

ANATOMY & PHYSIOLOGY

MCQs

Dendrites

Axon

PHARMACY
TECHNICIAN

1st year

Electrical Impulses



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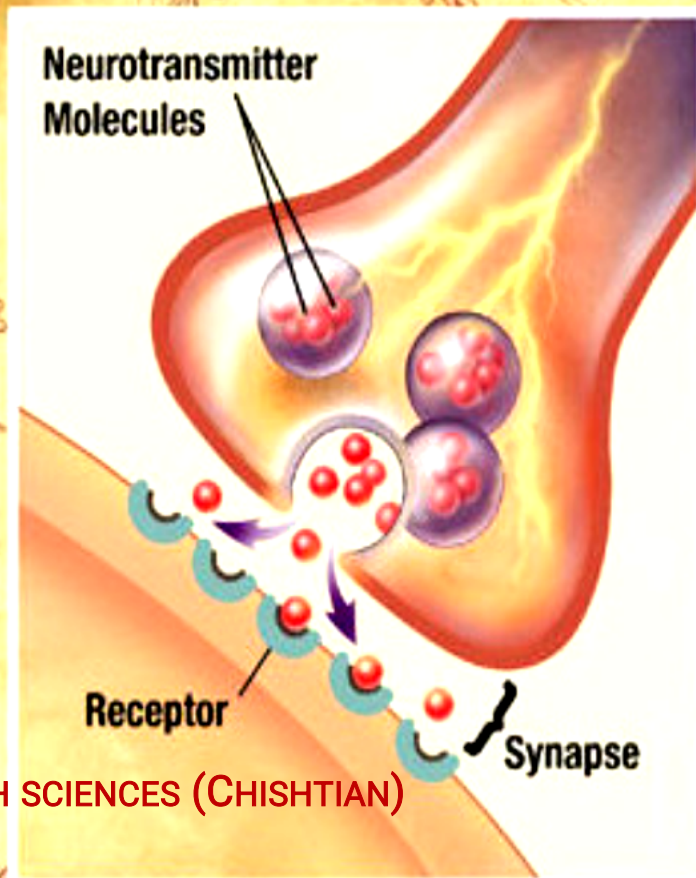
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Neurotransmitter
Molecules

Receptor

Synapse



CHAPTER # 01

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

CHAPTER # 02

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

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 arebones 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) Ileum

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) **Ileum**

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) bronchioles
- 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 5th 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 aboutin 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 arechambers 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
115.connect arteries with capillaries.
- 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) Epididymis**
- 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

Part

B

(PHYSIOLOGY)

CHAPTER#01

INTRODUCTION OF PHYSIOLOGY

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

CELL

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 embedded in it.

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

128. Some carbohydrates inare 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 pH 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 carbohemoglobin

a) O₂

b) N₂

c) CO₂

d) 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) O₂

b) CO₂

c) N₂

d) None of these

186. Factors needed for erythropoiesis

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 RBCs.

- 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 B₁₂
 - 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 Intracorpuseular 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/mm³**
- b) 8000/mm³
- c) 9000/mm³
- d) 10,000/mm³

206. Life span of monocytes

- a) 2 hours
- b) 1 hour
- c) 3 hours
- d) **10-12 hours**

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 indication 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) Fighting against 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) Stuart 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) Agglutininogen

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) **Agglutininogen A**

- b) Agglutinin B
- c) Agglutinin A and B
- d) NO Agglutinin

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^{++}
- b) ATP
- c) N_2
- 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 intercostals**
- 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_2 of venous blood entering the capillary is an average:

- a) 23mmHg
- b) 104mmHg
- c) 40mmHg**
- d) 64mmHg

267. PCO_2 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 CO₂ 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) CO₂
- b) **H⁺**
- c) HCO₃
- 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 CO₂ transported in plasma in bicarbonate form:

- a) 7%
- b) 23%
- c) 97%
- d) **70%**

277. Percentage of O₂ 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 O₂ 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 CO₂ is _____ reaction:

- a) Irreversible
- b) Reversible**
- c) Both a & b
- d) None of these

283. Deoxygenated blood contains total _____ of CO₂:

- 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 mantle 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
- 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

CHAPTER#07

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) β -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_4
- 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 ileocecal valve:

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

311. When food enters the stomach, vagal tone causes the _____ in muscular tone:

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

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

- a) Submucosa
- b) Mucosa
- c) Muscularis
- d) Adventitia**

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

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

314. In which stage of swallowing does gravity play an important role:

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

CHAPTER#08

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 tubules into the

- a) capillaries
- 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) concentrated
- b) **dilute**
- c) both a & b
- d) none of these

CHAPTER#09

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

CHAPTER#11

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

CHAPTER#12

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) **α -cells**
- b) β -cells
- c) γ -cells
- d) Both a & b