

1) Cell membrane

a. formed entirely of protein molecules	b. are impermeable to fat soluble substances
c. in some tissues permit transport of glucose at a greater rate in the presence of insulin	d. are not changed through out the life

Ans. c

2) The substance that contributes maximally to the osmolality inside the cell is

a. protein	b. phosphate
c. urea	d. potassium

Ans. c

3) Proteins that are secreted by cells are generally

a. not synthesized on ribosomes that are bound to endoplasmic reticulum	b. are synthesized in the mitochondria
c. packed in the golgi apparatus	d. moves across the cell membrane by endocytosis

Ans. c

4) The unique feature in mitochondria is

a. myosin	b. actin
c. DNA	d. prothrombin

Ans. c

5) The resting membrane potential of a cell

a. is dependant on the permeability of the cell membrane to K^+ being greater to Na^+	b. falls to zero if Na^+/K^+ ATPase in membrane is inhibited
c. is equal to the equilibrium potential for K^+	d. is equal to the equilibrium potential of Na^+

Ans. a

6) The somatic cells containing the full complement of 46 chromosomes in their nuclei, containing all the genes necessary for carrying out the cell activities are called

a. autosomes	b. haploid cells
c. allosomes	d. diploid cells

Ans. d

7) In some cases DM is due to

a. excessive receptors	b. antibodies against receptors
c. deficiency of receptors for extra cellular proteins	d. deficiency of nucleotide regulatory G proteins

Ans. b

8) Many substances are removed from the cell to outside by

a. pinocytosis	b. chemotaxis
c. phagocytosis	c. exocytosis

Ans. d

9) Excessive formation of a substance/ secretion in the body is controlled in order to maintain homeostasis by

a. +ve feedback mechanism	b. -ve feedback mechanism
c. osmosis	d. haemodynamics

Ans. b

10) An action potential in a nerve

a. is terminated by influx of Na ⁺ excessive receptors	b. is terminated by efflux of K ⁺
c. is initiated by efflux of Na ⁺	d. is initiated by influx of K ⁺

Ans. b

11)" Milieu interior " is a term introduced by

a. Laplace	b. Boyle
c. Claud Bernard	d. Lansteiner

Ans. c

12) An example of co-transport is

a. Na ⁺ -K ⁺ pump	b. Ca ⁺⁺ pump
c. Na ⁺ - H ⁺ pump	d. Na ⁺ glucose transport

Ans.d

Nerve Muscle

1) Which of the following has slowest conduction

a. A alpha	b. A gamma
c. B fibres	d. C fibres

Ans. d

2) A man falls into deep sleep with one arm under his head. After awakening the arm is paralyzed but tingling sensation and pain sensation persists. This loss of motor function without the loss of sensory function is due to

a. A fibres are more susceptible to hypoxia than B	b. A fibres are more sensitive to pressure than C
c. C fibres are more sensitive to pressure than A	d. Sensory nerves are nearer bone and hence affected by pressure

Ans. b

3) Saltatory conduction

a. is seen only in myelinated nerve fibres	b. is slower than non saltatory conduction
c. is not affected if a local anesthetic is applied to the node of Ranvier	d. none of the above

Ans. a

4) Myelin sheath is produced by

a. axoplasm	b. mitochondria
c. scawann cell	d. muscle cell

Ans. c

5) The action potential of skeletal muscle

a. has a prolonged plateau phase	b. spreads inwards to all parts of the muscle via T tubules
c. is longer than the action potential of cardiac muscle	d. is not essential for muscle conduction

Ans. b

6) Smooth muscle need help of

a. calmodulin for contraction	b. acetyl choline for contraction
c. K ⁺ for contraction	d. monoamine oxidase for contraction

Ans. a

7) The cross bridges of the sarcomere in skeletal muscle are components of

a. actin	b. myosin
c. troponin	d. tropomyosin

Ans. b

8) The likely mechanism through which neostigmine acts in improving muscular weakness is

a. It blocks action of acetylcholine	b. it interferes with action of mono-amine oxidase
c. it enhances the action of catecholamines	d. it blocks the action of acetyl choline esterase

Ans. d

9) A skeletal muscle

a. obeys all or none phenomenon	b. becomes less excitable when its membrane becomes hyperpolarized
c. has a resting membrane potential positive inside	d. contains excessive Na ⁺ in intracellular compartment

Ans. a

10) The function of tropomyosin in skeletal muscle is-

a. sliding on actin to produce shortening	b. Releasing Ca ⁺⁺ after initiation of contraction
c. binding to myosin during contraction	d. covering up the actin binding sites of myosin at rest

Ans. d

Blood

1) The number of oxygen molecules carried by one Hb molecule

a. 1	b. 2
c. 4	d. 8

Ans. c

2) Arneht count is counting of

a. lymphocytes	b. lobes of eosinophils
c. lobes of neutrophils	d. reticulocytes

Ans. c

3) Majority of clotting factors are produced in

a. liver	b. kidney
c. heart	d. brain

Ans. a

4) Endothelial cells synthesise

a. fibrinogen	b. factor 8
c. factor 10	d. factor 12

Ans. b

5) Iron is stored in the body in the following except

a. spleen	b. R.E. system
c. gall bladder	d. bone marrow

Ans. c

6) Cellular immunity is due to

a. B lymphocytes	b. T lymphocytes
c. neutrophils	d. eosinophils

Ans. b

7) Action of plasmin is

a. to remove calcium	b. antithrombin action
c. to stimulate heparin	d. to degenerate fibrin

Ans. d

8) Osmotic pressure of plasma is mainly maintained by

a. albumin	b. alpha globulin
c. beta globulin	d. gamma globulin

Ans. a

9) Which is the most rare blood group

a. A Rh+	b. AB Rh+
c. AB Rh-	d. B Rh-

Ans. c

10) Hematocrit of 45% means that in the sample of blood analysed

a. 45% Hb is in the plasma	b. 45% of total blood volume is made up of plasma
c. 45% of Hb is in the RBC	d. 45% of the total blood volume is made up of RBC's and WBC's

Ans. d

11) The normal A/G ratio in blood is

a. 1:2	b. 2:1
c. 1:3	d. 3:1

Ans. b

12) Which of the following statements concerning the monocyte is incorrect

a. more common in blood than eosinophils and basophils	b. produced in the adult by the bone marrow and lymph nodes
c. unlike neutrophil does not accumulate outside circulation in area of inflammation	d. not classified as a granulocyte

Ans. c

13) The normal non fasting blood ketone level is

a. 0.1 - 0.5 mg%	b. 0.5- 2 mg%
c. 2- 10 mg %	d. 100 - 500 mg%

Ans. c

Cardio vascular system

1) S.A. node is the pacemaker of heart because of

a. location in the right atrium	b. neural control
c. natural leakiness to Na ⁺	d. Natural leakiness to k ⁺

Ans. c

2) Absolute refractory period in the heart

a. corresponds to the duration of relaxation	b. lasts till half of cardiac contraction
c. shorter than refractory period in skeletal muscle	d. lasts till cardiac contraction

Ans. d

3) First heart sound occurs during the period of

a. isometric relaxation	b. isotonic relaxation
c. isovolumetric contraction	d. isovolumetric relaxation

Ans. c

4) Which of these vessels does not have sympathetic control

a. cerebral	b. splanchnic
c. cardiac	d. cutaneous

Ans. a

5) Blood brain barrier is made up of

a. astrocytes	b. oligodendrocytes
c. oligodendroglia	d. microglia

Ans. a

6) Positive bathmotropic effect on heart is produced by

a. stimulation of vagus nerve	b. stimulation of sympathetic nerves
c. atropin	d. sectioning of vagus

Ans. b

7) Mary's law denotes relationship between heart and

a. contractility and conductivity	b. rate and contraction
c. rate and BP	d. contraction and BP

Ans. c

8) Which of the following conducting systems has the slowest conducting velocity

a. SAN	b. atrial muscle
c. purkinje fibres	d. AVN

Ans. c

9) In heart, within physiological limits the force of contraction is directly proportional to the

a. pacemaker activity	b. a-v nodal delay
c. initial length of the cardiac muscle	d. respiratory rate

Ans. c

10) The diacrotic notch on aortic pressure curve is caused by

a. closure of mitral valve	b. closure of tricuspid valve
c. closure of atrial valve	d. closure of pulmonary valve

Ans. c

11) The PR interval of ECG corresponds to

a. ventricular repolarization	b. ventricular repolarization
c. atrial repolarization and conduction through AV node	d. repolarization of AV node and bundle of His

Ans. c

12) Increased vagal tone causes

a. hypertension	b. tachycardia
c. bradycardia	d. increase in cardiac output

Ans. c

13) Which of the following is not increased during exercise

a. Stroke volume	b. total peripheral resistance
c. systolic BP	d. heart rate

Ans. b

14) Which of the following takes longest time to return to normal after 1L of blood is removed from a normal individual

a. number of RBC's in peripheral blood	b. plasma volume
c. renin secretion	d. blood pressure

Ans. a

15) When a pheochromocytoma suddenly discharges a large amount of epinephrine into the circulation the patients heart rate would be expected to

a. increase because epinephrine has a direct chronotropic effect on the heart	b. increase because of increased parasympathetic discharge to the heart
c. decrease because the increase in blood pressure stimulates the carotid and aortic baroreceptors	d. decrease because of increased tonic parasympathetic discharge to heart

Ans. a

16) In a patient with mitral stenosis one would expect to hear

a. continuous murmur	b. a systolic murmur loudest over the base of heart
c. a diastolic murmur loudest over the apex of heart	d. a diastolic murmur loudest over the base of heart

Ans. c

17) The 's' wave in ECG is below isoelectric line because of

a. repolarization of ventricles	b. change in direction of the impulse when the base of the ventricles are getting depolarised
c. depolarisation of apex of heart	d. repolarisation of apex of heart

Ans. b

18) Which of the following is least likely to cause hypertension

a. chronically increased secretion of adrenal medulla	b. treatment with OCP
c. chronically increased secretion of thyroid gland	d. chronically increased secretion by zona glomerulosa of adrenal cortex

Ans. c

19) Lymph flow from the foot is

a. increased when an individual rises from the supine to standing position	b. increased by massaging the foot
c. increased when capillary permeability is decreased	d. decreased by exercise

Ans. b

20) The pressure in the radial artery is determined by

a. the degree of constriction of brachial vein	b. the rate of discharge in sympathetic nerve fibres to the arm
c. pressure in the hepatic portal vein	d. pressure in the brachial vein

Ans. b

21) The 'T' wave in ECG is above the isoelectric line because of

a. depolarisation of ventricles	b. depolarisation of bundle of His
c. change in the direction of repolarisation from the wave of depolarization of the ventricles	d. repolarisation of purkinje fibres

Ans. c

Respiratory system

1) In Caissons disease pain in the joints and muscles is due to

a. formation of N ₂ bubbles	b. formation of CO ₂ bubbles
c. due to fatigue	d. due to increase in barometric pressure

Ans. a

2) Normal value of FEV₁ in an adult is

a. 95%	b. 80%
c. 65%	d. 50%

Ans. b

3) The most important gas maintaining alveolar ventilation is

a. oxygen	b. hydrogen
c. carbon dioxide	d. N ₂

Ans. c

4) Hyperbaric oxygen is useful in all except

a. congenital heart disease	b. gas gangrene
c. CO poisoning	d. N ₂ toxicity

Ans. d

5) Administration of O₂ is of value in all except

a. cytotoxic hypoxia	b. stagnant hypoxia
c. anaemic hypoxia	d. histotoxic hypoxia

Ans. d

6) As one ascends to higher than 3000meters above sea level changes in alveolar PO₂ and PCO₂ are as follows

a. decrease in PO ₂ , increase in PCO ₂	b. decrease in PO ₂ , decrease in PCO ₂
c. increase in both PO ₂ and PCO ₂	d. increase in PO ₂ , decrease in PCO ₂

Ans. b

7) Surfactant is secreted by

a. type 1 pneumatocytes	b. type 2 pneumatocytes
c. goblet cells	d. pulmonary vessels

Ans. a

8) Which of the following effects is not observed during prolonged stay in space

a. decrease in blood volume	b. decrease in muscle strength
c. increase in red cell mass	d. loss of bone mass

Ans. c

9) Which of the following discharge spontaneously during quiet breathing

a. stretch receptors in lung	b. motor neurons in respiratory muscles
c. dorsal respiratory group of neurons	d. ventral respiratory group of neurons

Ans. c

10) Pneumatic center functions primarily to

a. limit inspiration	b. prolong expiration
c. decrease rate	d. discharge inspiratory action potentials

Ans. a

11) Which of the following is the effect of negative G on the eye

a. temporary blinding with redout	b. blackout of vision within few seconds
c. no effect	d. redout and blackout

Ans. a

12) Airway resistance

a. increases in asthma	b. decreases in emphysema
c. increases in paraplegic patients	d. does not affect work of breathing

Ans. a

13) Decrease on PCO₂, decrease in H⁺ and increased PO₂ causes

a. hyperventilation	b. hypoventilation
c. hypercapnoea	d. hypoxia

Ans. b

14) Herring-Breuer inflation reflex in human being

a. decreases the rate of respiration	b. is not activated until the tidal volume increases above 1.5 lit
c. is an important factor in normal control of ventilation	d. is activated only when tidal volume is less than 1 lit.

Ans. b

15) Total vital capacity is decreased but timed vital capacity is normal in

a. bronchial asthma	b. scoliosis
c. chronic bronchitis	d. all the above

Ans. b

16) The intrapleural pressure at the end of deep inspiration is

a. - 4mm Hg	b. + 4 mm Hg
c. - 6mm hg	d. + 6 mm Hg

Ans. a

GIT

1) Which of the following are incorrectly paired

a. pancreatic alpha amylase-starch	b. elastase-tissue rich in elastin
c. renin-coagulated milk	d. erythropeptidase-polypeptides

Ans. d

2) All are GIT hormones except

a. cholecystokinin	b. gastrin
c. secretin	d. erythropoietin

Ans. d

3) Iron is absorbed in

a. stomach	b. duodenum
c. jejunum	d. ileum

Ans. b

4) In infants, defecation often follows a meal. The cause of colonic contractions in this situation is

a. gastro-ileal reflex	b. increased circulating levels of CCK
c. gastrocolic reflex	d. enterogastric reflex

Ans. c

5) Which of the following has highest ph

a. gastric juice	b. pancreatic juice
c. bile in GB	d. secretions of intestinal glands

Ans. b

6) Man is unable to digest

a. dextrin	b. glucose
c. cellulose	d. glycogen

Ans. c

7) Steatorrhea may be caused by all factors except

a. pancreatectomy	b. gastrin secreting hormone
c. resection of distal ileum	d. hemolytic jaundice

Ans. d

8) Normal swallowing is dependant on the integrity of the

a. 9th and 10th cranial nerves	b. pyramidal tract
c. trigeminal nerve	d. appetite center of hypothalamus

Ans. a

9) Secretion of intrinsic factor occurs in

a. parietal cells of stomach	b. chief cells of stomach
c. upper abdomen	d. alpha cells of pancreas

Ans. b

10) In which of the following is absorption of water greatest

a. colon	b. jejunum
c. duodenum	d. stomach

Ans. b

11) Secretin is released by

a. acid in duodenum	b. acid in stomach
c. cells in the liver	d. distention of colon

Ans. a

12) Which of the following would not be produced by total pancreatectomy

a. hyperglycaemia	b. metabolic acidosis
c. weight gain	d. decreased absorption of amino acids

Ans. c

13) Vit D is essential for normal

a. fat absorption	b. Ca absorption
c. ADH secretion	d. protein absorption

Ans. b

14) Gastrin secretion is increased by

a. acid in the lumen of stomach	b. distension of stomach
c. increased circulating levels of secretin	d. vagotomy

Ans. b

15) Saliva is responsible for all EXCEPT

a. helps in deglutition	b. prevents dental caries
c. is essential for complete digestion of starch	d. prevents decalcification of the teeth

Ans. c

CNS

1) Lesions of which of the following nuclei cause hypothalamic obesity

a. ventromedial nucleus	b. dorsomedial nucleus
c. suprachiasmatic nucleus	d. supraoptic nucleus

Ans. a

2) The EPSP

a. is an all or none response to a presynaptic potential	b. can be temporarily summated during repetitive presynaptic stimulation
c. always initiates an action potential	d. lasts only for the duration of presynaptic action potential

Ans. b

3) Following statements are true for dopamine except

a. it is related to Parkinsonism	b. it is found in the cells uninhibited by Ach in basal ganglia
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c. it is one of the endogenous opiates from CNS	d. it cannot be replaced in CNS from dietary dopamine
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Ans. c

4) Loss of fear and emotion is often observed in the lesion at

a. septal nucleus	b. thalamus
c. amygdaloidal nucleus	d. sensory cortex

Ans. c

5) The Renshaw cell

a. receive recurrent collaterals from motor neurons and inhibit other motor neurons in the vicinity	b. is the inhibitory system of cerebellum
c. are a major component of muscle spindle	d. are present in retina

Ans. a

6) Premotor cortex refers to

a. some areas anterior to primary motor cortex causing complex co-ordinate movements like speech, eye movements	b. an area of motor cortex responsible for voluntary movements
c. an area in temporal cortex	d. an area of cerebellum

Ans. a

7) Functions of limbic system are all EXCEPT

a. olfaction	b. gustation
c. feeding behaviour	d. sexual behaviour

Ans. b

8) REM is

a. characterised by delta waves on ECG	b. a sound and dreamless sleep
c. characterised by total lack of muscular	d. referred to as paradoxical sleep

activity	
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Ans. d

9) Sleep deprivation

a. can cause psychotic episodes	b. is associated with sluggishness of thoughts
c. makes a person more alert	d. has no effect on the individual

Ans. a

10) The sympathetic system

a. has short post ganglionic fibres	b. consists of vagus nerve
c. produces nicotine at its nerve endings	d. has a thoraco-lumbar outflow from the spinal cord

Ans. d

11) Visceral pain

a. shows relatively rapid adaptation	b. is mediated by beta fibres in dorsal root of spinal nerves
can sometimes be relieved by applying irritant to skin	can be produced by prolonged stimulation of touch receptors

Ans. c

12) The naked nerve endings are responsible for the sensation of

a. pain	b. touch
c. hearing	d. vision

Ans. a

13) When a normally innervated skeletal muscle is stretched the initial response is contraction, with increase in the stretch sudden relaxation occurs because of

a. decrease in gamma efferent discharge	b. inhibition of the discharge from annulospiral endings of afferent nerve fibres
decreased activity of afferent nerve fibres from	d. increased activity of afferent nerve fibres

golgi tendon organs	from golgi tendon organs
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Ans. d

14) After anterolateral cordotomy relief of pain is due to interruption of

a. left dorsal column	left ventral spinothalamic tract
c. right lateral spinothalamic tract	left lateral spinothalamic tract

Ans. d

15) Parasympathetic system

a. has short preganglionic fibres	b. secretes dopamine
c. controls most of the movements and secretions of gut	d. brings increase in heart rate during exercise

Ans. c

16) In a health adult sitting with eyes closed the EEG rhythm observed with electrodes on occipital lobes

a. alpha	b. theta
c. delta	d. beta

Ans. a

17) The basal ganglia are primarily concerned with

a. sensory integration	b. short term memory
c. control of movement	d. neuroendocrine control

Ans. c

18) Interruption of motor pathways in the internal capsule on one side causes

a. spastic paralysis on the same side	b. spastic paralysis on the opposite side
c. flaccid paralysis on the same side	d. flaccid paralysis on the opposite side

Ans. b

19) the extrapyramidal system is not concerned with

a. stretch reflex	b. righting reflex
c. spasticity	d. sensation of viscera

Ans. d

20) After falling down from a staircase a young woman is found to have partial loss of voluntary movement on the right side of the body and loss of pain and temperature sensation on the left side below the mid-thoracic region. The probable site of lesion is

a. transection of the right half of the spinal cord in the upper thoracic region	b. transection of the left side of the spinal cord in the upper thoracic region
transection of sensory and motor pathways on the right side of the pons	d. transection of the left half of the spinal cord in the lumbar region

Ans. a

21) Thirst is stimulated by

a. increase in plasma osmolality and volume	increase in plasma osmolality and decrease in volume
c. decrease in osmolality and increase in volume	d. decrease in plasma osmolality and volume

Ans. d

22) Lesions of which of the following hypothalamic nuclei cause loss of circadian rhythm

a. ventromedial	b. dorsomedial
c. suprachiasmatic	d. supraoptic

Ans. c

23) Normal blood flow to the brain is

a. greatly modified by vasomotor control	b. about 150ml/min
c. about 750ml/min	d. greatly increased during exercise

Ans. c

24) Retrograde amnesia

a. is abolished by prefrontal lobectomy	b. responds to drugs that block dopamine receptors
c. is commonly precipitated by a blow on the head	d. is commonly precipitated by ageing

Ans. c

25) Non fluent aphasia is produced by lesion of

a. Brocas area	b. angular gyrus
c. parietal lobe	d. frontal lobe

Ans. b

Endocrinology

1) A meal rich in proteins but low in carbohydrates does not cause hypoglycaemia because

a. glucagon secretion is stimulated by meals	b. the meal causes compensatory increase in T4 secretion
c. cortisol in circulation prevents glucose from entering the muscles	d. the amino acids in the meal are converted to glucose

Ans. a

2) Which of the following is incorrectly paired

a. beta cells-insulin	b. F cells- gastrin
c. delta cells- somatostatin	d. alpha cells- glucagon

Ans. b

3) After intravenous administration of a large dose of insulin, the return of a low blood sugar level to normal is delayed by

a. thyrotoxicosis	b. glucagon deficiency
c. diabetes	d. parathormone deficiency

Ans. b

4) Insulin increases entry of glucose into

a. renal tubule	b. the mucosa of the small intestine
c. neurons of motor cortex	d. skeletal muscle cells

Ans. d

5) Glucagon is not normally found in the

a. brain	b. pancreas
c. git	d. adrenal glands

Ans. d

6) Which of the following is NOT produced by physiological amounts of glucocorticoids

a. maintenance of normal vascular reactivity	b. inhibition of inflammatory response
c. increased excretion of a water load	d. inhibition of ACTH secretion

Ans. b

7) Cortisol increases blood glucose level by

a. increasing lipolysis	b. increasing protein synthesis in muscles
c. increasing gluconeogenesis	d. increasing growth hormone secretion

Ans. c

8) Epinephrine and norepinephrine

a. are amino acids	b. are both secreted by neurons in the autonomic nervous system
c. are polypeptides	d. both activate alpha and beta adrenergic receptors

Ans. d

9) A decrease in extracellular volume is expected to cause increased secretion of all except

a. vasopressin	b. renin
c. thyroxin	d. ACTH

Ans. c

10) A patient with parathyroid deficiency 10 days after thyroidectomy will show

a. a low plasma phosphate and Ca ⁺⁺ levels and tetanus	b. a low plasma Ca ⁺⁺ levels, increased muscular excitability and Trousseau's sign
c. high plasma phosphate and Ca ⁺⁺ and bone demineralization	d. increased muscular excitability, high plasma Ca ⁺⁺ and bone demineralization

Ans. b

11) Which of the following is not involved in regulation of plasma Ca⁺⁺ levels

a. kidneys	b. skin
c. lungs	d. intestine

Ans. c

12) Ca⁺⁺ plays an important role in following biological processes except

a. oxygen utilization	b. contraction of cardiac muscle
c. contraction of skeletal muscle	d. blood coagulation

Ans. a

13) Epiphyseal closure is regulated by

a. calcitonin	b. somatomedins
c. 1,25 dihydroxy cholecalciferol	d. thyroxine

Ans. b

14) Which of the following pituitary hormones is a polypeptide

a. MSH	b. ACTh
c. beta - endorphin	d. growth hormone

Ans. c

15) Growth hormone acts directly on

a. stimulation of protein synthesis	b. stimulation of cartilage formation
c. elevation of BSL	d. stimulation of bone formation

Ans. c

16) Hypopituitarism is characterized by

a. infertility	b. intolerance to heat
c. weight gain	d. excessive growth of the soft tissue

Ans. a

17) Excessive growth hormone secretion in adults causes

a. acromegaly	b. gigantism
c. increased entry of glucose in muscles	d. hypothyroidism

Ans. a

18) Angiotensin increases blood pressure by acting on the following EXCEPT

a. aldosterone secretion	b. vascular smooth muscle
c. parasympathetic nervous system	d. sympathetic nervous system

Ans. c

19) Erythropoietin

a. contains iron	b. has no effect on WBC count
c. stimulates renin secretion	d. increases half life of RBC

Ans. b

20) Somatostatin

a. inhibits insulin and glucagon release	b. stimulates insulin and glucagon release
c. stimulator of glucagon release	d. acts as obesity hormone

Ans. a

21) Thyroid hormone stored in the lumen of follicles is in the form of

a. free T3	b. free T4
c. attached to thyroglobulin in the gland	d. attached to thyroid binding globulin

Ans. c

22) Secretion of growth hormone

a. increases during REM sleep	b. increases during exercise
c. increases during starvation	d. increases during NREM sleep

Ans. d

23) Atrial natriuretic peptide brings

a. afferent arteriolar constriction in kidney	b. efferent arteriolar constriction in kidney
c. increases renin secretion	d. constriction of mesangial cells

Ans. b

24) Thyroid binding globulins are normal in

a. hyperthyroidism	b. pregnancy
c. parents treated with glucocorticoids	d. parents treated with estrogens

Ans. a

25) In starvation which of the following is reduced

a. plasma T4	b. plasma T3
c. reverse tri-iodothyroxine	d. D thyroxine

Ans. b

26) Hypothyroidism is associated with increased levels of

a. cholesterol	b. albumin
c. TBG	d. iodine

Ans. a

27) The metabolic rate is least affected by an increase in the plasma levels of

a. TSH	b. TRH
c. TBG	d. none of the above

Ans. c

28) The coupling of mono iodotyrosine and di-iodotyrosine and the iodination of thyroglobin is blocked by

a. TSH	b. TRH
c. iodine	d. thiocarbamides such as propylthiouracil

Ans. d

29) Parathyroid hormone

a. decreases Ca^{++} mobilization of bone	b. increases Ca^{++} mobilization from bone
c. decreases circulating levels of free Ca^{++}	d. increases urinary excretion of Ca^{++}

Ans. b

30) Thyrocalcitonin

a. is secreted by thyroid	b. is secreted by hypothalamus
c. is secreted by parathyroid	d. increases Ca^{++} absorption by stomach

Ans. a

Reproductive System

1) Testosterone is secreted by

a. sertoli cells of testis	b. cells of adrenal medulla
c. cells of hypothalamus	d. leydig cells of testis

Ans. d

2) Temporary methods of birth control which are best suited to prevent transmission of disease are

a. IUD	b. spermaticides
c. condom	d. Ru 486

Ans. c

3) Cryptorchidism means

a. descent of testis	b. hypogonadism
c. hyperfunction of the testis	d. undescended testis

Ans. d

4) Androgen binding protein is produced by

a. adrenals	b. hypothalamus
c. sertoli cells	d. leydig cells

Ans. c

5) All of the following are produced by the corpus leuteum except

a. estrogens	b. progesteron
c. relaxin	d. F.S.H.

Ans. d

6) The testis is kept at a temperature of 2-3 degrees C below core temperature due to

a. contraction of cremasteric muscle	b. contraction of dartos muscle
c. contraction of internal oblique muscle	d. relaxation of cremasteric muscle and due to position of the testis outside the pelvic cavity

Ans. d

7) Early detection of pregnancy depends on detection of

a. FSH	b. progesteron
c. LH	d. HCG

Ans. d

8) Secondary amenorrhoea can most commonly be caused in the following conditions EXCEPT

a. age above 60 years	b. stress
c. pregnancy	d. competitive athletes

Ans. a

9) In the first 20 weeks of pregnancy, placental function is best assessed by urinary

a. pregnanediol	b. pregnanetriol
c. chorionic gonadotropin	d. estriol

Ans. c

10) Best method for diagnosing fetal lung maturity is

a. clinical examination	b. ultrasonography
c. amniocentesis	d. fetal kick counts

Ans. c

11) Full lung maturity is indicated by L/S ratio

a. 2:1	b. 3:1
c. 4:1	d. 5:1

Ans. a

12) The best method to diagnose Rh sensitization in the mother is

a. direct coombs test	b. indirect coombs test
c. 'c' antigen	d. 'a' antigen

Ans. b

13) Inhibin is secreted by

a. graffian follicle	b. corpus luteum
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c. endometrium	d. placenta
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Ans. a

14) Maximal rise in the levels of prolactin are seen in

a. at term	b. after delivery
c. during lactation only	d. none of the above

Ans. a

15) Oestrogens are given in high doses to the mother to suppress lactation in

a. cleft palate in child	b. highly obese mother
c. to prevent transmission of communicable disease like HIV	d. inverted nipples

Ans. c