

NEET PG 2015 Memory Based Question Paper

1. Zygote with zona pellucida reaches uterine cavity by :
 - a) 2 days
 - b) 4 days
 - c) 5 days
 - d) 6 days
2. In spermatogenesis, independent assortment of paternal and maternal chromosomes occurs during-
 - a) Primary to secondary spermatocyte
 - b) Spermatogonia to primary spermatocyte
 - c) Secondary spermatocyte to spermatids
 - d) Spermatids to spermatozoa
3. Tongue muscles are derived from
 - a) Lateral plate mesoderm
 - b) Occipital myotome
 - c) Intermediate mesoderm
 - d) Cervical myotome
4. Which of the following is remnant of distal umbilical artery?
 - a) Ligamentum Teres
 - b) Superior Vesical artery
 - c) Medial umbilical Ligament
 - d) Ligamentum arteriosum
5. All are derived from neural crest except ?
 - a) Adrenal medulla
 - b) Pigment cell in skin
 - c) Corneal stroma
 - d) Retinal pigmented epithelium
6. Optic vesicle is derived from -
 - a) Endoderm
 - b) Mesoderm
 - c) Neuroectoderm
 - d) Surface Ectoderm
7. Digeorge syndrome is characterized by all except ?
 - a) Congenital thymic hypoplasia
 - b) Abnormal development of third and fourth pouches
 - c) Hypothyroidism
 - d) Hypocalcemic tetany
 - a) Basal lamina
 - b) Alar lamina
 - c) Lamina terminalis
 - d) Basal plate

9. Epithelial lining of urinary bladder ?

- a) Squamous
- b) Transitional
- c) Cuboidal
- d) Columnar

10. Female urethra develops from -

- a) Urogenital sinus
- b) Mesonephric duct
- c) Ureteric bud
- d) Metanephric Blastema

11. All of the following help in formation of IVC except -

- a) The posterior intercardinal anastomosis
- b) Terminal portion of right vitelline vein
- c) Segment of right cardinal vein
- d) Subcardinal sinus

12. Kidney parenchyma is derived from -

- a) Ureteric bud
 - b) Mesonephros
 - c) Metanephros
 - d) Paramesonephros
- a) First arch
 - b) Second arch
 - c) Third arch
 - d) Fourth arch

14. Leptotene and pachytene are stages of which phases of meiosis -

- a) Prophase I
- b) Metaphase I
- c) Anaphase II
- d) Telophase II

15. Pelvic kidneys are due to all except ?

- a) Inability to ascend during fetal life
- b) Fusion of the lower poles
- c) Being blocked by branches of the aorta
- d) p53 mutation

16. Crypta magna develops from which pouch?

- a) 1st
- b) 2nd
- c) 3rd
- d) 4th

17. Which of the following is a traction epiphysis?

- a) Distal Radius
- b) Mastoid process
- c) Tibial Condyles
- d) Coracoid Process

18. All of the following are true about the liver except ?

- a) It is covered by Glisson's capsule
- b) Stellate cells are present in the space of Disse
- c) Kupfer cells are the defense cells
- d) The lobules in the liver are pentagonal

19. Hering's canal is present in ?

- a) Spleen
- b) Liver
- c) Kidney
- d) Lung

20. Herring's bodies are present in?

- a) Pars tuberalis
- b) Pars intermedia
- c) Neurohypophysis
- d) Pars terminalis

21. All of the following are true about thymus except?

- a) The cortical portion is mainly composed of lymphocytes
- b) The medulla contains Hassall's Corpuscles
- c) It is derived from the fourth Pharyngeal pouch
- d) It undergoes atrophy puberty onwards

22. Auerbachs plexus is present in the -

- a) Colon
- b) Esophagus
- c) Stomach
- d) All of the above

23. Which of the following layer is absent in the esophagus -

- a) Adventitia
- b) Serosa
- c) Muscularis propria
- d) Mucosa

24. Which is the most abundant cartilage-

- a) Hyaline cartilage
- b) Elastic cartilage
- c) Fibrocartilage
- d) None

25. Haustrations are present in -

- a) Duodenum

- b) Ileum
- c) Jejunum
- d) Colon

26. What is the lining of the lacrimal gland alveoli?

- a) Ciliated columnar cells
- b) Pyramidal cells
- c) Non keratinizing squamous epithelium
- d) None

27. What type of muscles are medial two lumbricals?

- a) Unipennate
- b) Bipennate
- c) Multipennate
- d) None

28. Ansa nephroni is lined by ?

- a) Columnar
- b) Squamous epithelium
- c) Cuboidal and columnar epithelium
- d) Stratified squamous epithelium

29. Four carpal bones are present at what age?

- a) 3 years
- b) 4 years
- c) 5 years
- d) 6 years

30. What is the level of the spine of scapula?

- a) T7
- b) T10
- c) T4
- d) T2

31. Which of the following muscles carries out shoulder abduction from 15 to 90 degrees?

- a) Suprapinatus
- b) Trapezius
- c) Deltoid
- d) Serratus Anterior

32. Which muscle acting on the thumb has dual nerve supply?

- a) Flexor Pollicis Longus
- b) Flexor Pollicis brevis
- c) Adductor Pollicis
- d) Opponens Pollicis

33. What is Wartenberg's sign?

- a) Inability to maintain Intrinsic plus position
- b) Inability to adduct small finger against the ring finger
- c) Inability to grasp a book between the thumb and index finger
- d) Inability to move the middle finger sideways

34. Sensory region of the ulnar nerve is?

- a) Tip of little finger
- b) Tip of index finger
- c) 1st web space
- d) Lateral upper aspect of arm

35. Pulp of the index finger is supplied by

- a) Median nerve
- b) Radial nerve
- c) Ulnar nerve
- d) Axillary nerve

36. Low radial nerve [just after spiral groove] palsy does not produce ?

- a) Loss of wrist extension
 - b) Loss of elbow extension
 - c) Loss of finger extension
 - d) Loss of thumb extension
- a) Type 1
 - b) Type 2

37. Infraspinous fossa of scapula contains which of the following muscles?

- a) Subscapularis
- b) Infraspinatus
- c) Teres major
- d) Supraspinatus

38. Structure passing deep to flexor retinaculum at wrist:

- a) Ulnar nerve
- b) Median nerve
- c) Radial nerve
- d) Ulnar artery

39. Coracoacromial ligament resists which movements?

- a) Upward displacement of humeral head
- b) Abduction of shoulder
- c) Inferior displacement of humerus
- d) External rotation

40. Coracohumeral ligament inserts on?

- a) Greater tuberosity
- b) Lesser and greater tuberosities
- c) Anatomical neck of humerus

d) Bicipital groove

41. What is the action of anconeus?

- a) Primary elbow extensor
- b) Assists Extension of elbow
- c) Wrist extension
- d) Thumb Abduction

42. Which muscle helps in climbing a tree ?

- a) Latissimus Dorsi
- b) Rhomboideus
- c) Trapezius
- d) Levator scapulae

43. Posterior interosseus artery is a branch of ?

- a) Common interosseus artery
- b) Radial artery
- c) Median artery
- d) Brachial artery

44. Which muscle protects the brachial plexus in case of clavicle fractures?

- a) Subclavius
- b) Supraspinatus
- c) Subscapularius
- d) Teres Minor

45. Which of the following is true about deep palmar arch?

- a) Mainly formed by the radial artery
 - b) Ulnar artery has no contribution to it
 - c) It gives off 5 perforating branches
 - d) It does not anastomose with the superficial palmar arch
- a) Coracoid process
 - b) Spine of scapula
 - c) Inferior angle
 - d) Supraspinous fossa

47. Flexor carpi radialis inserts into ?

- a) Base of 5th metatarsal
- b) Base of 2nd and 3rd metacarpal
- c) Scaphoid and trapezium
- d) Capitate and hamate

48. What is true about lateral tibial condyle ?

- a) Iliotibial tract is attached to the lateral condyle of tibia
- b) Ligamentum patellae inserts on it
- c) Medial collateral ligament is attached to it
- d) Semimembranosus is attached to it

49. Weakness of extensor Hallucis longus is

due to which nerve root mainly?

- a) L5
- b) L4
- c) S1
- d) S2

50. Which of the following is common between the medial and lateral plantar arch?

- a) Flexor Digitorum Brevis
- b) Plantar Fascia
- c) Spring Ligament
- d) Deltoid Ligament

51. Which tendon is lodged in the groove on posterior surface of lateral malleolus?

- a) Peroneus longus
- b) Tibialis anterior
- c) Tibialis posterior
- d) Flexor Hallucis Longus

52. All of the following are true about tibialis anterior except ?

- a) It is supplied by the superficial peroneal nerve
- b) It dorsiflexes the foot
- c) It is closely related to the anterior tibial vessels
- d) It inserts on the medial cuneiform

53. Attachment on posterior surface of sacrum?

- a) Multifidus Lumborum
 - b) Iliacus
 - c) Coccygeus
 - d) Piriformis
- A) Posterior Surface

54. Structures passing through sacral hiatus are ?

- a) S4 nerve root
- b) S2 nerve root
- c) S3 nerve root
- d) S5 nerve root

55. Longest cutaneous nerve in body ?

- a) Lateral cutaneous nerve of thigh
- b) Medial cutaneous nerve of thigh
- c) Saphenous nerve
- d) Sural nerve

56. Oblique popliteal ligament is derived from ?

- a) Semitendinosus

- b) Biceps femoris
- c) Adductor magnus
- d) Semimembranosus

57. Lateral border of the foot receives its sensory supply from ?

- a) Saphenous nerve
- b) Sural nerve
- c) Deep peroneal nerve
- d) Sciatic nerve

58. All of the following is included in chest wall except?

- a) Ribs
- b) Thoracic Vertebrae
- c) Sternum
- d) Lumbar vertebrae

59. Respiratory bronchioles are formed from ?

- a) Principal bronchus
- b) Terminal bronchioles
- c) Tertiary Bronchus
- d) Lobar bronchioles

60. Segment of bronchi distal to primary bifurcation?

- a) Primary bronchi
- b) Terminal bronchiole
- c) Respiratory bronchiole
- d) Secondary bronchi

61. The cricopharyngeal sphincter is how far from the central incisor?

- a) 15cm
- b) 25cm
- c) 40cm
- d) 50cm

62. Which of the following structures is related to the esophagus 22.5cm from the incisor teeth?

- a) Arch of aorta
- b) Right principal bronchus
- c) Thoracic Duct
- d) Azygous Vein

63. Thoracic duct opens into systemic circulation at?

- a) junction of SVC and left brachiocephalic vein
- b) Junction of left internal jugular and left subclavian vein
- c) Directly into coronary sinus

d) Into azygous vein

64. Sympathetic supply of the heart is from ?

- a) Vagus
- b) Thoracic sympathetic fibres [T1 to T5]
- c) Lumbar sympathetic fibres
- d) Cervical ganglion

65. Which of the following are cusps of the aortic valves?

- a) Left, right and Anterior
- b) Anterior, Right and Posterior
- c) Posterior, Left and Right
- d) Anterior, Posterior and Left

66. Which is the widow's artery in myocardial infarction?

- a) Left anterior descending artery
- b) Right coronary artery
- c) Posterior interventricular artery
- d) Left circumflex artery

67. Which of the following passes posterior to the hilum of the lung?

- a) Vagus
- b) Phrenic nerve
- c) SVC
- d) Right atrium

68. What is the level of the pulmonary valve?

- a) 3rd intercostal space
- b) 4th costal cartilage
- c) 3rd costal cartilage
- d) 2nd intercostal space

69. Lower limit of the inferior border of the lung in the midaxillary line is ?

- a) 6th rib
- b) 8th rib
- c) 10th rib
- d) 12th rib

70. Which is a typical intercostal nerve?

- a) First
- b) Second
- c) Third
- d) Seventh

71. Great cardiac vein lies in ?

- a) Tricuspid valve
- b) Anterior interventricular sulcus
- c) Posterior interventricular sulcus

d) None

72. Apex at of the lung lies at what level?

- a) Above the clavicle
- b) Below the clavicle
- c) At the level of the clavicle
- d) None

73. Diaphragm is supplied by ?

- a) Phrenic nerve
- b) C2,C3,C4 Roots
- c) Thoracodorsal nerve
- d) Long thoracic nerve

74. Midpoint between suprasternal notch and pubic symphyses passes through which plane?

- a) Transpyloric plane
- b) Transtuberular plane
- c) Trnasxiphoid plane
- d) None

75. Muscle lying between anterior and middle layer of thoracolumbar fascia is ?

- a) Psoas major
- b) Quadratus Lumborum
- c) Obdurator internus
- d) External oblique

76. Anterior Rectus Sheath just above pubic symphysis is formed by ?

- a) External Oblique Aponeurosis
- b) The aponeurosis of three muscles including External Oblique,
- c) Linea Alba
- d) Internal Oblique only

77. Right suprarenal vein drains into ?

- a) Inferior vena cava
- b) Right renal vein
- c) Left renal vein
- d) Accessory Hemiazygous vein

78. Which of the following is not derived from the external oblique aponeurosis?

- a) Inguinal Ligament
- b) Lacunar ligament
- c) Line Semilunaris
- d) Pectineal Ligament

79. Stomach is supplied by ?

- a) Coeliac trunk
- b) Splenic artery

- c) Gastrooduodenal artery
- d) All of the above
- a) 1
- b) 2
- c) 3
- d) 4

81. Stomach wall is mainly drained by all lymphnodes except?

- a) Pyloric nodes
- b) Short gastric vessel nodal group
- c) Right gastroepiploic nodes
- d) Inguinal nodes

82. All lymph of stomach drains into ?

- a) Pyloric nodes
- b) Short gastric vessel nodal group
- c) Right gastroepiploic nodes
- d) Coeliac nodes

83. Gall bladder is related to which segment of the liver?

- a) I
- b) II
- c) III
- d) IV

84. Which segment of liver drains on both sides ?

- a) I
- b) II
- c) III
- d) IV

85. Caudate lobe of the liver - True is?

- a) It receives blood supply from both right and left hepatic arteries
- b) It is Segment II of the liver
- c) It is situated on the anterior surface of liver
- d) It lies between the aorta and ligamentum venosum

86. Superior border of epiploic foramen formed by -

- a) Caudate lobe
- b) Hepatic artery
- c) Bile duct
- d) IVC

87. Internal anal Sphincter is formed by ?

- a) Puborectalis
- b) Circular muscles from lower rectum
- c) Longitudinal Involuntary muscles
- d) None

88. All of the following are true about duodenum except?
- a) Fourth part is the shortest part
 - b) Ampulla of Vater opens through the second part
 - c) Minor duodenal papilla is in the third part
 - d) First part appears like a duodenal cap on barium studies
89. Which of the following is a branch of the inferior mesenteric artery?
- a) Sigmoid artery
 - b) Middle colic artery
 - c) Renal artery
 - d) Right Colic artery
90. Waldeyer's fascia connects ?
- a) Rectum to sacrum
 - b) Rectum to uterus
 - c) Rectum to lateral wall of pelvis
 - d) Rectum to bladder
91. Content of Alcock's canal is ?
- a) Internal pudendal artery
 - b) Internal iliac artery
 - c) Inferior rectal vein
 - d) Inferior mesenteric vein
92. All of the following organs are in direct contact with the spleen except?
- a) Duodenum
 - b) Stomach
 - c) Left kidney
 - d) Colon
93. Glans penis is a continuation of -
- a) Corpus spongiosum
 - b) Ischiocavernosus
 - c) Corpora Cavernosa
 - d) Puborectalis
94. Which muscle causes opening of the upper end of esophagus?
- a) Epiglottis
 - b) Thyropharungeus
 - c) Stylopharyngeus
 - d) Cricopharyngeus of inferior constrictor
95. Posterior perforation of stomach, collection of contents occurs in which pouch ?
- a) Greater sac
 - b) Left subhepatic and hepatorenal spaces [pouch of Morrison]

- c) Omental bursa
- d) Right subphrenic space

96. Cremasteric muscle is formed from ?

- a) Fascia from internal oblique
- b) Fascia from external oblique
- c) Fascia from rectus abdominis
- d) Fascia from transversus abdominis

97. Kidney is covered by what fascia?

- a) Sibson's fascia
- b) Buck's Fascia
- c) Gerota's Fascia
- d) None
- a) Brim of the pelvis
- b) Crossing by gonadal vessels
- c) Vesicouretric junction
- d) Crossing by ductus deferens

99. What is the total length of the colon?

- a) 1 metre
- b) 1.5 metres
- c) 2 metres
- d) 4 metres

100. Submandibular lymphnodes drain the following areas of the face except?

- a) Medial half of eyelids
- b) Central part of lower lip
- c) Medial part of cheek
- d) Central part of fore head

101. Larynx below the vocal cords drain into ?

- a) Pretracheal lymph nodes
- b) Occipital lymphnodes
- c) Mediastinal nodes
- d) Lymphatics along the superior laryngeal vein

102. Nerve supply to the angle of the mandible is by ?

- a) Posterior primary rami of C2, C3
- b) Greater auricular nerve
- c) Maxillary nerve
- d) Mandibular nerve

103. Nerve supply to the tip of the nose is from?

- a) The ophthalmic division of the trigeminal nerve
- b) Greater auricular nerve
- c) The maxillary division of the trigeminal nerve
- d) Mandibular nerve

104. Dangerous space in the neck is found between?

- a) Buccopharyngeal fascia and alar fascia
- b) Prevertebral fascia and alar fascia
- c) Buccopharyngeal fascia and Prevertebral fascia
- d) None

105. Which muscle is attached to the disc of the temporomandibular joint?

- a) Buccinator
- b) Lateral pterygoid
- c) Masseter
- d) Temporalis

106. Maxillary tubercle gives attachment to ?

- a) Lateral pterygoid
- b) Medial pterygoid
- c) Temporalis
- d) Masseter

107. Vidian nerve is also known as?

- a) Nerve of Pterygoid canal
- b) Greater Petrosal nerve
- c) Lesser Petrosal nerve
- d) Greater Auricular nerve
- a) Facial nerve nucleus
- b) Trigeminal nucleus
- c) Dorsal nucleus of vagus
- d) Nucleus ambiguus

109. Right Recurrent laryngeal nerve loops around?

- a) Right subclavian artery
- b) Right axillary artery
- c) Right External carotid artery
- d) Right Superior thyroid artery

110. Left recurrent laryngeal passes between ?

- a) Trachea & larynx
- b) Trachea & esophagus
- c) Esophagus and bronchi
- d) Esophagus and aorta

111. Structures pierced by the parotid duct are all except?

- a) Buccopharyngeal fascia
- b) Buccinator muscle
- c) Buccal fat pad
- d) Investing layer of deep cervical fascia

112. Which layer of the scalp is vascular?

- a) Pericranium
- b) Superficial fascia
- c) Skin
- d) Aponeurosis

113. All of the following pass through the

Sinus of Morgagni except -

- a) Auditory tube
- b) Levator veli palatini
- c) Ascending palatine artery
- d) Stylopharyngeus

114. Chorda tympani is a branch of ?

- a) Facial nerve
- b) Trigeminal nerve
- c) Greater auricular nerve
- d) External laryngeal nerve

115. Chorda-tympani does not carry which fibers?

- a) Preganglionic parasympathetic fibers for sublingual glands
- b) Preganglionic parasympathetic fibers for submandibular gland
- c) Preganglionic parasympathetic fibers for parotid gland
- d) Taste fibers from anterior two third of tongue

116. Which of the following pass through the Hypoglossal canal?

- a) Hypoglossal nerve
- b) External jugular vein
- c) Facial nerve
- d) Mandibular nerve

117. Which muscle is antagonist to orbicularis oculi that is not supplied by facial nerve?

- a) Levator Palpebrae superioris
- b) Orbicularis oris
- c) Superior oblique
- d) Inferior oblique

118. All of the following are main branches of Trigeminal nerve except ?

- a) Mandibular nerve
- b) Maxillary nerve
- c) Ophthalmic nerve
- d) Optic nerve

119. Extension of the retropharyngeal space is between ?

- a) Alar fascia and buccopharyngeal fascia
- b) buccopharyngeal fascia and prevertebral fascia

- c) Alar fascia and Prevertebral fascia
- d) None

120. Delphian nodes are ?

- a) Prelaryngeal nodes
- b) Occipital nodes
- c) Coeliac nodes
- d) None of the above

121. Straight sinus is formed by?

- a) Inferior Sagittal Sinus
- b) Internal Jugular veins
- c) Superior Sagittal Sinus
- d) Transverse sinus

122. Which artery supplies the paracentral lobule?

- a) Medial Striate artery
- b) Callosal Marginal artery
- c) Pericallosal artery
- d) Frontopolar artery

123. Nucleus of basal ganglia

- a) Dentate
- b) Thalamus
- c) Caudate
- d) Red nucleus

124. Most lateral nucleus of cerebellum is ?

- a) Dentate
- b) Globose
- c) Fastigial
- d) Emboliform
- a) Parietal lobe
- b) Frontal lobe
- c) Temporal lobe
- d) Occipital lobe
- a) Cerebrum
- b) Cerebellum
- c) Pons
- d) Thalamus

127. Arbor vitae are seen in ?

- a) Cerebrum
- b) Cerebellum
- c) Pons
- d) Thalamus

128. Total volume of CSF is?

- a) 150 ml
- b) 500 ml
- c) 50 ml

d) 800 ml

129. Lateral lemniscus terminates into ?

- a) Lateral geniculate body
- b) Superior colliculus
- c) Inferior colliculus
- d) Inferior olivary complex

130. Internal capsule- All of the following are parts except ?

- a) Anterior limb
- b) Sublentiform part
- c) Retrolentiform
- d) Prelentiform

131. Substantia ferruginea is found in -

- a) Fourth ventricle
- b) Thalamus
- c) Midbrain
- d) Third ventricle

132. Infundibular diverticulum is an extension of ?

- a) 1st and 2th ventricles
- b) 3rd ventricle
- c) 4th ventricle
- d) None

133. Which of the following is a complete sulcus in the brain?

- a) Calcarine sulcus
- b) Paracentral sulcus
- c) Both
- d) None

134. Which of the following is derived from the neural tube except?

- a) Retina
- b) Brain
- c) Dorsal root ganglia
- d) Pineal gland

135. Cerebellovestibular fibres pass through ?

- a) Superior cerebellar peduncle
- b) Middle cerebellar peduncle
- c) Inferior cerebellar peduncle
- d) None

136. Long spinous process is seen in ?

- a) Cervical vertebrae
- b) Thoracic Vertebrae

- c) Lumbar Vertebrae
- d) Sacrum

137. Movement occurring at atlanto-axial joint?

- a) Flexion
- b) Bending
- c) Rotation
- d) Nodding

138. Spinal segmental artery is a branch of ?

- a) Ascending spinal artery
- b) Basilar artery
- c) Posterior spinal artery
- d) Anterior spinal artery

139. Which of the following is not a permanent mucosal fold?

- a) Heister's valves
- b) Transverse rectal fold
- c) Plicae circularis
- d) Gastric rugae

140. Lipid rafts are seen in?

- a) Ribosomes
- b) Mitochondria
- c) Plasma membrane
- d) ER

141. Marker of endoplasmic reticulum?

- a) Acid phosphatase
- b) Glucose-6-phosphatase
- c) Catalase
- d) LDH

142. Following is a feature of simple diffusion?

- a) Against a concentration gradient
 - b) Easy for non-polar substance
 - c) More in thick membrane
 - d) Requires carrier protein
- A) Rate of diffusion is directly proportionate :-
B) Rate of diffusion is inversely proportionate:-

143. Most common mechanism for transport into the cell?

- a) Diffusion
- b) Primary active transport
- c) Antiport
- d) Cotransport

144. True about Nernst equation?

- a) Used to calculate equilibrium potential
- b) Calculated for non-ionic solution
- c) Nernst potential for Cl is -90 my
- d) All are correct

145. ECF concentration of Cl^- is 150 meq/L and ICF concentration of K^+ is 5 meq/L.

+

What is the equilibrium potential for K is?

- a) +60 mV
- b) -60 mV
- c) -90 mV
- d) +90 mV

146. Nernst equation related to equilibrium potential does not depend upon?

- a) Concentration gradient
- b) Electric gradient
- c) Non-ionic solution
- d) Concentration of ions in two solution

147. Due to Donnan-Gibbs effect?

- a) Concentration of K. is greater in ECF
- b) Concentration of Cl is greater in ECF
- c) Total ions are more in ICF
- d) All are true

148. ATPase is which type of pump?

- a) Secondary active
- b) Electrogenic
- c) Symport
- d) All of the above

149. Diffusion related to O_2 transport across
2

respiratory membrane is an example of?

- a) Simple diffusion
- b) Facilitated diffusion
- c) Active diffusion
- d) Osmotic diffusion

150. Measurement of intracellular fluid in a 50 years old male is done by?

- a) Dilution method
- b) Evans blue
- c) D₂O
- d) Indirectly

151. Calculation of interstitial fluid in a 50 years old is done by?

- a) TBW minus ECF

- b) ECF minus plasma volume
- c) ICF minus ECF
- d) TBW minus ICF

152. Excitability of cells is maximally affected by change in concentration of which ion?

- a) IC^+
- b) Na^+
- c) a^-
- d) Ca^{+2}

153. Non-specific pain pathway is for?

- a) Nociceptive pain
- b) Neuropathic pain
- c) Idiopathic pain
- d) Inflammatory pain

154. Dull visceral pain is carried by which type of neurons?

- a) A gamma
- b) A α
- c) C fibres
- d) B

155. 'C' fibers carry sensations through which pathway?

- a) Posterior column
- b) Anterior spinothalamic tract
- c) Lateral spinothalamic tract
- d) All of the above

156. Types C nerve fibers are?

- a) Sensory
- b) Motor
- c) Mixed
- d) Any of the above

157. Warmth sensation is carried by?

- a) A α fibers
- b) A β fibers
- c) A γ fibers
- d) A δ fibers

158. True about myosin?

- a) Thin filament
- b) Covers active site of action
- c) Has ATPase activity
- d) Ca^{2+} binding protein

159. In cardiac muscles, T-tubules are present at?

- a) Z lines
- b) A lines
- c) I lines
- d) A-I junction

160. In a muscle fiber at rest, the length of the I band is 1 mm and A band is 1.5 mm.

What is the length of the sarcomere

- a) 0.5 mm
- b) 2.5 mm
- c) 35 mm
- d) 5 mm

161. White fibers are present in which muscle?

- a) Calf muscles
- b) Back muscles
- c) Gluteal muscles
- d) Hand muscles

162. Function of muscle spindle is?

- a) Movement of a limb
- b) Muscle tone maintenance
- c) Goal oriented muscle contraction
- d) All of the above

163. Afferents for stretch reflexes are carried by which fibers?

- a) Aa
- b) Ay
- c) Type B
- d) Type C

164. Spinal cord has how many synapses in golgi tendon reflex?

- a) 1
- b) 2
- c) 3
- d) 4

165. Inverse stretch reflex is a?

- a) Monosynaptic reflex
- b) Bisynaptic reflex
- c) Polysynaptic reflex
- d) Nonsynaptic reflex

166. Facilitatory presynaptic neurotransmitter is?

- a) GABA
- b) Glycine
- c) Glutamate
- d) Aspartate

- a) Axon hillock
- b) Axons
- c) Node of Ranvier
- d) Body

168. Stereocilia are found in?

- a) Eye
- b) Nose
- c) Tongue
- d) Epididymis

169. Stereocilia are present in?

- a) Taste buds
- b) Hair cells
- c) Retina
- d) Nose

170. CSF pressure is increased in all except -

- a) Forced inspiration
- b) Coughing
- c) Valsalva manoeuvre
- d) Crying

171. CSF is present in which space?

- a) Central canal of spinal cord
- b) Ventricles of brain
- c) Subarachnoid space
- d) All of the above

172. Function of Ghrelin?

- a) Stimulate water absorption
- b) Increase appetite
- c) Regulation of temperature
- d) Stimulate lipogenesis

173. Location of visual cortex?

- a) Precentral gyrus
- b) Postcentral gyrus
- c) Sylvian fissure
- d) Calcarine sulcus

174. Parvocellular pathway for vision is concerned with?

- a) Fine details of object
- b) Movements of object
- c) Flickering features
- d) Depth of vision

175. Sweat glands are supplied by all except?

- a) Cholinergic neurons
- b) Sympathetic neurons
- c) Adrenergic neurons

d) C-fibers

176. Gustatory pathway involves which nerve?

- a) Facial
- b) Glossopharyngeal
- c) Vagus
- d) All of the above

177. Function of cerebellum?

- a) Regulation of tone
- b) Coordination of eye movement
- c) Planning & initiation of movement
- d) All of the above

178. Which of the following is not a metabotropic receptor for serotonin?

- a) 5HT_{1A}
- b) 5HT_{1B}
- c) 5HT_{2A}
- d) 5HT₃

179. Two point discrimination is mainly a function of which touch receptors?

- a) Merkel's disc
- b) Ruffini's end organ
- c) Paccinian corpuscle
- d) Meissner's corpuscle

180. Which of the following defines vital capacity?

- a) Air in lung after normal expiration
- b) Maximum air that can be expired after normal inspiration
- c) Maximum air that can be expired after maximum inspiration
- d) Maximum air in lung after end of maximal inspiration

181. Functional residual capacity in normal adult is?

- a) 500 ml
- b) 1200 ml
- c) 2400 ml
- d) 3200 ml

182. What is maximum voluntary ventilation?

- a) Amount of air expired in one minute at rest
- b) Maximum amount of air that can be inspired and expired in one
- c) Maximum amount of air that can be inspired per breath
- d) Maximum amount of air remaining in lung after forced expiration

183. True about Carboxyhemoglobin?

- a) Take up O₂ very quickly
- b) Causes histotoxic hypoxia

- c) Causes left shift of Hb-O dissociation curve
- d) All are true

184. What is the difference between Hb-O dissociation curve and Hb-CO curve?

- a) CO shifts the curve to left
- b) CO has more affinity to Hb
- c) Co-Hb curve is similar to O₂-Hb curve
- d) All are true

185. Not true about Bohr effect?

- a) Decrease affinity of O₂ by increase PCO₂
- b) Left shift of Hb-O₂ dissociation curve
- c) It is due to H⁺
- d) All are true

186. Which of the following explains uptake of O₂ in fetal circulation ?

- a) Bohr's effect
- b) Halden's effect
- c) Higher affinity of HbF for O₂
- d) None of the above

187. Which of the following explains delivery of O₂ in fetal circulation?

2

- a) Bohr's effect
- b) Halden's effect
- c) Higher affinity of HbF for O₂
- d) None of the above

188. True of O₂-Hb dissociation curve?

- a) Straight line curve
- b) 100% saturated at P₅₀ of 100 mmHg
- c) Cooperative binding
- d) Hb molecule can carry 6 molecules of O₂

189. Which increases affinity of hemoglobin for O₂,-

- a) Acidosis
- b) Hyperthermia
- c) High pH
- d) High PCO₂

190. In comparison to hemoglobin, effect of myoglobin on Bohr effect?

- a) Increased
- b) Decreased
- c) Same
- d) No Bohr effect

191. Function of chloride shift in RBCs?

- a) Right shift of Hb-O₂ curve
- b) Left shift of Hb-O₂ curve
- c) Transport of CO₂
- d) Diffusion of O₂ in alveoli

192. Closing volume is related to which of the following?

- a) Tidal volume
- b) Residual volume
- c) Vital capacity
- d) None

193. Central chemoreceptors are not stimulated by?

- a) T PCO₂
- b) T EI' in CSF
- c) Hypoxia
- d) All stimulate

194. Chemical regulation of respiration is not affected by?

- a) P_O
- b) PCO₂
- c) pH
- d) Mean BP

195. True about high altitude acclimatization?

- a) Left shift O₂ - Hb curve
- b) Decreased RBC count
- c) Hypoventilation
- d) Increased erythropoietin

196. Respiratory exchange of gases is started from?

- a) Branchi
- b) Alveoli
- c) Bronchiole
- d) Tissue level

197. Distending capacity of lung is maximum at?

- a) Apex
- b) Base
- c) Mid region
- d) Posterior lobe

198. Action potential in cardiac muscles is due to which ions?

- a) K⁺
- b) Na⁺
- c) Ca²⁺
- d) Cl⁻

199. Heart sound occurring just before closure of AV?

- a) S1
- b) S2
- c) S3
- d) S4

200. Baroreceptors are related to which vessels?

- a) Internal carotid artery
- b) External carotid artery
- c) Subclavian artery
- d) Brachiocephalic trunk

201. Effect of positive G?

- a) Increased cerebral arterial pressure
- b) Increased venous return
- c) Decreased cardiac output
- d) Increased pressure in lower limb

202. Which of the following cause increase in pulmonary arterial pressure?

- a) Histamine
- b) Hypoxia
- c) ANP
- d) PGI₂

203. Most important cerebral vasodilator?

- a) H⁺
- b) Na⁺
- c) Ca²⁺
- d) None

204. Renin secretion is decreased by?

- a) Sympathetic stimulation
- b) Prostacycline [PGI₂]
- c) NaCl in distal tubules
- d) Hypotension

205. True about function of distal convoluted tubule?

- a) Reabsorbe Na⁺ by Na⁺/2Cl⁻ channel
- b) Reabsorbe IC⁺ by Na⁺ channel
- c) Water reabsorption by ADH
- d) All are correct

206. Function of Lacis cells in nephron?

- a) H⁺ secretion
- b) Na⁺ reabsorption
- c) Renin secretion
- d) Regulation of vasoconstriction / vasodilatation of arterioles

207. Plasma inulin of a person is 4 mg/ml and urine flow rate is 20 ml/min. What will be GFR if urine inulin is 50 mg/ml?

- a) 125 ml/min
- b) 250 ml/min
- c) 500 ml/min
- d) 1000 ml/min

208. True about aquaporins are all except ?

- a) Protein
- b) Aquaporin-1 in PCT
- c) Aquaporin-2 in loop of Henle
- d) Aquaporin-2 in CD

209. Maximum fat absorption in GI tract occurs in?

- a) Duodenum
- b) Jejunum
- c) Ileum
- d) Calcium

210. If the ileum is excised, what will increase in stool?

- a) Bile salts
- b) Bile acids
- c) Iron
- d) Calcium

211. Which of the following acts as "Gatekeeper" in the GIT?

- a) Na⁺-amino acid cotransporter
- b) Na⁺ K⁺ ATPase
- c) Calcium channel
- d) Na⁺-glucose cotransporter

212. True about basic rhythm of GIT?

- a) Fluctuate between -65 and -40 mV
- b) Initiated by zymogen cells
- c) Pacemaker cells are present in proximal stomach
- d) All of the above

213. Daily fecal urobilinogen excretion in healthy adults?

- a) 20-40 gm
- b) 40-280 gm
- c) 20-40 mg
- d) 40-280 mg

214. Maximum daily degradation of hemoglobin in normal adults?

- a) 2 gm

- b) 4 gm
- c) 6 gm
- d) 8 gm

215. cAMP activates?

- a) Protein kinase 'A'
- b) Protein kinase 'C'
- c) Nuclear transcription
- d) Phospholipase

216. Mechanism of action of 5- α reductase?

- a) Breakage of C-C double bond
- b) Breakage of C-N bond
- c) Breakage of amide bond
- d) Breakage of N-N bond

217. Glucose transporter affected in diabetes mellitus?

- a) GLUT-2
- b) GLUT-5
- c) GLUT-4
- d) SGLT-2

218. Gene for insulin responsive glucose transporter is located on chromosome?

- a) 7
- b) 21
- c) 17
- d) 13

219. True about ACTH and cortisol [corticosteroid] secretion?

- a) Maximum secretion in the evening
- b) ACTH has negative feed-back control
- c) ACTH has major effect on mineralocorticoid secretion
- d) ACTH is derived from POMC

220. Secretion of cortisol is highest at?

- a) Mid-night
- b) Early morning
- c) Afternoon
- d) Evening

221. All are true regarding intracellular receptors, except?

- a) Act by regulating gene expression
- b) Fastest acting receptors
- c) Glucocorticoid receptors
- d) DNA contains hormone responsive elements

222. Hormone which affects IC^{+} ion concentration?

- a) GH
- b) Thyroxine
- c) Insulin
- d) Estrogen

223. Tissue factor activates?

- a) Intrinsic pathway
- b) Contact pathway
- c) In vitro pathway
- d) In vivo pathway

224. Tissue factor activates?

- a) Preaccelerin
- b) Hageman factor
- c) Labile factor
- d) Prothrombin
- a) Adipose tissue
- b) Skeletal muscles
- c) Blood
- d) Bone
- a) Cell membrane
- b) DNA
- c) RNA
- d) All of the above

227. Exercise mediated increase in muscular blood flow is mediated by which sympathetic fibers

- a) Adrenergic
- b) Noradrenergic
- c) Dopaminergic
- d) Cholinergic

228. Premature ejaculation occurs in which phase of sexual cycle?

- a) Excitement phase
- b) Plateau phase
- c) Orgasmic phase
- d) Resolution

229. Erection of penis occurs in which phase of sexual cycle?

- a) Excitement phase
- b) Plateau phase
- c) Orgasmic phase
- d) Resolution

230. Shortest phase of sexual cycle?

- a) Excitement phase
- b) Plateau phase
- c) Orgasmic phase
- d) Resolution

231. Inhibition of Na⁺ ATPase leads to?

- a) Decreased Na⁺ in the cell
- b) Increased Ca²⁺ in the cell
- c) Increased K⁺ in the cell
- d) Increased Cl⁻ in the cell

232. Hypercoagulable factor is?

- a) Protein C
- b) Protein S
- c) Factor V Leiden
- d) Antithrombin III

233. Apnea-hypopnea index is used for?

- a) Emphysema
- b) Asthma
- c) Hyaline membrane disease
- d) Obstructive sleep apnea [OSA]

234. True about heterophilic receptors?

- a) Involved in binding of GH to cell membrane
- b) Bind to same ligand/hormone
- c) Involved in cell adhesion
- d) All are correct

235. Third order neurons of sensations from face arise in?

- a) Medulla
- b) Spinal nucleus of trigeminal
- c) Thalamus
- d) Brainstem

236. Somatic efferent of which arise from medulla?

- a) Oculomotor
- b) Trochlear
- c) Abducent
- d) Hypoglossal

237. Actin is which type of protein?

- a) Fibrous
- b) Globular
- c) Both
- d) None

238. NAD Acts as a coenzyme for ?

- a) Xanthine oxidase
- b) L-amino acid oxidase
- c) Succinate dehydrogenase
- d) Malate dehydrogenase

239. Enzyme involved in the transfer of

hydrogen ion is

- a) Hydratase
- b) Oxidase
- c) Peroxidase
- d) Dehydrogenase

240. Which of the following is a constitutive enzyme?

- a) Hexokinase
- b) Glucokinase
- c) β galactosidase
- d) Cyclooxygenase-2

241. Sequence of complexes in the electron transport chain is -

- a) NADH dehydrogenase $\rightarrow$ Q $\rightarrow$ Cytochrome bc1 $\rightarrow$
- b) NADH dehydrogenase $\rightarrow$ Q $\rightarrow$ Cytochrome aa3 $\rightarrow$
- c) NADH dehydrogenase $\rightarrow$ Cytochrome aa3 $\rightarrow$ Q $\rightarrow$
- d) NADH dehydrogenase $\rightarrow$ Cytochrome bcl $\rightarrow$ Q $\rightarrow$

242. Regarding energy production by the electron transport chain, which is true?

- a) The complexes are arranged in a decreasing order of redox
- b) The complexes are arranged in a decreasing order of ability
- c) The complexes are arranged in a decreasing order of state
- d) The complexes are arranged in a decreasing order of

243. Electron transport chain all are true except

- a) Complexes are arranged in an increasing order of redox
- b) Mitochondrial Glycerol phosphate dehydrogenase sends its
- c) 10 Hydrogen ions are translocated when NADH enters into
- d) 7 Hydrogen ions are translocated when FADH₂ electrons

244. Atractiloside act as ?

- a) Uncoupler
- b) Inhibitor of oxidative phosphorylation
- c) Inhibitor of complex I of ETC
- d) Inhibitor of complex III of ETC

245. Which of the following is the respiratory centre of cell?

- a) Mitochondria
- b) Microsome
- c) Lysosome
- d) Nucleus

246. Cellulose is biochemically -

- a) β (1,4) L glucose
- b) α (1,4) D glucose
- c) β (1,4) D glucose
- d) α (1,4) L glucose

247. D and L isomerism is -

- a) Optical isomerism
 - b) Functional isomerism
 - c) Epimerism
 - d) Enantiomerism
- a) GLUT1
- b) GLUT2
- c) GLUT3
- d) GLUT4

249. All of the following are converted to α -ketoglutarate on catabolism except-

- a) Glutamate
- b) Histidine
- c) Proline
- d) Glycine

250. Glucogenic aminoacids give rise to all of the following intermediates of citric acid cycle except-

- a) Isocitrate
- b) α -ketoglutarate
- c) Succinyl CoA
- d) Fumarates

251. What is the precursor of proline in Krebs cycle?

- a) Oxaloacetate
- b) α -ketoglutarate
- c) Succinyl CoA
- d) Fumarates

252. used in citric acid cycle are all except-

- a) NAD
- b) FAD
- c) NADP
- d) GDP

253. All of the following steps act as sources of energy in citric acid cycle except -

- a) Citrate synthase
- b) Isocitrate dehydrogenase
- c) Succinyl Thiokinase
- d) Succinate Dehydrogenase

254. True about glucokinase is -

- a) It is present in all cells
- b) It is a constitutive enzyme
- c) It has a high K_m
- d) It is inhibited by glucose 6 phosphate

255. All of the following are true about lactate utilisation in liver except -

- a) Total net number of ATP formed because of cori's cycle is
- b) Cori's cycle shifts the metabolic burden from muscle to liver
- c) Cori's cycle can not be sustained indefinitely because it is
- d) Cori's cycle is linked to glycogen synthesis in muscle

256. Which of the following is true about effect of insulin and glucagon on gluconeogenesis?

- a) Insulin favours the formation of fructose 2,6 bisphosphate
- b) Fructose 2, 6 bisphosphate is an inhibitor of glycolysis
- c) Insulin acts through a kinase
- d) Glucagon stimulates PFK.2 activity of the tandem enzyme

257. Key enzyme of gluconeogenesis are all except?

- a) Pyruvate carboxylase
- b) PEP carboxykinase
- c) Pyruvate kinase
- d) Glucose-6-phosphatase

258. In glycogen synthesis the active form of glucose used is-

- a) Glucose 6 phosphate
- b) Glucose 1 phosphate
- c) UDP glucose
- d) UTP glucose

259. UDP glucose is not used in ?

- a) Uronic acid pathway
- b) Glycogen synthesis
- c) Galactose metabolism
- d) HMP shunt

260. Neonatal hypoglycaemia which does not respond to counter regulatory hormone administration is diagnostic of

-

- a) Her's disease
- b) Cori's disease
- c) Anderson's disease
- d) Von Gierke's disease

261. Which of the following is a serine protease

- a) Chymotrypsin
- b) Pepsin
- c) Carboxypeptidase
- d) Caspases
- a) Arachidonic acid

- b) Linoleic acid
- c) Palmitic acid
- d) Linolenic acid

263. Which of the following is a transfatty acid?

- a) Oleic acid
- b) Elaidic acid
- c) Stearic acid
- d) Arachidonic acid

264. Activators of Acetyl CoA carboxylase are all except

- a) Acyl coA
- b) Citrate
- c) Glutamate
- d) Dicarboxylic acid

265. Arachidonic acid oxidation involves how many cycles of beta oxidation?

- a) 10
- b) 20
- c) 9
- d) 8

266. All are true about beta oxidation of fatty acids except -

- a) Carnitine acyl transferase I is the rate limiting enzyme of
- b) Carnitine acyl transferase I is stimulated by Acyl CoA
- c) Carnitine Acyl transferase I is stimulated by malonyl CoA
- d) Carnitine Acyl transferase I defect causes a decrease in

267. All are true about beta oxidation of fats acids except -

- a) Occurs in mitochondria
- b) Occurs in peroxisome
- c) Results in hydrogen peroxide generation
- d) Fatty acid oxidation defects present with ketosis

268. Which of the following is true about Beta oxidation of fatty acids?

- a) Stearic acid on oxidation provides 106 ATPs
- b) Odd chain fatty acid oxidation provides only propionyl coA
- c) Fatty acid oxidation defects cause hypoglycemia
- d) Ketone bodies are formed by incomplete oxidation of fatty

269. Which of the following is true about properties of VLDL/LDL-

- a) In electrophoresis, VLDL migrates more cathodal than LDL
- b) LDL is formed from liver
- c) LDL is formed from Chylomicron
- d) VLDL remnants reach extrahepatic tissues

270. Reverse cholesterol transport - all are true except-

- a) Transport of cholesterol from extrahepatic tissues to liver
- b) ATP Binding Cassette Transporter protein is involved in the
- c) Lecithin Cholesterol Acyl Transferase helps in the
- d) Cholesterol Ester Transfer Protein helps in increasing HDL

271. Progesterone synthesis requires -

- a) LDL
- b) VLDL
- c) HDL
- d) Chylomicron

272. Site of small chain fatty acid absorption is -

- a) Ileum
- b) Duodenum
- c) Ascending colon
- d) Rectum

273. HMG CoA is precursor of all except-

- a) Ubiquinone
- b) Dolichol
- c) Bile pigments
- d) Ketone body

274. Refsum's disease is due to deficiency of which of the following enzyme?

- a) Malonate dehydrogease
- b) Thiophorase
- c) Succinate thiokinase
- d) Phytanic alpha oxidase

275. What is the parameter that is used to assess lipid peroxidation?

- a) Malondialdehyde
- b) CRP
- c) hsCRP
- d) Carboxymethyl lysine

276. All are true about ketone bodies except ?

- a) Acetoacetate is primary ketone body
- b) Synthesized in mitochondria
- c) Synthesized in liver
- d) HMG CoA reductase is the rate-limiting enzyme
- a) Plasma levels of cholesterol and triglyceride are extremely low
- b) Manifest in early childhood with diarrhea
- c) Progressive pigmented retinopathy seen
- d) Neurological manifestation as ataxia in first decade

278. Amino acid in synthesis of

neurotransmitter

- a) Glutamate
- b) Proline
- c) Cysteine
- d) Alanine

279. Maximum buffering capacity of a buffer is maximum at pH

- a) Less than pka
- b) More than pka
- c) Equal to pka
- d) Has no relation with pka

280. Essential amino-acid deficiency affect nitrogen balance by

- a) Increasing protein degradation
- b) Decreasing protein degradation
- c) Decreasing protein synthesis
- d) Increasing protein synthesis

281. Creatinine is formed from :

- a) Arginine
- b) Lysine
- c) Leucine
- d) Histamine

282. Acidic amino acids are -

- a) Asparagine
- b) Arginine
- c) None
- d) Lysine

283. Function of tyrosinase is

- a) Synthesis of norepinephrine
- b) Synthesis of dopamine
- c) Synthesis of melanin
- d) All of the above

284. Cofactor for dopamine hydroxylase ?

- a) Fe
- b) Mg
- c) Mn
- d) Cu

285. Rate limiting enzyme in catecholamine synthesis?

- a) Dopa decarboxylase
- b) N-methyltransferase
- c) Dopamine hydroxylase
- d) Tyrosine hydroxylase

286. Enzyme which acts on aspartate

- a) Serum Glutamate Pyruvate Transaminase (SGPT)
- b) Serum Glutamate Oxaloacetate Transaminase (SGOT)
- c) Ornithine transcarbamylase (OTC)
- d) Argininosuccinate lyase (ASL)

287. True about glutamate dehydrogenase is
A/E

- a) Liver mitochondrial enzyme
- b) Use both NAD⁺ or NADP⁺ coenzyme
- c) Inhibited by ADP & activated by GTP
- d) Reversible oxidative deamination

288. Allosteric stimulator of glutamate dehydrogenase is

- a) ATP
- b) GTP
- c) Palmitoyl CoA
- d) Leucine

289. Which of the following is a biologically important tripeptide?

- a) Thyrotropin releasing hormone
- b) Thyroid stimulating hormone
- c) Gonadotropin releasing hormone
- d) Follicle Stimulating hormone

290. Carbamoyl Phosphate synthetase I [CPSI] true is

- a) It is present in cytoplasm
- b) It is involved in pyrimidine synthesis
- c) N- Acetyl Glutamate is an allosteric stimulator of CPSI
- d) Glutamine is the amino group donor for CPSI

291. Carbamoyl phosphate synthetase I is:

- a) Lysosomal enzyme
- b) Cytosolic enzyme
- c) Mitochondrial enzyme
- d) All of the above

292. HHH syndrome is due to defect in ?

- a) Tryptophan metabolism
- b) Histidine transporter
- c) Branched chain AA metabolism
- d) Ornithine transporter

293. All of the following can determine protein structure except

- a) Edman's Sequencing
- b) X ray crystallography
- c) Optical rotatory dispersion
- d) Spectrophotometry
- A) Sanger's sequencing

- B) Edman's Sequencing
C) Reverse Sequencing

294. Edman's reagent is used for

- a) DNA sequencing
b) Protein sequencing
c) Protein Denaturation
d) DNA denaturation

295. Most abundant aminoacid in brain is

- a) Glutamate
b) Aspartate
c) Glutamine
d) Asparagine

296. Cystine has how many molecules of cysteine?

- a) 1
b) 2
c) 3
d) 4

297. Vitamin given in homocysteinuria are all except

- a) Vitamin B6
b) Vitamin B12
c) Folate
d) Thiamine

298. Glutathione is used to detoxify which free radical?

- a) Hydrogen peroxide
b) Superoxide
c) Peroxyl radical
d) Singlet Oxygen

299. Match enzyme with the disease caused due to its deficiency -

Enzyme

- A Fumarylacetoacetate
B Tyrosinetransaminase
C Tyrosinase
D Alkaptonuria

Disease

- A. Tyrosinemia Type II
hydroxylase
B. Homogentisate Oxidase
C. Tyrosinemia Type I
D- Albinism

- a) 1 → D, 2 → C, 3 → A, 4 → B
b) 1 → A, 2 → C, 3 → D, 4 → B
c) 1 → C, 2 → D, 3 → A, 4 → B
d) 1 → C, 2 → A, 3 → D, 4 → B

300. Which of the following has two amino groups-

- a) Glycine
- b) Arginine
- c) Lysine
- d) Asparagine

