

9) In Patients of poorly controlled Diabetes Mellitus-

- A) Values of HbA decreases
  - B) There is presence of HbF
  - C) Values of HbA1c increases
  - D) There is presence of HbS
- 

10) Chronic Loss of small amount of Blood can cause -

- A) Iron deficiency anaemia
  - B) Megaloblastic anaemia
  - C) Normocytic anaemia
  - D) Aplastic anaemia
- 

11) Which of the following statement is true for Na - K ATPase pump -

- A) Pumps 2 Na outside and 3 K inside the cell
  - B) It is a primary active transport mechanism
  - C) It is a downhill process requiring no energy
  - D) It is a secondary active transport mechanism
- 

12) Extracellular fluid is -

- A)  $\frac{1}{3}$  of total body water
  - B)  $\frac{2}{3}$  of total body water
  - C)  $\frac{1}{2}$  of total body water
  - D)  $\frac{1}{4}$  of total body water
- 

13) Characteristic feature of Facilitated Diffusion is -

- A) It requires energy
  - B) It requires a carrier protein
  - C) An active process
  - D) An uphill process
- 

14) Transcription is -

- A) DNA replication
  - B) DNA wrapping around histone
  - C) RNA forming proteins
  - D) Production of RNA from DNA
- 

15) G proteins are -

- A) Good proteins
  - B) Gap junction proteins
  - C) Guiding proteins
  - D) Cell signaling proteins
- 

16) After Action Potential, Resting Membrane Potential is restored by -

- A) Na - K Pump activity
  - B) Na - K channels inactivity
  - C) K channel activity
  - D) Na channel inactivity
- 

17) Absolute Refractory Period is due to -

- A) Opening of Na channels
- B) Closure of K channels
- C) Closure of Na channels
- D) Opening of K channels

18) Nerve cell has maximum Na channels at -

- A) Dendrites
  - B) Axon Hillock
  - C) Soma
  - D) Axonal termination
- 

19) Local Anaesthetics mostly affect

- A) Group C fibers
  - B) Group A fibers
  - C) Group D fibers
  - D) Group B fibers
- 

20) Nerve Conduction Velocity is least in -

- A) A alpha fibers
  - B) A gamma fibers
  - C) B fibers
  - D) C fibers
- 

21) Motor Unit is a term used for -

- A) All muscle fibers
  - B) Single muscle fiber
  - C) A motor nerve branch and all muscle fibers supplied by it
  - D) Motor nerve, all muscle fibers and afferent nerve, together
- 

22) Action of Acetylcholine on Nicotinic receptors causes -

- A) Relaxation of Skeletal muscle
  - B) Contraction of Skeletal muscle
  - C) Relaxation of Smooth muscle
  - D) Contraction of Smooth muscle
- 

23) Golgi tendon organs are supplied by -

- A) A Alpha fibers
  - B) A beta fibers
  - C) A delta fibers
  - D) A gamma fibers
- 

24) Which cells of the Collecting Ducts are responsible for Vasopressin stimulated water reabsorption -

- A) Lacin cells
  - B) Mesangial cells
  - C) Principal cells
  - D) Intercalated cells
- 

25) Renin secretion by neural stimulation is due to -

- A) Activation of beta adrenergic receptors
  - B) Activation of alpha adrenergic receptors
  - C) Activation of Muscarinic receptors
  - D) Activation of Nicotinic receptors
- 

26) Glomerular Filtration Rate in healthy adult male is -

- A) 500 ml per minute
- B) 250 ml per minute
- C) 125 ml per minute
- D) 75 ml per minute

27) Aldosterone regulated Sodium absorption occurs in -

- A) Proximal tubule
  - B) Distal tubule
  - C) Loop of Henle
  - D) Collecting ducts
- 

28) Transport maximum for Glucose, in man is -

- A) 675 mg per minute
  - B) 375 mg per minute
  - C) 175 mg per minute
  - D) 75 mg per minute
- 

29) In Proteinuria, most of the protein is -

- A) Albumin
  - B) Globulin
  - C) Fibrinogen
  - D) Prothrombin
- 

30) Urine is maximally acidified at -

- A) Proximal tubule
  - B) Loop of Henle
  - C) Ascending tubule
  - D) Distal tubule and collecting ducts
- 

31) Intrinsic Factor is secreted by -

- A) Parietal Cells
  - B) Chief cells
  - C) Mucus cells
  - D) ECL cells
- 

32) Potent stimulator for HCL secretion is -

- A) Acetylcholine
  - B) Somatostatin
  - C) Gastrin
  - D) Prostaglandin
- 

33) pH is highest in -

- A) Saliva
  - B) Gastric juice
  - C) Bile juice
  - D) Pancreatic juice
- 

34) Normal Bile secretion is -

- A) 500 ml per day
  - B) 1000 ml per day
  - C) 1500 ml per day
  - D) 250 ml per day
- 

35) Absorption of Hexoses across small intestine is dependent on -

- A) K
- B) Na
- C) Mg
- D) Ca

36) Intolerance to Milk occurs due to -

- A) Low Amylase levels
  - B) Low Maltase levels
  - C) Low Lactase levels
  - D) Low Sucrase levels
- 

37) Best source of dietary fiber is -

- A) Meat
  - B) Eggs
  - C) Milk
  - D) Plants
- 

38) Gut flora are responsible for Synthesis of Vitamin -

- A) C
  - B) D
  - C) K
  - D) E
- 

39) Peristalsis is Initiated because of -

- A) Intestinal distension
  - B) Intestinal secretion
  - C) Hormonal stimulation
  - D) Nervous stimulation
- 

40) Short chain fatty acids produced by Gut Flora are maximally absorbed in -

- A) Duodenum
  - B) Jejunum
  - C) Ileum
  - D) Colon
- 

41) Pulsatile secretion of TSH Peaks -

- A) In morning
  - B) At noon
  - C) In evening
  - D) At midnight
- 

42) Receptors for Thyroid Hormone are present-

- A) On outer surface of cell membranes
  - B) On inner surface of cell membranes
  - C) In the cytoplasm
  - D) In the nuclei
- 

43) In Hypothyroidism, Yellowish Tint of the Skin is due to accumulation of -

- A) Free bilirubin
  - B) Biliverdin
  - C) Carotene
  - D) Conjugated bilirubin
- 

44) Insulin causes entry of Glucose into the cells by -

- A) Simple diffusion
- B) Facilitated diffusion
- C) Primary active transport
- D) Secondary active transport

45) Major Function of Fetal Adrenal gland is -

- A) Secretion of Androgens
  - B) Secretion of Epinephrine
  - C) Secretion of Corticosteroids
  - D) Secretion of Mineralocorticoids
- 

46) Half life of Catecholamines in Circulation is -

- A) 2 mins
  - B) 20 mins
  - C) 2 hours
  - D) 2 days
- 

47) The Hormones of Adrenal Cortex are derivatives of -

- A) Triglycerides
  - B) LDL
  - C) HDL
  - D) Cholesterol
- 

48) Calcium content of adult human body is about -

- A) 100 gms
  - B) 600 gms
  - C) 1100 gms
  - D) 1700 gms
- 

49) Number of Parathyroid Glands in human is -

- A) 4
  - B) 3
  - C) 2
  - D) 1
- 

50) Calcitonin is produced by -

- A) A Cells
  - B) B Cells
  - C) C Cells
  - D) D Cells
- 

51) Pineal Hormone is -

- A) Melanin
  - B) Melatonin
  - C) Serotonin
  - D) Bradykinin
- 

52) The Hormone, causing relaxation of ligaments of pubic joints and symphysis, softening cervix, during Pregnancy, is -

- A) Progesterone
  - B) Relaxin
  - C) Estrogen
  - D) Inhibin
- 

53) Barr Body is-

- A) Condensation of X chromosome
- B) Condensation of Y chromosome
- C) Condensation of Proteins
- D) Condensation of Ribosomes

54) Leptin Hormone is secreted by -

- A) Anterior Pituitary
  - B) Ovary
  - C) Pineal Gland
  - D) Fat Cells
- 

55) Hypothalamic Prolactin Inhibiting Hormone is -

- A) Adrenaline
  - B) Dopamine
  - C) Serotonin
  - D) Norepinephrine
- 

56) Developing Spermatozoa acquire Motility in -

- A) Epididymis
  - B) Vas deferens
  - C) Seminiferous Tubules
  - D) Vagina
- 

57) Each ml of Semen normally contains about -

- A) 10 million sperms
  - B) 20 million sperms
  - C) 40 million sperms
  - D) 100 million sperms
- 

58) Final Maturation of the Ovarian Follicle occurs due to -

- A) FSH
  - B) LH
  - C) FSH and LH
  - D) Activin
- 

59) In Humans Fertilisation of the Ovum by Sperm, usually occurs in -

- A) Ampulla of Uterine Tube
  - B) Fimbriae of Uterine Tube
  - C) Fundus of Uterus
  - D) Upper part of Cervix
- 

60) Connection from SA node to AV node is by -

- A) 1 Bundle of Atrial Fibers
  - B) 2 Bundles of Atrial Fibers
  - C) 3 Bundles of Atrial Fibers
  - D) 4 Bundles of Atrial Fibers
- 

61) RMP of Myocardial Fibers is -

- A) - 50 mV
  - B) - 90 mV
  - C) - 55 mV
  - D) - 60 mV
- 

62) AV Nodal delay is -

- A) 0.5 sec
- B) 1.0 sec
- C) 1.5 sec
- D) 0.1 sec

63) During Inspiration, Heart Rate -

- A) Increases
  - B) Decreases
  - C) Initially Decreases and then Increases
  - D) Remains Unchanged
- 

64) When Conduction from Atria to Ventricle is Completely Interrupted, resulting Heart Block is -

- A) 1st Degree
  - B) 2nd Degree
  - C) 3rd Degree
  - D) 4th Degree
- 

65) Normally Pressure in Pulmonary Artery is -

- A) Zero mm of Hg
  - B) 10 mm of Hg
  - C) 80 mm of Hg
  - D) 120 mm of Hg
- 

66) Normal Ejection Fraction is -

- A) 35%
  - B) 65%
  - C) 85%
  - D) 100%
- 

67) Vasomotor Center is located in -

- A) Medulla
  - B) Thoracic Segment of Spinal Cord
  - C) Pons
  - D) Midbrain
- 

68) Increase in Peripheral Resistance is due to -

- A) Constriction of Venules
  - B) Constriction of Capillaries
  - C) Constriction of Arterioles
  - D) Constriction of Arteries
- 

69) Volume of Anatomic Dead Space in healthy adult male is -

- A) 500 ml
  - B) 350 ml
  - C) 150 ml
  - D) 50 ml
- 

70) Normal Pressure of Oxygen in Alveolar air is -

- A) 100 mm Hg
  - B) 40 mm Hg
  - C) 200 mm Hg
  - D) 140 mm Hg
- 

71) Haemoglobin Molecule can combine with -

- A) 1 Oxygen mol
- B) 2 Oxygen mols
- C) 3 Oxygen mols
- D) 4 Oxygen mols

72) Myoglobin Molecule binds -

- A) 1 Oxygen mol
  - B) 2 Oxygen mols
  - C) 3 Oxygen mols
  - D) 4 Oxygen mols
- 

73) Carbon Dioxide Solubility in Blood is -

- A) Same as Oxygen
  - B) 10 times greater than Oxygen
  - C) 20 times greater than Oxygen
  - D) Less than Oxygen
- 

74) Cyanosis appears, when the Reduced Haemoglobin Concentration of Blood, in capillaries is more than -

- A) 1 gm per 100 ml of Blood
  - B) 3 gm per 100 ml of Blood
  - C) 5 gm per 100 ml of Blood
  - D) 0.5 gm per 100 ml of Blood
- 

75) Normal pH of Arterial Plasma is -

- A) 7.40
  - B) 7.20
  - C) 7.00
  - D) 6.80
- 

76) Haemoglobin has Highest Affinity for -

- A) Oxygen
  - B) Carbon dioxide
  - C) Nitrogen
  - D) Carbon monoxide
- 

77) Neural area for Voluntary Control of Respiration, is located in -

- A) Medulla
  - B) Pons
  - C) Diencephalon
  - D) Cerebral Cortex
- 

78) The stimulus for Increased Respiratory rate, after Exercise is -

- A) Pressure of Carbon dioxide in blood
  - B) Pressure of Oxygen in blood
  - C) Hydrogen ion concentration of blood
  - D) Both pressure of Carbon dioxide and pressure of Oxygen in blood
- 

79) Maximum number of Synapses in the Cerebral Cortex are, on -

- A) Dendrites
  - B) Soma
  - C) Initial segment of Axon
  - D) In the middle of Axon
- 

80) In Myasthenia Gravis, antibodies destroy -

- A) Alpha receptors
- B) Beta Receptors
- C) Muscarinic Receptors
- D) Nicotinic Receptors



81) Cold receptors are inactivated at -

- A) 13 degree C
  - B) 17 degree C
  - C) 08 degree C
  - D) 22 degree C
- 

82) Arousal response in EEG is indicated, by -

- A) Alpha rhythm
  - B) Beta rhythm
  - C) Delta rhythm
  - D) Gamma rhythm
- 

83) NREM and REM sleep cycles in a young adult are repeated at intervals of, about -

- A) 30 min
  - B) 60 min
  - C) 90 min
  - D) 120 min
- 

84) Normally the temperature of Scrotum is maintained at -

- A) 32 degree C
  - B) 35 degree C
  - C) 37 degree C
  - D) 30 degree C
- 

85) Changes in the Diameter of Pupil, can vary the amount of Light reaching Retina, by -

- A) 2 folds
  - B) 3 folds
  - C) 4 folds
  - D) 5 folds
- 

86) The distance at which the subject reads the Snellen Chart, is -

- A) 20 ft
  - B) 15 ft
  - C) 10 ft
  - D) 05 ft
- 

87) Rotational Acceleration is detected by receptors present, in -

- A) Saccule
  - B) Utricle
  - C) Semicircular canals
  - D) Cochlea
- 

88) Endolymph has high concentration of -

- A) Na ion
  - B) K ion
  - C) Ca ion
  - D) Cl ion
- 

89) Olfactory Receptors Neurons have an average Lifespan of -

- A) 365 days
- B) 300 days
- C) 250 days
- D) 50 days

90) Neurogenesis of Olfactory receptor neurons occurs, from/ by

- A) Basal cells
  - B) Supporting cells
  - C) Bowman's Gland
  - D) Division of Olfactory Receptors
- 

91) The Thermo regulatory integration and Control Center is located in -

- A) Olivary nucleus
  - B) Nucleus Tractus Solitarius
  - C) Pre optic area
  - D) Area Postrema
- 

92) Which of the following Hormone decreases with Aerobic Exercise -

- A) Catecholamines
  - B) Cortisol
  - C) Glucagon
  - D) Insulin
- 

93) As per Research, practising Yoga -

- A) Provides Physical Health benefits
  - B) Provides Mental Health benefits
  - C) Provides both Physical and Mental Health benefits
  - D) Has no Health benefits
- 

94) Meditation induces -

- A) Relaxation response
  - B) Stress response
  - C) Sleep response
  - D) Arousal response
- 

95) Some types of Meditation works by -

- A) Reducing activity of sympathetic nervous system & increasing activity of parasympathetic nervous system
  - B) Reducing activity of parasympathetic nervous system & increasing activity of sympathetic nervous system
  - C) No effect on sympathetic nervous system & increasing activity of parasympathetic nervous system
  - D) No effect on parasympathetic nervous system & increasing activity of sympathetic nervous system
- 

96) The number of Ventricles in Brain are -

- A) 2
  - B) 3
  - C) 4
  - D) 5
- 

97) Cerebrospinal fluid pressure, is normally within a range of -

- A) 70.5 to 110.5 mm of Hg
  - B) 4.5 to 14.5 mm of Hg
  - C) 10.5 to 25.5 mm of Hg
  - D) 30.5 to 60.5 mm of Hg
- 

98) Biological Clock is present at -

- A) Arcuate nucleus
  - B) Mammillary nucleus
  - C) Paraventricular nucleus
  - D) Suprachiasmatic nucleus
-

99) Surfactant is produced by -

- A) Type II alveolar epithelial cells
  - B) Type I alveolar epithelial cells
  - C) Pulmonary alveolar macrophages
  - D) Neuroendocrine cells
- 

100) The Sugar that gives main Nutritional supply for Spermatozoa is -

- A) Glucose
- B) Fructose
- C) Sucrose
- D) Maltose