept: Progesterone b) Cortisol a) Lactogenesis Testosterone d) Corticosterone Milk ejection 92. Following are the features of cretinism, except b) Contraction of uterine muscle Pot-belly c) a) Myepithelial cell contraction Idiotic look d) b) 79. Not a glycoprotein: Normal intelligence c) **FSH** Stunted growth b) LH d) a) **TSH** d) GH 93. Parathyroid hormone increases the blood level of c) 80. Following are local hormones except: Copper b) Calcium a) d) Sodium Insulin b) Heparin Iron c) a) Bradykinin d) Acetylcholine 94. Paneth cells secrete which of the following? c) Antibacterial substance 81. Insulin facilitates glucose uptake in: a) Kidney tubules b) Red blood cells b) Lipase Maltase c) Brain d) Skeletal muscle c) 82. Noradrenaline is differentiated from adrenaline by Secretin d) increasing: 95. Glucose tolerance test is usually done to assess: Heart rate Acute Pancreatitis a) a) Cardiac output b) Carcinoma of Head of Pancreas b) Peripheral resistance Acinar Function of the Pancreas c) c) d) All of the above d) **Endocrine Dysfuncres** 83. Hypercalcemia associated with malignancy is most 96. Tetany is characterised by: often mediated by: a) Hypotonicity of muscles Parathyroid hormone (PTH) Hypertonicity of muscles b) Parathyroid hormone related protein (PTHrP) Increased serum calcium concentration b) c) Interleukin-6 (IL-6) d) None of above c) 97. Which of the following hormiones act via cAMP? Calcitonin d) b) Parathormone 84. A child is below the third percentile for height Growth Insulin a) Vasopressin d) Adrenalin velocity is normal, but chronologic age is more than c) 98. The effect which is seen due to decrease in serum skeletal age. The most likely diagnosis is: Constitutional delay in growth calcium concentration is a) b) Genetic short stature Relaxation of muscle a) Primordial dwarfism b) Excitability of the muscle c) d) Hypopituitarism c) Increase the renal absorption 85. Hyjpothyroidism should be treated with daily d) Depression of Nervous system administration of which of the following thyroid hormone preparations? a) Thyroid extract b) Thyroglobulin (B) 86 (B) 76 (g) 96 (a) \$6 (A) 49 c) Thyroxine (T4) d) Triodothyronine (T3) (a) £6 (2) 26 (A) 16 86. Blood coagulation is impaired in (B) 06 (**a**) 68  $(\mathbf{Q})88$ (A) 78(A) 88 87(C)a) Tetany b) Hyperparathyrodism (D) **28** (A) 48 (a) £8 (**Q**) 18 (A) 08 (A) 87 (a) 6L (A77(**B**) 9L c) Rickets d) None 72 (B) (C) ST 74 (B) 73 (B) (D) I7 87. The hormone which exerts hypoglycemic effect is: (B) 99 70(C) $(\mathfrak{I})$ (B) 89 (A) 70Insulin b) Glucagon (2) (C) (C) (D) £9 (g) 79 (A) 10 Growth hormone d) Epinephrine e0 (B) (a) 6S 28 (B) (B) LS (A) 9S 88. All of the following hormones have cell surface (a) \$\$ (A) E2 24(C) (A) 22 (A) I & receptors except: (a) 0S (B) 6t (A) 84 (B) \tau (a)97 Adrenalin b) Growth Hormone a) d) Thyroxine 42 (B) 44 (B) (A) £4 47 (B) (A) I4 Insulin

89. Which of the following organs is not involved in

90. Osteoclasts are inhibited/modified and regulated by:

1,25-dihydroxycholecalciferol

b) Skin

d) Lungs

calcium homeostasis?

Kidneys

Intestines

Calcitonin

Parathyroid hormone

a)

a)

b)

40 (C)

35 (B)

(A) 0£

72 (D)

70 (B)

(A) & I

10(B)

 $(A) \delta$ 

(a) e£

34(C)

 $(\mathfrak{I})$  67

74 (A)

(A) 6I

14(B)

 $(\mathfrak{I})_{6}$ 

38 (B)

(a) EE

(2)82

(a) £2

(a)81

(a) £1

 $(\mathbf{Q})$  8

3 (B)

**VNSMEKS** 

37 (D)

32 (B)

(A) 72

22 (D)

(A) 7 I

12(C)

 $(\mathbf{B})$ 

7 (B)

36 (B)

(A) IE

(A) 32

(3)17

(A) 9I

(A) II

 $(\mathbf{q})$ 9

1 (B)