

Physiology

- 1) In Peripheral blood film, the Reticulocytes are stained with -
- A) Brilliant cresyl blue
 - B) Methylene blue
 - C) Eosin
 - D) Indigo carmine
-

- 2) Blood disorder Hemophilia, occurs due to deficiency of -
- A) Factor V
 - B) Factor VIII
 - C) Factor XII
 - D) Factor IV
-

- 3) Diagnostic characteristic of Iron Deficiency Anaemia, is-
- A) Increased Mean Corpuscular Haemoglobin
 - B) Increased Red Blood Cell Size
 - C) Decreased Mean Corpuscular Volume
 - D) Increased blood Ferritin level
-

- 4) Granules in the cytoplasm of Neutrophil are -
- A) Coarse
 - B) Spectacle shaped
 - C) Stained by basic dyes
 - D) Take both acidic and basic dyes
-

- 5) Normal Life span of a Red Blood Cell is -
- A) 10 days
 - B) 120 days
 - C) 360 days
 - D) 420 days
-

- 6) Human Immunodeficiency Virus(HIV) causing AIDS, chiefly attacks -
- A) Neutrophils
 - B) Eosinophils
 - C) Basophils
 - D) Helper T lymphocytes
-

- 7) Normal values of Plasma Proteins is -
- A) 6 - 8 gms/ 100 ml of blood
 - B) 2- 4 gms/ 100 ml of blood
 - C) 10 - 12 gms/ 100 ml of blood
 - D) 14 - 16 gms/ 100 ml of blood
-

- 8) Clinically important Rh agglutinin is -
- A) A
 - B) E
 - C) C
 - D) D

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) 1/3 of total body water
 - B) 1/2 of total body water
 - C) 1/2 of total body water
 - D) 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