# INTRODUCTION

- 1. ..... deals with the study of the structure of an organism and the relationships of its parts.
- a) Physiology
- b) Anatomy
- c) Histology
- d) Embryology
- 2. Word anatomy is derived from
- a) Latin word
- b) Italian word
- c) Greek word
- d) None of these
- 3. .....Is used to describe the study of body parts visible to the naked eye
- a) Cytology
- b) Histology
- c) Gross anatomy
- d) Physiology
- 4. Study of tissues is called
- a) Histology
- b) Cytology
- c) Embryology
- d) Pathological anatomy
- 5. Study of cell is called
- a) Histology
- b) Cytology
- c) Embryology
- d) Pathological anatomy
- 6. Study of diseased body structure is called
- a) Histology
- b) Cytology
- c) Embryology
- d) Pathological anatomy
- 7. ..... is the branch of anatomy which deals with the study of embryo.
- a) Histology
- b) Cytology
- c) Embryology
- d) Pathological anatomy
- 8. .....deals with the study of structure of different organs and body parts of human.
- a) Human anatomy
- b) Histology
- c) Cytology
- d) embryology
- 9. ..... helps in understanding congenital deformities and defects.
- a) histology
- b) cytology
- c) embryology
- d) pathological anatomy
- **10.** .....is the branch of anatomy that deals with the study of any specific part of the body.
- a) Systemic anatomy

#### b) Regional anatomy

- c) Embryology
- d) Cytology
- **11.** .....is the branch of anatomy that deals with the study of any system of body is called systemic anatomy.
- a) Systemic anatomy
- b) Regional anatomy
- c) Embryology
- d) Cytology
- **12.** .....Is the branch of anatomy that deals with the study of diagnosis of disease.
- a) Cross- section anatomy
- b) Applied anatomy
- c) Regional anatomy
- d) Systemic anatomy
- **13.** .....is the branch of anatomy that deals with the study of cross-sectional part of human body.
- a) Cross- section anatomy
- b) Applied anatomy
- c) Regional anatomy
- d) Systemic anatomy



## TERMINOLOGIES OF ANATOMY

- 14. The part of body which is present in front or near to abdomen is called
- a) Ventral/ Posterior
- b) Dorsal/Posterior
- c) Ventral/ anterior
- d) Dorsal / anterior
- 15. The part of body which present near to back side is called
- a) Ventral/Posterior
- b) Dorsal/ Posterior
- c) Ventral/ anterior
- d) Dorsal / anterior
- 16. The part of body which is present towards upper side is called
- a) Inferior
- b) Anterior
- c) Posterior
- d) Superior
- 17. The part of body which is present towards lower side is called
- a) Inferior
- b) Anterior
- c) Posterior
- d) Superior
- 18. The line which divides the body into two equal , right and left parts is called
- a) Lateral
- b) Medial
- c) Medial line
- d) Deep
- 19. The parts of the body that are present near to the medial line is called
- a) Lateral
- b) Medial
- c) Medial line
- d) Deep
- 20. The parts of body which are present away from the medial line.
- a) Lateral
- b) Medial
- c) Medial line
- d) Deep
- **21.** Any part which is away from the surface is called
- a) Lateral
- b) Medial
- c) Medial line
- d) Deep
- **22.** Any part which is near from the surface is called
- a) Deep
- b) Superficial
- c) Proximal
- d) Distal
- 23. It is the part which is present nearer to the reference point.

- a) Deep
- b) Superficial
- c) Proximal
- d) Distal
- 24. It is the part which is present away to the reference point.
- a) Deep
- b) Superficial
- c) Proximal
- d) Distal
- 25. It is the part of body that present near to the medial line and towards the lower side.
- a) Ipsilateral
- b) Contralateral
- c) Inferomedial
- d) None of these
- 26. Two parts of body that present at the same side of body.
- a) Ipsilateral
- b) Contralateral
- c) Inferomedial
- d) None of these
- 27. Two body organs which are present opposite to each other is called
- a) Ipsilateral
- b) Contralateral
- c) Inferomedial
- d) None of these
- 28. Bending movement in which angle between two bones decreases
- a) Flexion
- b) Extension
- c) Abduction
- d) Adduction
- 29. Extending movement in which angle or distance between two bones increases.
- a) Flexion
- b) Extension
- c) Abduction
- d) Adduction
- **30.** Movement of limb away from the medial line.
- a) Flexion
- b) Extension
- c) Abduction
- d) Adduction
- **31.** Movement of limb towards the medial line.
- a) Flexion
- b) Extension
- c) Abduction
- d) Adduction
- **32.** Movement of forearm in which position that palm facing downward.
- a) Inversion
- b) Eversion
- c) Supination
- d) pronation
- 33. Movement of forearm in which position that palm facing upward.
- a) Inversion
- b) Eversion
- c) Supination
- d) pronation
- 34. Movement of sole of foot towards the medial line.

- a) Inversion
- b) Eversion
- c) Supination
- d) pronation
- **35.** Movement of sole of foot away from the medial line.
- a) Inversion
- b) Eversion
- c) Supination
- d) pronation
- 36. Movement of bones towards the upper side is called
- a) Planter flexion
- b) Depression
- c) Dorsiflexion
- d) Elevation
- 37. Movement of bones towards the lower side is called
- a) Planter flexion
- b) Depression
- c) Dorsiflexion
- d) Elevation
- **38.** Movement of the sole of foot in which angle or distance between foot and leg increase.
- a) Planter flexion
- b) Depression
- c) Dorsiflexion
- d) Elevation
- **39.** If the distance between leg and foot is decreased is called
- a) Planter flexion
- b) Depression
- c) **Dorsiflexion**
- d) Elevation

CHAPTER#03

## SURFACE ANATOMY

- 40. Which one of the following is a part of skull?
- a) Humerus
- b) Radius
- c) Parietal bone
- d) Ulna
- e) Tibia
- 41. Which one of the following is a facial bone?
- a) Nasal bone
- b) Maxilla
- c) Zygomatic bone

#### d) All of these

- 42. Which one of the following is not a part of upper limb?
- a) Arm
- b) Fore arm
- c) Tibia
- d) Hand
- 43. ..... starts from scapula and ended to elbow joint.
- a) Arm
- b) Fore arm
- c) Hand
- d) Tibia
- 44. ..... is long bone in upper limb.
- a) Radius
- b) Ulna
- c) Humerus
- d) Fibula
- 45. ..... opposite to the radius.
- a) Tibia
- b) Fibula
- c) Humerus
- d) Ulna
- 46. In start of hand there are 8 little bones which are called
- a) Metacarpals
- b) Carpals
- c) Phalanges
- d) None of these
- **47.** How many metacarpals are present in hands
- a) 14
- b) 5
- c) 8
- d) None of these
- **48.** How many phalanges are present in hands.
- a) 14
- b) 5
- c) 8
- d) None of these
- **49.** .....Is start from pelvic girdle to knee.
- a) Tibia

- b) Fibula
- c) Femur
- d) Radius
- 50. .....Is attached to the nearest to medial line.
- a) Fibula
- b) Tibia
- c) Both A & B
- d) None of these
- **51.** ..... is away from medial line.
- a) Fibula
- b) Tibia
- c) Both A & B
- d) None of these
- **52.** .....is large bone and bear whole of the weight.
- a) Fibula
- b) Tibia
- c) Both A & B
- d) None of these
- **53.** .....is small it is attach to muscles.
- a) Fibula
- b) Tibia
- c) Both A & B
- d) None of these
- 54. ..... also called knee cap.
- a) Fibula
- b) Tibia
- c) Patella
- d) None of these
- 55. .....connects femur and tibia its bone is somewhat like triangular shape or sesamoid bone.
- a) Fibula
- b) Tibia
- c) Patella
- d) None of these
- 56. There are 14 phalanges in
- a) Hands
- b) Foot
- c) Both a & b
- d) None of these
- 57. There are.....bones in vertebral column.
- a) 44
- b) 22
- c) 25
- d) 33
- 58. Bones of vertebral column are classified in......different regions.
- a) 6
- b) 4
- c) 5
- d) 3
- **59.** There are..... bones in cervical region
- a) 5
- b) 7
- c) 4
- d) 12
- 60. There are ...... bones in thoracic region
- a) 5

- b) 7
- c) 4
- d) 12
- **61.** There are .....bones in lumbar region.
- a) 5
- b) 7
- c) 4
- d) 12

#### 62. Number of bones in sacrum region is

- a) 5
- b) 7
- c) 4
- d) 12
- 63. Number of bones in coccyx region is
- a) 5
- b) 7
- c) 4
- d) 12
- 64. Coxal bone consists of
- a) 2 parts
- b) 3 parts
- c) 4 parts
- d) None of these
- 65. Digestive system consist of long muscular tube called
- a) Gastrointestinal tract
- b) Alementary canal
- c) Both a & b
- d) None of these
- 66. Which one of the following is not an accessory organ of digestive system
- a) Pacrease
- b) Liver
- c) Gall bladder
- d) Stomach
- 67. Which one of the following is not a gland of oral cavity
- a) Parotid gland
- b) Submandibular gland
- c) Sublingual gland
- d) Adrenal gland
- 68. Length of pharynx ranges from
- a) 2-3inches
- b) 7-8inches
- c) 5-6inches
- d) 1-2 inches
- 69. Pharynx consists of
- a) 2 parts
- b) 3 parts
- c) 5 parts
- d) 4 parts
- 70. Length of esophagus is
- a) 20cm
- b) 15cm
- c) 25cm
- d) 12cm
- 71. ....lies in median plate in thorax, infront of the vertebral column, behind the trachea.
- a) Pharynx

- b) Bronchioles
- c) Oral cavity
- d) Esophagus
- **72.** .....starts from pharynx and end in stomach.
- a) larynx
- b) Bronchioles
- c) Oral cavity
- d) Esophagus

73. .....like a muscular bag that connects above to the lower end of esophagus and below the duodenum.

- a) liver
- b) Oral cavity
- c) Esophagus
- d) stomach
- **74.** Length of stomach is
- a) 8inches
- b) 15inches
- c) 10inches
- d) 14inches
- **75.** .....extends from the stomach to ileocaecal junction.
- a) Oral cavity
- b) Small intestine
- c) Large intestine
- d) Esophagus
- **76.** The length of the small intestine is about...... in male.
- a) 7.1
- b) 6.2
- c) 6.9
- d) 5
- 77. The length of the small intestine is about ...... in female.
- a) 7.1
- b) 6.2
- c) 6.9
- d) 5
- 78. Small intestine is divided into...... Parts.
- a) 4
- b) 2
- c) 1
- d) 3
- 79. The length of the deudenum is about
- a) 2.5-3.8m
- b) 2.5
- c) 2-4m
- d) None of these
- 80. The length of the jejunum is about
- a) 2.5-3.8m
- b) 2.5m
- c) 2-4m
- d) None of these
- 81. the length of the ileum is about
- a) 2.5-3.8m
- b) 2.5
- c) 2-4m
- d) None of these
- 82. Mucous membrane of small intestine has microscopic finger like projection called..
- a) Duodenum

- b) Jejunum
- c) lleum
- d) Villi
- 83. Length of large intestine is about
- a) 2.5m
- b) 6m
- c) 1.5m
- d) 3m

84. Which one of the following is not a part of large intestine.

- a) Cecum
- b) Colon
- c) Rectum
- d) lleum
- **85.** .....is upper prominent part of windpipe and opens into the trachea.
- a) Larynx
- b) Pharynx
- c) Nose
- d) None of these
- 86. ......Attached to the top of the thyroid cartilage &it helps to close off the larynx during swallowing.
- a) Pharynx
- b) Bronchioles
- c) Trachea
- d) Epiglottis
- 87. .....lies inside the larynx.
- a) brochioles
- b) Pharynx
- c) Nasal cavity
- d) Vocal cords
- 88. Length of trachea is about.
- a) 6cm
- b) 5cm
- c) 10cm
- **89.** ...... are formed by the bifurcation of the trachea at the level of 5<sup>th</sup>vertebrae.
- a) Pharynx
- b) Larynx
- c) Bronchi
- d) None of these
- **90.** .....divide into alveoli.
- a) Pharynx
- b) Larynx
- c) Bronchioles
- d) None of these
- **91.** Millions of...... are present in respiratory system and these are in close contact with capillaries, where blood comes into almost in direct contact with air.
- a) Pharynx
- b) alveoli
- c) Larynx
- d) Bronchioles
- 92. .....is basic structural & functional unit of kidney.
- a) Neuron
- b) Alveoli
- c) Nephron
- d) Both a & c
- **93.** .....are pair of excretory organs situated on the posterior abdominal wall , on each side of the vertebral column behind the peritoneum.

- a) Heart
- b) Stomach
- c) Small intestine
- d) Kidney
- **94.** .....are located mainly in the lumbar region.
- a) Heart
- b) Lungs
- c) kidney
- d) Esophagus
- 95. The outer zone of kidney is called
- a) Medulla
- b) Cortex
- c) Pyramid
- d) Both a & b
- 96. The inner zone kidney is called
- a) Medulla
- b) Cortex
- c) Pyramid
- d) Both a & b
- 97. .....contain straight collecting tubes.
- a) Medulla
- b) cortex
- c) Pyramid
- d) Both a & b
- **98.** .....is the basic structural and functional unit of the kidney capable of forming urine.
- a) Neuron
- b) Alveoli
- c) Nephron
- d) Both a & c
- 99. Number of nephrons inBoth kidney is about.
- a) 6 million
- b) 5million
- c) 1million
- d) 2.4million
- **100.** Which one of the following is not a part of nephron.
- a) Bowmans capsule
- b) Glomerulus
- c) Distal convulated tubules
- d) ureter
- **101.** ..... Convey the urine from from kidney to bladder.
- a) Urethra
- b) Ureters
- c) Both a & b
- d) None of these
- 102. Weight of heart is about .....in male
- a) 400g
- b) 600g
- c) 250g
- d) 300g
- 103. Weight of heart is about.....in female.
- a) 250g
- b) 300g
- c) 600g
- d) 400g
- 104. .....lies in the thorax, behind the sternum and between two lungs.

- a) Pharynx
- b) Larynx
- c) Heart
- d) None of these
- **105.** Which one of the following layer provide outer covering to the heart
- a) Myocardium
- b) Endocardium
- c) Epicardium
- d) None of these
- **106.** .....is tough double layered membrane which covers the heart, between them fluid is present to lubricate the heart.
- a) Pericardium
- b) Endocardium
- c) Myocardium
- d) Both a & c
- 107. There are.....chambers of heart.
- a) 3
- b) 2
- c) 4
- d) 1
- 108. Tricuspid valve is present between
- a) the left atrium and left ventricle
- b) the right atrium and right ventricle
- c) right ventricle and pulmonary artery
- d) left ventricle and aorta
- **109.** Bicuspid valve is present between
- a) the left atrium and left ventricle
- b) the right atrium and right ventricle
- c) right ventricle and pulmonary artery
- d) left ventricle and aorta
- 110. Aortic valve is present between
- a) the left atrium and left ventricle
- b) the right atrium and right ventricle
- c) right ventricle and pulmonary artery

#### d) left ventricle and aorta

- 111. Pulmonary valve is present between
- a) the left atrium and left ventricle
- b) the right atrium and right ventricle
- c) right ventricle and pulmonary artery
- d) left ventricle and aorta
- 112. Which one the following is semilunar valve
- a) bicuspid valve
- b) tricuspid valve
- c) aortic valve
- d) none of these
- 113. ....is largest artery
- a) Capillaries
- b) Aorta
- c) Arterioles
- d) None of these
- **114.** .....distribute oxygenated blood to all parts of body.
- a) Veins
- b) Venules
- c) Aorta
- d) None of these

- a) Venules
- b) Veins
- c) Aorta
- d) Arterioles

**116.** ..... is diffuse networks of blood vessels which connects arterioles with the venules.

- a) Arteries
- b) Veins
- c) Capillaries
- d) None of these
- **117.** .....carry deoxygenated blood towards the heart.
- a) Arteries
- b) Arterioles
- c) veins
- d) none of these

**118.** .....is a narrow fibromuscular that conducts urine & semen from the bladder.

- a) Seminal vesicle
- b) Prostate gland
- c) Urethra
- d) scrotum

**119.** .....mass made up of highly coiled tubes that store the spermatozoa.

- a) Epidydimis
- b) Scrotum
- c) Seminal vesicle
- d) None of these

**120.** .....are the female gonads.

- a) Uterine tubes
- b) Uterus
- c) Ovaries
- d) None of these
- 121. Weight of ovary is about
- a) 3g
- b) 4-8g
- c) 10g
- d) None of these
- 122. .....protects & provide nutrients to a fertilized ovum.
- a) uterine tube
- b) uterus
- c) ovaries
- d) none of these

123. .....deals with body function.

- a) Anatomy
- b) Physiology
- c) Histology
- d) Embryology

**124**. Physiology is a combination of two.....words.

- a) Italian
- b) Greek
- c) Latin
- d) None of these

### CHAPTER# 02

CEI

125. Cell consists of..... of water.

- a) 25-50%
- b) 20-25%
- c) 90%
- d) 65-80%
- 126. Thickness of cell membrane is
- a) 6-7nm
- b) 8-10nm
- c) 5nm
- d) 4nm

**127.** .....is lipid bilayer in nature in which carbohydrates are sandwich and proteins are also emended in it.

- a) Cytoplasm
- b) Nucleus
- c) Microtubules

#### d) Cell membrane

128. Some carbohydrates in .....are helpful for binding of hormones. (Insulin)

- a) Cytoplasm
- b) Nucleus
- c) Microtubules
- d) Cell membrane

129. Water soluble substances are transported by attaching to the cell membrane\_\_\_\_\_

- a) Phospholipids
- b) Lipids
- c) Proteins
- d) Both a & b
- **130.** ..... is the zone of cytoplasm near to the nucleus.
- a) Ectoplasm
- b) Endoplasm
- c) Both a & b
- d) None of these
- **131.** .....is synthesized by ribosome.
- a) Lipids
- b) Carbohydrates
- c) Proteins
- d) Both a & b
- **132.** .....play a major role in glycogen metabolism.
- a) Rough endoplasmic reticulum
- b) Smooth endoplasmic reticulum
- c) Both a & b
- d) Nucleus
- **133.** .....helps in detoxification of various toxins and alcohol.
- a) Rough endoplasmic reticulum
- b) Smooth endoplasmic reticulum
- c) Both a & b
- 134. Nucleus Which one of the following is a non-membranous organelle
- a) Mitochondria
- b) Golgi apparatus
- c) Ribosomes
- d) Both a & b

#### **135.** There are...... Types of ribosomes are depending upon its functions.

- a) Three
- b) Two
- c) Four
- d) None of these
- 136. Formation of Messenger RNA from DNA is called as

#### a) transcription

- b) translation
- c) both a & b
- d) none of these
- **137.** .....is responsible for packaging and lysosomes formation.
- a) Ribosomes
- b) Endoplasmic reticulum
- c) Nucleus

#### d) Golgi apparatus

- 138. ..... modifies N-oligosaccharides.
- a) Ribosomes
- b) Endoplasmic reticulum
- c) Nucleus
- d) Golgi apparatus

**139.** Which one of the following organelle is called power house of the cell.

- a) Ribosomes
- b) Endoplasmic reticulum
- c) mitochondria
- d) Golgi apparatus

140. .....controls the cell division.

- a) Ribosomes
- b) Endoplasmic reticulum
- c) Nucleus
- d) Golgi apparatus
- 141. ..... is a control center of cell.
- a) Ribosomes
- b) Endoplasmic reticulum
- c) Nucleus
- d) Golgi apparatus
- 142. ..... made by Nucleus membrane, Nucleus plasma, Chromosomes and Nucleolus.
- a) Ribosomes
- b) Endoplasmic reticulum
- c) Nucleus
- d) Golgi apparatus

## TISSUES

143. ..... is characterized by the presence of relatively few cells but a large amount of inter cellular substance

- a) Epithelium
- b) Connective tissue
- c) Muscular tissue
- d) Nervous tissue
- 144. Fibroblast, histiocytes, plasma cells, mast cells and fat cells constitute the common types of
- a) Epithelium
- b) Connective tissue
- c) Muscular tissue
- d) Nervous tissue

145. Which one of the following is not a type of connective tissue fibers

- a) Collagenous fibers
- b) Reticular fibers
- c) Elastic fibers
- d) Fibroblast

146. Ground substances of connective tissues are composed of

- a) Proteoglycans
- b) Water
- c) Glycoproteins
- d) All of these

147. .....group of tissues is found covering the body and lining cavities and tubes.

- a) Epithelium
- b) Connective tissue
- c) Muscular tissue
- d) Nervous tissue

148. .....consists of a single layer of identical cells.

- a) Stratified epithelium
- b) Simple epithelium
- c) Both a & b
- d) None of these

# BONES

#### 149. Bone is a type of

- a) Epithelium
- b) Connective tissue
- c) Muscular tissue
- d) Nervous tissue
- **150.** .....components of bone matrix is responsible for hardness of bone tissue and constitutes about 65% of the dry weight of the bone.
- a) Organic components
- b) Inorganic components
- c) Both a & b
- d) None of these
- **151.** In..... which the bone substance is in the form of slender Spicules and traveculae separated from each other by numerous interconnecting cavities.

#### a) Spongy bone

- b) Compact bone
- c) Both a & b
- d) None of these

**152.** In long bones the ends (epiphyses) are composed of..... covered by a thin shell of compact bone.

- a) Spongy bone
- b) Compact bone
- c) Both a & b
- d) None of these
- 153. In long bones the shaft (diaphysis) consists almost entirely of
- a) Spongy bone
- b) Compact bone
- c) Both a & b
- d) None of these
- **154.** Which one of the following is not a long bone?
- a) Femur
- b) Tibia
- c) Carpals
- d) Fibula
- 155. Which one of the following is an example of flat bones?
- a) Femur
- b) Tibia
- c) Carpals
- d) Ribs
- **156.** .....consist of a core of spongy bone completely covered by a layer of compact bone.
- a) Long bones
- b) Short bones
- c) Both a & b
- d) None of these
- 157. Which one of the following is an example of sesamoid bones?
- a) Tibia
- b) Carpals
- c) Ribs
- d) Patella
- **158.** Bone matrix is arranged as layers or lamellae ranging from..... in thickness.
- a) 3 to 7 μm
- b) 2-3 μm

- c) 1 μm d) 8-10 μm

## JOINTS

**159.** There are.....types of joints.

- a) Two
- b) Three
- c) Four
- d) Five

**160.** Which one of the following immovable joints have fibrous tissue between the bones.

- a) Fibrous joints
- b) Cavitated joints
- c) Cartilaginous joints
- d) None of these
- **161.** Which one of the following joints has Pad of fibro cartilage between the ends of the bones?
- a) Fibrous joints
- b) Cavitated joints
- c) Cartilaginous joints
- d) None of these
- 162. Which one of the following is an example of hinge joints.
- a) Elbow
- b) knee
- c) ankle
- d) all of these

**163.** Which one of the following is an example of gliding joints?

- a) Joints between tarsals bones
- b) Shoulder joints
- c) Atlas joints
- d) None of these

164. Which one of the following joints allows Movement around one axis.

- a) Hinge joints
- b) Gliding joints
- c) Ball & socket joints
- d) Pivot joints

## LYMPHATIC SYSTEM

- **165.** .....is a fluid containing white blood cells, which bathes the tissues and drains through the lymphatic system into the bloodstream?
- a) Plasma
- b) Serum
- c) Lymph
- d) None of these
- **166.** .....flow serves as an important route for intestinal fat absorption.
- a) Plasma
- b) Serum
- c) Lymph
- d) None of these
- **167.** Which one of the following contain a lower percentage of proteins.
- a) Plasma
- b) Lymph
- c) Both a & b
- d) None of these
- **168.** ..... serve as an important function in the absorption of fats and other nutrients.
- a) Plasma
- b) Serum
- c) Lacteals
- d) None of these
- **169.** Which one of the following is a function of lymph nodes.
- a) Filtration
- b) Phagocytosis
- c) Hematopoiesis
- d) All of these

### CHAPTER#03

# BLOOD

### COMPOSITION OF BLOOD

170. Which one of the following is a non cellular part of blood

- a) RBC's
- b) WBC's
- c) Platelets
- d) Plasma
- 171. Cellular part of blood consists of.....
- a) 55%
- b) 66%
- c) 10%
- d) 45%
- 172. Percentage of plasma consist of solid part
- a) 9%
- b) 91%
- c) 1%
- d) 50%
- 173. Which one of the following is an example of plasma protein?
- a) Urea
- b) Uric acid
- c) Creatinine
- d) Albumin

174. Which one of the following is an example of non-nitrogenous substance?

- a) Glucose
- b) Galactose
- c) Triglyceroids
- d) All of these
- 175. Life span of red blood cells is
- a) 80days
- b) 90days
- c) 120days
- d) 30days
- 176. Erythrocytes are
- a) Nucleated
- b) Non nucleated
- c) Both a & b
- d) None of these
- 177. RBC's count decrease during
- a) Evening
- b) Sleep
- c) Early morning
- d) None of these
- 178. Amount of globin present in hemoglobin is
- a) 100%
- b) 96%
- c) 94%
- d) 98%

#### 179. Which hemoglobin is necessary for hemoglobin synthesis?

- a) Vitamin B12
- b) Vitamin E
- c) Vitamin D
- d) Vitamin A
- **180.** Average volume of blood is
- a) 6L
- b) 5L
- c) 10L
- d) 11L
- **181.** Normal <sub>p</sub>H of blood is
- a) 7
- b) 8
- c) 7.4
- d) 9
- 182. Heme is a
- a) Protein part
- b) Non-protein part
- c) Both a & b
- d) None of these
- **183.** Hb in RBC's combines with..... form carbhemoglobin
- a) O<sub>2</sub>
- <sub>b)</sub> N<sub>2</sub>
- c) CO2
- <sub>d)</sub> Ca
- 184. Which one of the following is non-nucleated cells present in blood
- a) Erythrocytes
- b) Thrombocytes
- c) Both a & b
- d) Leukocytes
- **185.** Blood containing..... is of purple reddish in color
- a) O<sub>2</sub>
- b) CO<sub>2</sub>
- c) N<sub>2</sub>
- d) None of these
- 186. Factors needed for erythropoesis
- a) Proteins
- b) Hormones
- c) Vitamin B12
- d) All of these

## ANEMIA

- **187.** ..... defined as the decreased level of Hb% in the blood below the reference level for the age and sex of the individual.
- a) Hemorrhage
- b) Anemia
- c) Pulse
- d) None of these
- 188. Peptic ulcer is an example of
- a) Acute hemorrhagic anemia
- b) Post hemorrhagic anemia
- c) Both a & b
- d) None of these
- **189.** Which one of the following type of anemia may be due to disturbance of proliferation and maturation of RBC,s.
- a) Aplastic anemia
- b) Iron deficiency anemia
- c) Anemia due to renal failure
- d) Anemia due to endocrine disorders
- 190. Which one of the following drugs may cause aplastic anemia
- a) Chloramphenicol
- b) Sulphonamide
- c) Chlorpheniramine
- d) All of these
- 191. Megaloblastic anemia may caused due to
- a) lack of vit  $B_{12}$
- b) deficiency of folic acid.
- c) Both a & b
- d) None of these
- **192.** .....is the type of anemia in which there is atrophy of gastric mucosa.
- a) Hemorrhagic anemia
- b) Sickle cell anemia
- c) Pernicious anemia
- d) None of these
- **193.** ..... is a type of anemia there is early rupturing of the red blood cells and release of hemoglobin.
- a) Megaloblastic anemia
- b) Hemorrhagic anemia
- c) Pernicious anemia
- d) Hemolytic anemia

194. Which one of the following is not an Intracorpuscular abnormalities

- a) Hereditary spherocytosis
- b) Sickle cell anemia.
- c) Thalassemia.
- d) Erythroblastosis fetalis.

## ERYTHROCYTES SEDIMENTATION RATE

- 195. The rate at which this settling of RBCs occurs is known as.....
- a) Sedimentation
- b) Erythrocytes sedimentation rate
- c) Both a & b
- d) None of these
- 196. Decreased viscosity of RBC,s causes
- a) Decrease in ESR
- b) no effect
- c) increase in ESR
- d) none of these
- 197. Which one of the following factor may cause increase in ESR
- a) Increase in cholesterol
- b) Increase in alpha-globulin
- c) Increase in fibrinogen
- d) All of these
- 198. In old age ESR
- a) Decreases
- b) Increases
- c) No effect
- d) None of these
- 199. Which one of the following pathological conditions causes decrease in ESR
- a) Severe trauma
- b) burns
- c) Septicemia
- d) Cardiac failure

### WHITE BLOOD CELLS

200. .....are developing from red bone marrow, have conspicuous granules in their cytoplasm.

#### a) Granular leukocytes

- b) AGranular leukocytes
- c) Both a & b
- d) None of these

201. .....develop from the lymphoid tissue, cytoplasmic granules are not seen

a) Granular leukocytes

#### b) AGranular leukocytes

- c) Both a & b
- d) None of these

#### 202. Which one of the following plays a role in defense mechanism of body

- a) Platelets
- b) Leukocytes
- c) RBC'S

#### d) Both a & b

203. Which one of the following is granulocyte?

- a) Neutrophills
- b) Monocytes
- c) Basophiles
- d) Both a & c

204. Which one of the following is agranulocytes

- a) Neutrophills
- b) Monocytes
- c) Basophiles
- d) Both a & b
- 205. Average WBC's present in the body is
- a) 7000/mm<sup>3</sup>
- b) 8000/mm<sup>3</sup>
- c) 9000/mm<sup>3</sup>
- d) 10,000/mm<sup>3</sup>
- 206. Life span of monocytes
- a) 2hours
- b) 1hour
- c) 3hour
- d) 10-12hours
- 207. Lymphocytes and plasma cells are produced in
- a) Spleen
- b) Thymus
- c) Tonsils
- d) All of these

### PLATELETS

#### 208. Platelets are

- a) Regular shape
- b) Irregular shape
- c) Concave shape
- d) None of these
- 209. Life span of platelets is
- a) 2-3 days
- b) 6-10 days
- c) 4-9 days
- d) 8 days
- 210. Platelets normal count in blood is between
- a) 100,000/cumm
- b) 150,000 to 300,000/cumm
- c) 50,000/cumm
- d) None of these
- 211. Which one of the following is a first step in hemostasis
- a) Clotting of blood.
- b) Platelet aggregation
- c) Platelet adhesion
- d) None of these
- 212. Which one of the following is an Indications for Platelets Transfusion
- a) Thrombocytopenia
- b) Platelets count below 40,000.
- c) Platelet dysfunction
- d) All of these

## BLOOD COAGULATION

#### 213. Prothrombin helps in

- a) Fightening againt disease
- b) Giving red color to blood
- c) Hormone regulations

#### d) Blood clotting

- 214. Fibrinogen helps in
- a) fighting against diseases
- b) giving red color to blood

#### c) blood clotting

- d) hormones regulations
- 215. Essential element for blood clotting is
- a) chloride
- b) calcium
- c) sulphate
- d) phosphate
- **216.** Which of the following is a co factor?
- a) XII
- b) X
- c) VIII
- d) VII

#### 217. Coagulation factor III is

- a) Fibrinogen
- b) Fibrin
- c) Thromboplastin
- d) Antihemophilic factor
- 218. Coagulation factor XII is
- a) Fibrinogen
- b) Staurt power factor
- c) FSF

#### d) Hageman factor

- 219. Which one of the following is vitamin k dependent factor
- a) II
- b) VII
- c) IX

#### d) All of these

- 220. Which one of the following factor prevent coagulation?
- a) Addition of thrombin
- b) Addition of calcium chloride
- c) Warmth
- d) Addition of heparin

## BLOOD GROUPS

- 221. The universal donor for ABO Blood system are type
- a) A
- b) B
- c) O
- d) AB

222. If blood group of a person is A then antibodies present in that person blood is

- a) Anti-A- antibodies
- b) Anti-B-antibodies
- c) Anti-AB- antibodies
- d) None of these
- 223. Clumping of cells is known as
- a) Clotting
- b) Agglutination
- c) Mutation
- d) None of these
- 224. Person having antigen B on the surface of RBC's has
- a) Blood group B
- b) Blood group A
- c) Blood group AB
- d) Blood group O
- 225. People have blood group O can receive blood from who?
- a) A, B AND O
- b) A
- c) B
- d) O
- 226. These are foreign substances which can elicit an immunological response
- a) Antibodies
- b) Agglutinins
- c) Antigens
- d) Agglutinogen
- **227.** ..... refers to the combination of different genes
- a) Phenotype
- b) Genotype
- c) Both a & b
- d) None of these
- 228. Genotype OA or AA produces
- a) Agglutinogen A
- b) Agglutinogen B
- c) Agglutinogen A and B
- d) NO Agglutinogen

### CHAPTER#04

## CARDIOVASCULAR SYSTEM

- **229.** \_\_\_\_\_ is the ability of cell to undergo depolarization.
- a) Contractibility
- b) Refractory period
- c) Conductivity

#### d) Rhythmicity

- 230. Cardiac muscle fibers don't contract if the stimulus is:
- a) Normal
- b) Above threshold
- c) Sub threshold
- d) Both a & c
- 231. Cardiac muscles contract in the presence of:
- a) Ca<sup>++</sup>
- b) ATP
- c) N<sub>2</sub>

#### d) Both a & b

- **232.** There are \_\_\_\_\_ stages of cardiac cycle:
- a) 7
- b) 4
- c) 8
- d) 10
- **233.** Cardiac cycle occurs in\_\_\_\_\_:
- a) 0.303sec
- b) 0.8sec
- c) 0.495sec
- d) None of these
- **234.** Heart sounds can be heard discovered by:
- a) Wigger
- b) Lenic
- c) Frank starling
- d) None of these
- 235. "LUB" sound peaks at \_\_\_\_\_ phase of cardiac cycle:
- a) Protodiastole
- b) Atrial systole
- c) Maximum ejection period
- d) Reduced ejection period
- **236.** Second heart sound produced due to closure of \_\_\_\_\_ valves:
- a) Semilunar
- b) A-V valve
- c) Aortic & pulmonary
- d) Both a & c

**237.** When there is excessive turbulence of blood flow in the heart chamber which heart sound is produced:

- a) First
- b) Second
- c) Murmur
- d) None of these

**238.** \_\_\_\_\_\_ is caused by potentials generated when ventricles depolarized prior to contraction:

- a) P wave
- b) QRS complex
- c) T wave

- d) None of these
- 239. T wave represents:
- a) Atrial depolarization
- b) Ventricle depolarization
- c) Ventricle repolarization
- d) None of these
- 240. Voltage generated by T wave is:
- a) 0.1-0.3 mV
- b) 0.2-0.3 mV
- c) 1 mV
- d) None of these
- 241. Duration of QT interval is:
- a) 0.08-0.10sec
- b) 0.12-0.20sec
- c) 0.32sec
- d) 0.40-0.43sec
- 242. Normal blood pressure in elderly age is:
- a) 80-90mmHg
- b) 140-150mmHg
- c) 110-120mmHg
- d) 90-110mmHg
- 243. Light exercise \_\_\_\_\_\_ the diastolic blood pressure:
- a) Increase
- b) Decrease
- c) Normal
- d) None of these
- 244. \_\_\_\_\_\_\_ is the volume of blood pumped per unit time by R ventricle & L ventricle:
- a) Stroke volume
- b) Heart rate
- c) Cardiac output
- d) Both a & c
- 245. Which one of the following factor affecting stroke volume:
- a) Heart size
- b) Contractibility
- c) Preload
- d) All of these
- 246. The number of contraction of cardiac ventricles per unit time is called:
- a) Cardiac output
- b) Pulse rate
- c) Stroke volume
- d) Heart rate
- 247. In hypertension stages systolic B.P is:
- a) 120-139mmHg
- b) 140-159mmHg
- c) 160 or higher
- d) Both b & c
- 248. Complete loss of blood is called:
- a) Desanguination
- b) Ischemia
- c) Exsanguinations
- d) Infraction
- **249.** Diameter of capillaries are:
- a) 18mm
- b) 5µm
- c) 30mm

- d) None of these
- **250.** Tunica externa is made up of:
- a) Smooth muscles
- b) Endothelial muscles
- c) Elastin & Collagen
- d) None of these
- **251.** Which one of the following layer consist of smooth muscles:
- a) Tunica externa
- b) Tunica media
- c) Tunica interna
- d) None of these

CHAPTER#05

## RESPIRATORY SYSTEM

**252.** Which one of the following structure is associated with lower respiratory tract:

- a) Larynx
- b) Pharynx
- c) Trachea
- d) Both a & c

**253.** Which one of the following is expiratory muscle:

- a) External intercostals
- b) Internal itercostals
- c) Pectoralis minor
- d) Diaphragm

254. Which one of the following are inspiratory principal muscles:

- a) Pectoralis minor
- b) Diaphragm
- c) External intercostals
- d) Both b & c

**255.** Which one of the following is accessory muscle:

#### a) Pectoralis minor

- b) Diaphragm
- c) External intercostals
- d) Internal intercostals
- 256. During exhalation, diaphragm:
- a) Contract
- b) Relaxes
- c) Both a & b
- d) None of these
- **257.** During \_\_\_\_\_\_ rib cage gets smaller as rib muscles relax:
- a) Inhalation
- b) Exhalation
- c) Both a & b
- d) None of these
- **258.** There is \_\_\_\_\_\_ intra thoracic pressure during inspiration:
- a) Increase
- b) Decrease
- c) Both a&b
- d) None of these
- **259.** Vital capacity of lungs is:
- a) 1100ml
- b) 3000ml
- c) 3500ml

#### d) 4600ml

**260.** \_\_\_\_\_\_ is the volume of air still remaining in lungs after a forceful expiration:

- a) Tidal volume
- b) Residual volume
- c) Vital capacity
- d) Inspiratory capacity
- **261.** \_\_\_\_\_\_ is very useful test for diagnosis of Emphysema & Asthma:
- a) MRV

- b) ERV
- c) FEV1
- d) RV
- **262.** In athletes & swimmers vital capacity is\_\_\_\_\_:
- a) Decrease
- b) Increase
- c) Both a & b
- d) None of these

**263.** Functional residual capacity is equal to:

- a) TV+IRV+ERV
- b) TV+ Respiratory volume
- c) TV+IRV+ERV+RV
- d) ERV+RV
- **264.** Normal rate of respiration in one minute is:
- a) 15
- b) 10
- c) 12
- d) 09
- 265. Value of inspiratory reserve volume is:
- a) 4.6L
- b) 3.5L
- c) 5.8L
- d) 3L
- **266.** PO<sub>2</sub> of venous blood entering the capillary is an average:
- a) 23mmHg
- b) 104mmHg
- c) 40mmHg
- d) 64mmHg
- **267.** PCO<sub>2</sub> in alveolus is:
- a) 45mmHg
- b) 104mmHg
- c) 40mmHg
- d) 64mmHg

**268.** Which one of the following is an example of effectors of respiratory control system:

- a) Brain stem
- b) Pulmonary receptors
- c) Diaphragm
- d) Cortex

**269.** Which one of the following CO<sub>2</sub> has more potent effect on chemo sensitive area:

- a) CSF
- b) Blood
- c) ECF
- d) All of these
- **270.** Which one of the following effect primarily the rate of respiration:
- a) CO<sub>2</sub>
- b) H⁺
- c) HCO<sub>3</sub>
- d) None of these
- **271.** \_\_\_\_\_ center is situated in lower pons:
- a) Pneumotaxic
- b) Apneustic
- c) Both a & b
- d) None of these
- **272.** \_\_\_\_\_ provides powerful expiratory force during expiration:
- a) Pneumotaxic

- b) Apneustic
- c) DRGN
- d) VRGN

**273.** Stimulation of \_\_\_\_\_\_ area of brain prolongs the period of inspiration:

- a) Pneumotaxic
- b) Apneustic
- c) DRGN
- d) VRGN

**274.** When ramp signals are weak in dorsal inspiratory areas then inspiration last as long as \_\_\_\_\_:

- a) 0.5sec
- b) 5sec
- c) 3sec
- d) 2sec

**275.** Dorsal respiratory group of neurons is located in \_\_\_\_\_ portion of medulla oblongata:

- a) Lateral
- b) Dorsal
- c) Ventral
- d) Ventro-lateral
- **276.** \_\_\_\_\_\_ of CO<sub>2</sub> transported in plasma in bicarbonate form:
- a) 7%
- b) 23%
- c) 97%
- d) 70%
- **277.** Percentage of  $O_2$  by being dissolved in plasma:
- a) 97%
- b) 7%
- c) 23%
- d) 3%
- **278.** The \_\_\_\_\_\_ surface area lower the diffusion of gases:
- a) Greater
- b) Smaller
- c) Moderate
- d) Both a&c
- **279.** Diffusion of O<sub>2</sub> through respiratory membrane is \_\_\_\_\_ rapid as nitrogen:
- a) Same
- b) Trice
- c) Twice
- d) None of these
- **280.** If greater the thickness of respiratory membrane then diffusion of gases would be:
- a) Higher
- b) Lower
- c) Normal
- d) Both a & c
- **281.** All neurons are inspiratory type in \_\_\_\_\_ group:
- a) Ventral
- b) Dorsal
- c) Both a & b
- d) Dorsal
- **282.** Combination of hemoglobin with CO<sub>2</sub> is \_\_\_\_\_ reaction:
- a) Irreversible
- b) Reversible
- c) Both a & b
- d) None of these
- **283.** Deoxygenated blood contains total \_\_\_\_\_ of CO<sub>2</sub>:
- a) 1.4ml

- b) 0.3ml
- c) 4ml
- d) 2.7ml
- **284.** RBCs contains \_\_\_\_\_ of water:
- a) 70%
- b) 65%
- c) 30%
- d) 90%

### CHAPTER#06

# SKIN

- **285.** Which one of the following is the largest body organ:
- a) Heart
- b) Liver
- c) Skin
- d) Lungs
- **286.** Which one the following is not present in epidermis:
- a) Sebaceous glands
- b) Adipose tissues
- c) Both a & b
- d) None of these
- **287.** \_\_\_\_\_\_ is called true skin
- a) Epidermis
- b) Hypodermis
- c) Conium
- d) Both a & b

**288.** Dermis is a sheet of connective tissue that supports the \_\_\_\_\_:

- a) Hypodermis
- b) Epidermis
- c) Both a & b
- d) None of these
- 289. \_\_\_\_\_ is thicker than epidermis:

#### a) Dermis

- b) Hypodermis
- c) Both a & b
- d) None of these
- **290.** The mechanical strength of skin is in\_\_\_\_\_:
- a) Hypodermis
- b) Epidermis
- c) Dermis
- d) All of these
- **291.** Basic structure of \_\_\_\_\_\_ is a dense network of criss-crossing proteins fibers embedded in a mass of firm jelly:
- a) Epidermis
- b) Hypodermis
- c) Dermis
- d) None of these
- **292.** The\_\_\_\_\_\_ layer of the skin contains an acid mantile layer which limits the amount of substances entering through the skin that effect the body to a minor degree:
- a) Dermis
- b) Hypodermis
- c) Epidermis
- d) None of these
- **293.** The skin produces \_\_\_\_\_\_ in the presence of sunlight:
- a) Vit E
- b) Vit A
- c) Vit C
- d) Vit D
- **294.** The\_\_\_\_\_\_ glands excretes oil to lubricate and maintain the health of the skin:
- a) Sweet

#### 37

#### b) Sebaceous

- c) Endocrine
- d) All of these

**295.** Some\_\_\_\_\_\_ or more of this transfer of heat occur through skin:

- a) 20%
- b) 30%
- c) 80%
- d) 10%

**296.** \_\_\_\_\_ By the skin is controlled by a negative-feedback loop:

- a) Heat gain
- b) Heat loss
- c) Both a & b
- d) All of these

# GASTROINTESTINAL TRACT

**297.** Bile salts & \_\_\_\_\_\_ inhibit bacterial growth in small intestine:

- a) IgM
- b) IgG
- c) IgA
- d) None of these
- **298.** Gall bladder store bile enter it by the way of \_\_\_\_\_\_ ducts:
- a) Hepatic
- b) Pancreatic
- c) Cystic

### d) Both a & c

**299.** Concentration of bile salts in gall bladder is:

- a) 0.1mg/dl
- b) 1.1gm/dl
- c) 0.6gm/dl
- d) 6mg/dl
- 300. Which one of the following enzyme is involved in carbohydrates digestion?
- a) Elastase
- b) Trypsin
- c) Amylase
- d) Lipase
- **301.** Nature of pancreatic juice is:
- a) Acidic
- b) Alkaline
- c) Neutral
- d) Both a & c

**302.** Parietal cells are present in which region of gastric glands:

- a) Isthmus
- b) Neck
- c) Pit
- d) Base

303. From micelles monoglycerides enter the mucosal cells by:

- a) Active transport
- b) Osmosis
- c) Simple diffusion
- d) Passive diffusion
- **304.** If the substrate is wax then which one of the following is end product:
- a) Fatty acid, cholesterol
- b) Fatty acid, Monohydric alcohol
- c) Alcohol, Phosphate
- d)  $\beta$ -monoglycerides
- **305.** Most of the fat digestion occur in the presence of:
- a) Mouth
- b) Stomach
- c) Small intestine
- d) Large intestine
- **306.** Digestion of peptones occur in the presence of:
- a) Peptidases

- b) Amylases
- c) Lipases
- d) Trypsin

**307.** Pepsin works best if the pH of medium is \_\_\_\_\_:

- a) 7
- b) 3
- c) 8.2
- d) 5

**308.** Which one of the following is incorrect regarding the secretion of pancreas:

- a) Contains Elastases
- b) Involves in protein digestion
- c) Contain SO<sub>4</sub>

### d) Contain bilirubin

**309.** Which one of the following is not the movement of small intestine:

- a) Propulsive
- b) Peristalsis
- c) Segment contraction

### d) Haustration

**310.** How much time is required for the passage of chyme from pylorus to illeocecal valve:

- a) 45-48h
- b) 8-10sec
- c) 1h
- d) 5h

**311.** When food enter the stomach vegal tone causes the \_\_\_\_\_ in muscular tone:

- a) Increase
- b) Decrease
- c) Normalize
- d) No effect

**312.** Which one of the following is outermost layer of GIT:

- a) Sub mucosa
- b) Mucosa
- c) Muscularis
- d) Adventitia

**313.** Which one of the following is involuntary stage of swallowing:

- a) Buccal stage
- b) Oral stage
- c) Esophageal stage
- d) None of these

**314.** In which stage of swallowing gravity plays an important role:

- a) Buccal stage
- b) Pharyngeal stage
- c) Esophageal stage
- d) None of these

# URINARY SYSTEM

- 315. Chemical nature of urine is
- a) Alkaline
- b) Acidic
- c) Both a & b
- d) None of these
- **316.** When (ADH) is present in..... concentrations, the kidneys excrete a small volume of concentrated urine.
- a) Low
- b) High
- c) Both a & b
- d) None of these
- 317. The formation of urine that is concentrated is termed as
- a) hypo-osmotic to plasma
- b) isotonic to plasma
- c) hyperosmotic to plasma
- d) all of these
- 318. Kidneys are located in
- a) Thoracic region
- b) Cervical region
- c) Lumbar region
- d) Sacral region

319. Which one of the following option is correct according to the length and width of kidney?

- a) 15cm long, 5cm broad
- b) 12cm long, 6cm broad
- c) 10cm long, 5cm broad
- d) 15cm long, 3cm broad
- 320. Weight of kidney in females is
- a) 150gm
- b) 169gm
- c) 125gm
- d) 135gm
- **321.** Inner zone of kidney is called
- a) Cortex
- b) Pyramid
- c) Medulla
- d) Papilla
- **322.** ..... are the nephrons whose glomeruli lie deep in the renal cortex near the medulla.
- a) Cortical nephrons
- b) Juxtamedullary nephrons
- c) Both a & b
- d) None of these
- **323.** Because of high pressure in..... causing filtration of a large portion of plasma out of the glomerulus and into the Bowman's capsule.
- a) Renal tubules
- b) Ureter
- c) Bowmans capsule
- d) Glomerulus

**324.** substances are secreted from plasma directly through the epithelial cells lining the tubulesinto the.....

- a) cappilaries
- b) interstitium
- c) tubular lumen
- d) all of these

### **325.** mean pH of urine is

- a) 7
- b) 8
- c) 6
- d) 4

### **326.** .....contains straight collecting tubules.

- a) Cortex
- b) Pyramid
- c) Medulla
- d) Papilla

## 327. Which one of the following is an organic constituents of urine

- a) Sodium
- b) Chloride
- c) Sulphate

## d) Creatinine

328. Which one of the following is an abnormal constituents of urine

- a) Bilirubin
- b) Urochromogen
- c) Porphyrin

## d) All of these

329. Which one of the following ions follows secondary active secretory transport

- a) Na ions
- b) Ca ions
- c) H ions
- d) All of these
- 330. Weight of kidney in females is
- a) 150gm
- b) 169gm
- c) 125gm
- d) 135gm
- **331.** When it is necessary to rid the body of excess water, the kidneys excrete urine with a..... solute concentration.
- a) Low
- b) High
- c) Both a & b
- d) None of these

**332.** When there is Decreased reabsorption of water in late distal tubule, cortical collecting tubule and In collecting ducts then...... Urine is produced

- a) conentrated
- b) dilute
- c) both a & b
- d) none of these



# NERVE AND MUSCLE

**333.** Ability of muscle tissues to be stretched is called:

- a) Elasticity
- b) Excitability
- c) Extensibility
- d) Both a & b

**334.** Ability of muscle tissue to receive & respond to stimuli is called:

- a) Elasticity
- b) Excitability
- c) Extensibility
- d) Contractibility

### **335.** \_\_\_\_\_\_ tissues enables the body to maintain posture:

- a) Connective tissues
- b) Nervous tissues
- c) Muscle tissue
- d) Both b & c

**336.** Body produced heat by muscle contraction:

- a) 60%
- b) 70%
- c) 90%
- d) 80%

**337.** Which one of the muscle cell has mechanical connection of cells in parallel & can function independently:

### a) Cardiac muscle

- b) Smooth muscle
- c) Skeleton muscle
- d) Both b & c
- 338. Pressure neurons is an example of
- a) Interneuron
- b) Afferent neuron
- c) Efferent neuron
- d) Both a & c
- **339.** Examples of neurons without axons are:
- a) Amacrine cell in retina
- b) Posterior spinal root ganglia
- c) Brain & Spinal cord
- d) None of these

**340.** Type of neurons has only one process which functionally an axon:

- a) Bipolar neurons
- b) Pseudounipolar neurons
- c) Multipolar neurons

### d) Unipolar neurons

**341.** \_\_\_\_\_\_ integrates incoming signals & generates outgoing signals:

- a) Axon
- b) Cell body
- c) Dendrites
- d) Both a & c
- 342. Axons along their course show side branching called:
- a) Axon terminalis

#### b) Axon Collaterals

- c) Terminal buttons
- d) Node of ranvier

343. Axon emerges from cell body at the region termed as \_\_\_\_\_:

- a) Axon terminalis
- b) Axon Collaterals
- c) Axon hillock
- d) Both a & b
- 344. Nerve cell body is destroyed in:
- a) Viral infection
- b) Anoxia
- c) Toxins
- d) All of these

CHAPTER#10

# NERVOUS SYSTEM

345. Which one of the following is an example of monoamines?

- a) Glutamate
- b) Glycine
- c) Gaba
- d) Dopamine

346. Which one of the following is an example of neuropeptides?

- a) Dopamine
- b) Norepinephrine
- c) Endorphin
- d) Glutamate

**347.** The.....is a clear colourless transparent tissue fluid present in the cerebral ventricles, spinal canal and subarachnoid space.

- a) Plasma
- b) Serum
- c) cerebro spinal fluid
- d) gastric fluid
- 348. ..... Is not involved in muscle actioning?
- a) Dopamine
- b) Serotonin
- c) Gaba
- d) All of these

349. Which one of the following is an example of polypeptide?

- a) Dopamine
- b) Norepinephrine
- c) Endorphin
- d) gastrin

350. Which one of the following is an example of Excitatory amino acids?

- a) Glutamate
- b) Glycine
- c) Aspartate
- d) Both a & c

**351.** Neurotransmitters are released by..... into the synaptic cleft that excite or inhibit the post synaptic neuron.

- a) Postsynaptic terminal
- b) the presynaptic terminal
- c) both a & b
- d) none of these
- 352. Which one of the following system accelerates heart?
- a) Parasympathetic system
- b) Sympathetic system
- c) Somatic system
- d) None of these
- **353.** Which one of the following system involved in constriction of bronchioles?
- a) Parasympathetic system
- b) Sympathetic system
- c) Somatic system

- d) None of these
- **354.** ..... cranial nerves involved in wrist and elbow movement.
- a) C5
- b) C2
- c) C6-7
- d) C4-6
- 355. Lumber nerve (L5) Involved in
- a) Knee extension
- b) Foot motion
- c) Knee flexion
- d) Sympathetic tone
- 356. How many spinal nerves are present in peripheral nervous system?
- a) 12
- b) 24
- c) 31
- d) 62

**357.** ..... nerves arise from thoracic and lumbar region.

- a) Parasympathetic nerves
- b) Sympathetic nerves
- c) Both a & b
- d) None of these

358. Which one of the the following is an example of autonomic nerves?

- a) Sympathetic nerves
- b) Parasympathetic nerves
- c) Somatic nerves
- d) Both a & b
- **359.** Thalamus is a part of.....
- a) Fore brain
- b) Mid brain
- c) Hind brain
- d) None of these
- 360. .....controls breathing
- a) Medulla oblongata
- b) Cerebrum
- c) Pons
- d) Both a & c
- **361.** ..... is involved in speech recognition.
- a) Frontal lobe
- b) Temporal lobe
- c) Parietal lobe
- d) Occipital lobe

# SPECIAL SENSES

- **362.** Taste receptors are called
- a) Taste buds
- b) Gustatory receptors
- c) Olfactory receptors
- d) Taste pores
- 363. The muscle responsible for the change of shape of the lens is the
- a) Arrector pili muscle
- b) Orbicularis oculi
- c) Ciliary muscles
- d) Superior rectus muscles
- 364. The layer that contains the photoreceptors is
- a) Iris
- b) Retina
- c) Sclera
- d) Cornea
- 365. The area containing the highest concentration of cones is the
- a) Fovea centralis
- b) Optic disc
- c) Macula lutea
- d) Iris
- 366. The jelly like substance behind the lens of eye is the
- a) Aqueous humor
- b) Cellular body
- c) Ciliary body
- d) Vitreous humor
- 367. Which of the following belongs to the middle ear?
- a) Cochlea
- b) Ossicles
- c) Ampullae
- d) Vestibule
- 368. The sclera does all of the following except
- a) Allow light to enter eye
- b) Protect the eye
- c) Maintain eye shape
- d) None of these
- 369. Which is not a purpose of the secretions of the lacrimal gland?
- a) Cleanse the eye
- b) Provide oils
- c) Kill bacteria
- d) None of these
- 370. Which taste buds detect bitter taste?
- a) Curcumvillate
- b) Filiform
- c) Fungiform
- d) Foliate papillae
- **371.** The nose and the tongue are both for \_\_\_\_\_ reception.

- a) Electrical
- b) Vibratory
- c) Chemical
- d) None of these
- 372. The eye contains
- a) Mechanoreceptors
- b) Photoreceptors
- c) Chemoreceptors
- d) Proprioceptors
- **373.** The nose & taste buds contain
- a) Mechanoreceptors
- b) Photoreceptors
- c) Chemoreceptors
- d) Proprioceptors
- 374. Taste buds are located primarily on the
- a) Upper palate
- b) Tongue
- c) Gums
- d) Turbinate of nose
- 375. The layers of the eyeball are
- a) Sclera
- b) Choroid
- c) Retina
- d) All of above

376. The anterior cavity between the cornea and the lens is filled with a fluid a watery solution called

- a) Aqueous
- b) Vitreous
- c) Optic
- d) Sense

377. The retina contains an oval yellow area with a depression in which there are only cones called

- a) Optic nerve
- b) Fovea centralis
- c) Pupil
- d) None of these
- 378. The fovea centralis is responsible for
- a) Glaucoma
- b) Accommodation
- c) Blindness
- d) Acute vision
- **379.** The ear functions for
- a) Balance
- b) Hearing
- c) Both balance & hearing
- d) None of these
- 380. The auditory canal in the ear is lined with fine hairs and sweat glands that secrete
- a) Aqueous humor
- b) Ear wax
- c) Cochlear fluid
- d) Eustachian fluid
- 381. The small bones located in the middle ear , known collectively as the ossicles, include
- a) Tympanum, oval and round window
- b) Pinna, vestibule and Eustachian
- c) Malleus, incus, and stapes
- d) None of these
- 382. Macula

#### a) A highly sensitive structure in the central portion of the retina

- b) Lines the inner surface of the eyelids
- c) The second major humor of the eye
- d) None of these
- **383.** Colorful part of eye is known as
- a) iris
- b) cornea
- c) pupil
- d) eyeball
- 384. Cells that detect change are known as
- a) white blood cell
- b) sensory cells
- c) eukaryotic cells
- d) stem cells

# ENDOCRINOLOGY

**385.** Organic substances secreted into blood stream to control the metabolic & biological activities called

- a) Neurotransmitters
- b) Enzymes
- c) Hormones
- d) Both a & b
- 386. Endocrine gland secretes
- a) Local hormones
- b) Classical hormones
- c) Both a & b
- d) None of these

#### 387. Which one of the following is the hormone of posterior pituitary?

- a) Thyroid stimulating hormone
- b) ADH
- c) Growth hormone
- d) Both a & b

#### 388. Which one of the following is the hormone of anterior pituitary?

- a) Thyroid stimulating hormone
- b) ADH
- c) Growth hormone

### d) Both a & c

- **389.** Which one of the following is the hormone of adrenal gland?
- a) T3
- b) T4
- c) Calcitonin

### d) Cortisol hormone

- 390. Which one of the following is an amino acid derivative?
- a) Growth hormone
- b) Oxytocin
- c) Dopamine
- d) Both a & b
- **391.** Which one of the following is protein hormone?
- a) GH
- b) Oxytocin
- c) Dopamine
- d) Both a & b
- 392. Which one of the following is polypeptide containing 8 amino acids
- a) GH
- b) OT
- c) Insulin
- d) None of these

#### 393. Testosterone contain

- a) 18 carbon atoms
- b) Both a &b
- c) 19 carbon atom
- d) None of these
- **394.** Insulin is produced by
- a) alpha- cells

- b) beta cells
- c) both a & b
- d) none of these
- 395. Receptors of thyroid hormone are situated in
- a) cytoplasm
- b) cell membrane
- c) nucleus
- d) both a & c

396. Receptors of protein hormone are situated in

- a) cytoplasm
- b) cell membrane
- c) nucleus
- d) both a & b
- 397. Receptors of steroid hormone are situated in

### a) cytoplasm

- b) cell membrane
- c) nucleus
- d) both b & c
- **398.** ..... raises the blood pressure by bringing about...... of arterioles
- a) GH, constriction
- b) GH, dilatation
- c) Oxytocin, constriction
- d) Vasopressin, constriction

#### 399. Estrogen contain

- a) 18 carbon atoms
- b) Both a & c
- c) 19 carbon atoms
- d) None of these
- **400.** Glucagon is secreted by the...... Of the islets of Langerhans of the pancreas:
- a)  $\alpha$ -cells
- b) β-cells
- c) γ-cells
- d) Both a & b