42 তম বিশেষ বিসিএস (স্বাস্থ্য)

Medical Part

প্রশ্ন, ও সমাধান

মোট প্রশ্ন	১০০টি
অংশ	সাধারণ অংশ
প্রশ্ন	১-১০০

42nd Special BCS Medical Part

101. A major sign of cardiac tamponade is
(A) Bradycardia
(B) Ventricular dilatation
(C) 3rd degree heart block
(D) Pulsus paradoxus
Answer: D
Explanation: Pulsus paradoxus is a classic clinical sign of cardiac tamponade, characterized by an exaggerated decrease in systolic blood pressure during inspiration.
Signs of pulsus paradoxus include

- Raised JVP
- Marked hypotension
- Muffled heart sound
- Pulsus paradoxus.

102. Causes of short stature include following except
(A) Psychosocial deprivation
(B) Hypothyroidism
(C) Growth hormone deficiency
(D) Klinefelter syndrome
Answer: D
Explanation: Klinefelter syndrome is usually associated with tall stature rather than short stature.

103. Bleeding time is prolonged in
(A) ITP
(B) Von Willebrand disease
(C) Haemophilia-A
(D) Haemophilia-B
Answer: A, B
Explanation: Von Willebrand disease impairs platelet adhesion, leading to prolonged bleeding time.Bleeding time is prolonged in ITP also.

104. A stretch reflex is
(A) Monosynaptic
(B) Poly synaptic
(C) Initiated by muscle spindle
(D) Transmitted by type II fibre
Answer: A
Explanation: The stretch reflex is a monosynaptic reflex involving a direct connection between the sensory and motor neurons.

105. Following cells are involved in acute inflammation
(A) Beta cells

(B) Lymphocytes
(C) Epitheloid cells
(D) Neutrophil
Answer: D
Explanation: Neutrophils are the predominant inflammatory cells in acute inflammation.

106. Clearance of drug depends on
(A) Plasma half life
(B) Bioavailability
(C) Diffusion coefficient
(D) Rate of absorption
Answer: A
Explanation: Drug clearance is closely related to plasma half-life and determines the rate at which a drug is removed from the body.

107. Following muscles are involved in forceful respiration
(A) Rectus abdominis
(B) Intercostal muscle
(C) Scalene
(D) Soleus
Answer: A, B, C
Explanation:
(A) Rectus abdominis (Forceful expiration)
(B) Intercostal muscle (Internal = Forceful expiration; External = Inspiration)
(C) Scalene (Forceful/Accessory inspiration

108. Phagocytosis is promoted by
(A) Hyaluronidase
(B) Neuraminidase
(C) Complement
(D) Hexose monophosphate shunt
Answer: C
Explanation: Complement proteins, particularly C3b, act as opsonins and enhance phagocytosis.

109. Pyrimidine bases are catabolized to
(A) Orotic acid
(B) Uric acid
(C) Valproic acid
(D) Ammonia
Answer: D
Explanation: Pyrimidine degradation produces β-alanine, β-aminoisobutyrate, carbon dioxide, and ammonia.

110. In Graves disease, one would least likely expect
(A) Goitre
(B) Increased BMR
(C) Increased TSH secretion

(D) Weight loss
Answer: C
Explanation: In Graves disease, elevated thyroid hormone levels suppress TSH secretion through negative feedback.

111. Linear growth is determined by
(A) Calcium
(B) Phosphate
(C) Vitamin-D
(D) IGF-1
Answer: D
Explanation: IGF-1 mediates the growth-promoting effects of growth hormone and is essential for linear growth.

112. Contraindication of lumbar puncture
(A) Coma
(B) Decerebrate posturing
(C) Head injury
(D) Mole on the affected site
Answer: A, B, C
Explanation: Decerebrate posturing indicates severe brainstem compression or impending brain herniation (often due to massively raised intracranial pressure). Performing a lumbar puncture (LP) here creates a pressure gradient that can cause fatal downward cerebellar tonsillar herniation.
Coma and Head injury are strong relative contraindications. An LP should never be performed blindly in these states until focal mass lesions or intracranial shifts are ruled out via a CT scan.

113. Formation of clot is affected by
(A) Zinc
(B) Factor B
(C) Factor IX
(D) Kallikrein
Answer: C
Explanation: Factor IX is an essential component of the intrinsic coagulation pathway and is required for normal clot formation.

114. Vitamin K
(A) Synthesized in liver
(B) Synthesized in intestinal epithelium
(C) Causes haemolytic disease
(D) Antioxidant
Answer: B
Explanation: Synthesized by intestinal bacteria.

115. Extra-articular manifestation of rheumatoid arthritis are
(A) AKI
(B) Bronchiolitis obliterans
(C) Hepatic failure

(D) Leukoplakia
Answer: B
Explanation: Bronchiolitis obliterans is a recognized extra-articular pulmonary manifestation of rheumatoid arthritis.

116. Organism that can cross placenta
(A) Varicella zoster virus
(B) Toxoplasma gondii
(C) Hepatitis C virus
(D) Streptococcus
Answer: B
Explanation: Toxoplasma gondii can cross the placenta and cause congenital toxoplasmosis.

117. Causes of haematuria include
(A) Cardiac failure
(B) Renal tuberculosis
(C) Pregnancy
(D) Nephrotic syndrome
Answer: B
Explanation: Renal tuberculosis can damage the urinary tract and lead to hematuria.

118. Complete destruction of zona glomerulosa results in inability to produce
(A) Adrenaline
(B) Aldosterone
(C) Cortisol
(D) Dehydroepiandrosterone
Answer: B
Explanation: The zona glomerulosa of the adrenal cortex is responsible for the production of aldosterone.

119. Deep cervical fascia encloses
(A) Larynx
(B) Thyroid gland
(C) Pineal gland
(D) Submandibular gland
Answer: B
Explanation: The pretracheal layer of the deep cervical fascia surrounds the thyroid gland.

120. Renal control of acid-base balance is a function of
(A) Loop of Henle
(B) Proximal tubule
(C) Distal tubule
(D) Glomerulus
Answer: C
Explanation: The distal tubule plays a major role in acid-base regulation through hydrogen ion secretion and bicarbonate handling.Proximal tubule also takes part in acid base balance.

121. Sustained elevation of cardiac output occurs in
(A) Hypertension
(B) Anaemia
(C) Heart block
(D) Cardiac tamponade
Answer: B
Explanation: Anaemia causes decreased oxygen-carrying capacity of blood, leading to a compensatory increase in cardiac output.

122. Causes of hyperpyrexia
(A) Bronchial asthma
(B) COPD
(C) Malaria
(D) Hyperparathyroidism
Answer: C
Explanation: Severe malaria may cause hyperpyrexia, with body temperature rising above 41°C.

123. Parasites usually cross lungs during their life cycle
(A) Enterobius vermicularis
(B) Ancylostoma duodenale
(C) Trichuris trichiura
(D) Ascaris lumbricoides
Answer: D
Explanation: Ascaris lumbricoides larvae migrate through the lungs before returning to the intestine.

124. Precancerous condition is
(A) Leukoplakia
(B) Fibroadenosis of breast
(C) Duodenal ulcer
(D) Cervical erosion
Answer: A
Explanation: Leukoplakia is a premalignant lesion that may progress to squamous cell carcinoma.

125. Umbilical cord contains
(A) One umbilical artery
(B) One umbilical vein
(C) Allantois
(D) Fetal membrane
Answer: B
Explanation: A normal umbilical cord contains one umbilical vein and two umbilical arteries.

126. Autosomal recessive disorder
(A) Expressed in heterozygote
(B) Parents may be normal carrier
(C) Vertical transmission

(D) Variable expressivity
Answer: B
Explanation: In autosomal recessive disorders, both parents may be asymptomatic carriers of the defective gene.

127. DNA viruses are
(A) Reovirus
(B) Picornavirus
(C) Orthomyxovirus
(D) Parvovirus
Answer: D
Explanation: Parvovirus is a single-stranded DNA virus, whereas the others are RNA viruses.

128. In Addison's disease, there is
(A) High blood level of cortisol
(B) Hypertension
(C) Hypoglycaemia between meals
(D) Hypopigmentation
Answer: C
Explanation: Cortisol deficiency in Addison's disease can lead to fasting hypoglycaemia.

129. In blood CO_2 is transported from tissue to lungs mainly as
(A) Bicarbonate
(B) Carbaminohaemoglobin
(C) Carbonic acid
(D) Dissolved form
Answer: A
Explanation: About 70% of carbon dioxide is transported in the blood as bicarbonate ions.

130. Testosterone is synthesised from
(A) Cholesterol
(B) Glycine
(C) Oestrogen
(D) Tyrosine
Answer: A
Explanation: Testosterone is a steroid hormone synthesized from cholesterol.

131. Which of the following organ is specially vulnerable during haemorrhagic shock
(A) Brain
(B) Heart muscle
(C) Kidney
(D) Skeletal muscle
Answer: C
Explanation: The kidneys are highly sensitive to reduced blood flow and are particularly vulnerable during haemorrhagic shock.

132. Which of the followings are unencapsulated receptor
(A) Ruffini's corpuscle
(B) Merkel's disc
(C) Pacinian corpuscle
(D) Meissner's corpuscle
Answer: B
Explanation: Merkel's discs are unencapsulated mechanoreceptors responsible for fine touch sensation.

133. In basal condition, most of the energy used by cardiac muscle from metabolism of
(A) Fatty acid
(B) Glucose
(C) Lactate
(D) Pyruvate
Answer: A
Explanation: Under resting conditions, fatty acids provide the majority of energy required by the heart.

134. The major function of surfactant is to increase
(A) Alveolar surface tension
(B) Pulmonary compliance
(C) Work of breathing
(D) The tendency of lungs to collapse
Answer: B
Explanation: Surfactant reduces alveolar surface tension and thereby increases pulmonary compliance.

135. Spores are killed by
(A) H_2O_2
(B) Gentian violet
(C) Moist heat at 110°C for 30 minutes
(D) Dry heat
Answer: A
Explanation: Hydrogen peroxide is a powerful sporicidal agent capable of destroying bacterial spores.

136. In haemolytic anaemia
(A) Increased haptoglobin
(B) Increased urinary urobilinogen
(C) Decreased reticulocytes
(D) Decreased LDH
Answer: B
Explanation: Increased red cell destruction leads to elevated bilirubin production and increased urinary urobilinogen.

137. Acute renal failure following mismatched blood transfusion is due to
(A) Stricture urethra
(B) Septicemia
(C) Renal vasoconstriction

(D) Dehydration
Answer: C
Explanation: Hemolytic transfusion reactions cause renal ischemia and vasoconstriction, leading to acute kidney injury.

138. The affinity of Hb for O_2 is increased by
(A) Metabolic acidosis
(B) Exercise
(C) Anaemia
(D) CO poisoning
Answer: (D) CO poisoning
Explanation: Carbon monoxide binds strongly to haemoglobin and causes the remaining Hb sites to hold oxygen more tightly. This shifts the oxyhaemoglobin dissociation curve to the left. Metabolic acidosis and exercise shift it to the right.

139. In aerobic exercise there is decrease in
(A) Circulatory blood volume
(B) Skin temperature
(C) Cerebral blood flow
(D) Mean blood pressure
Answer: (C) Cerebral blood flow
Explanation: During moderate-to-heavy exercise, hyperventilation lowers arterial CO_2, causing cerebral vasoconstriction and a slight reduction in cerebral blood flow. Skin temperature and mean arterial pressure generally increase.

140. Following predispose to the development of tuberculosis
(A) HLA-B27
(B) Sarcoidosis
(C) Malnutrition
(D) Avitaminosis D
Answer: C
Explanation: Malnutrition weakens cell-mediated immunity and significantly increases susceptibility to tuberculosis.

141. Complication of typhoid fever is
(A) Thyroiditis
(B) Pericarditis
(C) Ileal perforation
(D) Blindness
Answer: C
Explanation: Ileal perforation is a serious and well-known complication of typhoid fever due to necrosis of Peyer's patches.

142. Third aortic arch derivatives
(A) Pulmonary trunk
(B) Subclavian artery
(C) External carotid artery
(D) Pulmonary artery

Answer: C
Explanation: The third aortic arch contributes to the formation of the common carotid artery and the proximal part of the internal carotid artery, while the external carotid artery develops from its ventral extension.

143. A regurgitant aortic valve in a nonfunctioning heart causes
(A) Decrease in diastolic pressure
(B) Decrease in heart rate
(C) Systolic murmur
(D) Decrease in systolic blood pressure
Answer: A
Explanation: Aortic regurgitation causes blood to flow back into the left ventricle during diastole, resulting in decreased diastolic pressure.

144. Insulin causes
(A) Glycogenolysis
(B) Breakdown of protein
(C) Lipolysis
(D) Entry of K^+ into the cell
Answer: D
Explanation: Insulin stimulates the uptake of potassium into cells by activating the Na^+/K^+-ATPase pump.

145. Vitamin K is necessary for synthesis of
(A) Factor I
(B) Factor V
(C) Factor II
(D) Glucocorticoid
Answer: C
Explanation: Vitamin K is required for the synthesis of clotting factors II, VII, IX, and X.

146. Causes of high ESR is
(A) Polycythemia
(B) Sickle cell anaemia
(C) Multiple myeloma
(D) Spherocytosis
Answer: C
Explanation: Multiple myeloma increases plasma proteins, especially immunoglobulins, leading to a markedly elevated ESR.

147. Features of aortic stenosis includes
(A) Irregular pulse
(B) Heaving apex beat
(C) Left parasternal heave
(D) Mid-diastolic murmur
Answer: B
Explanation: Left ventricular hypertrophy in aortic stenosis produces a sustained or heaving apex beat.

148. Polycythemia occurs in
(A) Hypoxia
(B) Iron deficiency
(C) Vitamin C deficiency
(D) Malnutrition
Answer: A
Explanation: Chronic hypoxia stimulates erythropoietin production, resulting in secondary polycythemia.

149. Medial cord of brachial plexus gives rise to
(A) Radial nerve
(B) Thoracodorsal nerve
(C) Axillary nerve
(D) Medial cutaneous nerve of forearm
Answer: D
Explanation: The medial cutaneous nerve of the forearm is a direct branch of the medial cord of the brachial plexus.

150. Jaundice within 24 hours of age
(A) ABO incompatibility
(B) Septicemia
(C) Hepatitis
(D) Hereditary spherocytosis
Answer: A
Explanation: Jaundice appearing within the first 24 hours of life is pathological and commonly results from ABO incompatibility.

151. Which anti-diabetic drug causes weight loss
(A) Pioglitazone
(B) Liraglutide
(C) Vildagliptin
(D) Repaglinide
Answer: B
Explanation: Liraglutide, a GLP-1 receptor agonist, promotes satiety and is associated with weight loss.

152. Cerebellar lesion causes
(A) Spasticity
(B) Rigidity
(C) Intention tremor
(D) Slow gait
Answer: C
Explanation: Intention tremor is a characteristic sign of cerebellar dysfunction and becomes more prominent during voluntary movement.

153. Bence-Jones proteins are

(A) Heavy chain immunoglobulin
(B) Found in the urine of multiple myeloma
(C) Associated with mononuclear antibody
(D) Precipitate by boiling
Answer: B
Explanation: Bence-Jones proteins are monoclonal immunoglobulin light chains commonly found in the urine of patients with multiple myeloma.

154. Axillary nerve supplies the
(A) Pectoralis major
(B) Pectoralis minor
(C) Teres major
(D) Teres minor
Answer: D
Explanation: The axillary nerve supplies the deltoid and teres minor muscles.

155. In secondary hypothyroidism
(A) ↑TSH, ↑FT4
(B) ↑FT4, normal TSH
(C) ↓TSH, ↓FT4
(D) ↓TSH, ↑FT4
Answer: C
Explanation: Secondary hypothyroidism results from pituitary dysfunction, causing low TSH and consequently low free T4 levels.

156. ECG changes in hyperkalaemia
(A) ST depression
(B) Short QRS complex
(C) Tall T wave
(D) K^+ level 5.5–7.0 mEq/L
Answer: C
Explanation: Tall, peaked T waves are the earliest and most characteristic ECG finding in hyperkalaemia.

157. Killed vaccine are except
(A) Smallpox
(B) COVID-19
(C) Polio
(D) Rubella
Answer: D
Explanation: Rubella vaccine is a live attenuated vaccine, whereas killed vaccines contain inactivated organisms.

158. Continuous capillaries are found in
(A) Cerebrum
(B) Liver
(C) Lungs

(D) Pituitary gland
Answer: A
Explanation: Continuous capillaries are present in the cerebrum and contribute to the blood-brain barrier.

159. Antibody present in highest percentage in newborn is
(A) IgA
(B) IgE
(C) IgG
(D) IgM
Answer: C
Explanation: IgG is the predominant antibody in newborns because it readily crosses the placenta.

160. Which of the following hormones exhibits a diurnal rhythm in its secretion
(A) ACTH
(B) Adrenaline
(C) Parathyroid hormone
(D) Prolactin
Answer: A
Explanation: ACTH secretion follows a circadian rhythm, with peak levels occurring in the early morning.

161. In an immune mediated response, which of the following leukocytes becomes an activated macrophage?
(A) Lymphocyte
(B) Basophil
(C) Neutrophil
(D) Monocyte
Answer: D
Explanation: Monocytes migrate into tissues and differentiate into activated macrophages during immune responses.

162. Which of the following does not have a membrane?
(A) Ribosome
(B) Mitochondria
(C) Nucleus
(D) Chloroplast
Answer: A
Explanation: Ribosomes are non-membrane-bound organelles responsible for protein synthesis.

163. The diaphragm is pierced by
(A) Sympathetic trunk
(B) Lowest intercostal nerves
(C) Left phrenic nerve
(D) Pudendal nerve
Answer: C

Explanation: The left phrenic nerve pierces the diaphragm independently to supply its motor and sensory innervation.

164. Excitatory cells of nervous system includes
(A) Anterior horn cells of spinal cord
(B) Ependymal cell
(C) Microglia
(D) Purkinje cell
Answer: A
Explanation: Anterior horn cells are motor neurons that generate excitatory impulses to skeletal muscles.

165. In which poisoning gastric lavage is contraindicated?
(A) Organophosphorus compound poisoning
(B) Kerosene poisoning
(C) Paracetamol poisoning
(D) Methanol poisoning
Answer: B
Explanation: Gastric lavage is contraindicated in kerosene poisoning because it increases the risk of aspiration pneumonitis.

166. Following infections are common in immunodeficient patient except
(A) Pneumocystis carinii
(B) Diphtheria
(C) Cytomegalovirus
(D) Candida albicans
Answer: B
Explanation: Diphtheria is not typically considered an opportunistic infection associated with immunodeficiency.

167. ACE inhibitors are contraindicated in
(A) Asthma
(B) Acute heart failure
(C) Pregnancy
(D) Diabetic nephropathy
Answer: C
Explanation: ACE inhibitors are contraindicated during pregnancy because they can cause fetal renal damage and congenital abnormalities.

168. Retroperitoneal structures include
(A) Transverse colon
(B) Ascending colon
(C) Inferior vena cava
(D) Vermiform appendix
Answer: C
Explanation: The inferior vena cava is a primary retroperitoneal structure located behind the peritoneum.

169. Omega-3 essential fatty acid are
(A) Linoleic acid
(B) Carbonic acid
(C) Arachidonic acid
(D) Oleic acid
Answer: Blank
Explanation: Among the given options, linoleic acid is an essential fatty acid; however, true omega-3 fatty acids include alpha-linolenic acid (ALA), EPA, and DHA.

170. Continuous capillaries gaseous exchange occurs in
(A) Thyroid gland
(B) Lungs
(C) Spleen
(D) Bone marrow
Answer: B
Explanation: Continuous capillaries in the lungs facilitate efficient gaseous exchange between alveoli and blood.

171. Commonest tumors of the central nervous system arise from
(A) Meninges
(B) Neuroglia
(C) Blood vessels
(D) Nerve cells
Answer: B
Explanation: Gliomas, which arise from neuroglial cells, are the most common primary tumors of the central nervous system.

172. Antigen presenting cell except
(A) Macrophage
(B) Neutrophil
(C) Langerhans cell of skin
(D) Dendritic cell
Answer: B
Explanation: Neutrophils are not professional antigen-presenting cells, unlike macrophages, dendritic cells, and Langerhans cells.

173. DNA synthesis is inhibited by
(A) Prednisolone
(B) Chloramphenicol
(C) Azathioprine
(D) Chloroquine
Answer: C
Explanation: Azathioprine inhibits purine synthesis and thereby suppresses DNA replication and cell proliferation.

174. Common organism for neonatal sepsis
(A) Pneumococci
(B) Pseudomonas
(C) E. coli
(D) Haemophilus influenzae
Answer: C
Explanation: Escherichia coli is one of the most common causative organisms of neonatal sepsis.

175. Rickets radiology
(A) Cupping of epiphysis
(B) Ring-shaped epiphysis
(C) Widening of epiphysis
(D) Increased calcification
Answer: Blank
Explanation: Radiological features of rickets include cupping, fraying, and widening of the metaphyses.

176. X-linked disorder is
(A) Polycystic ovarian syndrome
(B) Down syndrome
(C) Turner syndrome
(D) Haemophilia
Answer: D
Explanation: Haemophilia A and Haemophilia B are classic X-linked recessive disorders.

177. Mood stabilizer is
(A) Topiramate
(B) Lithium
(C) Dexamethasone
(D) Diazepam
Answer: B
Explanation: Lithium is the prototype mood stabilizer used in the treatment of bipolar disorder.

178. Normal saline is
(A) Capable to exert about 300 mOsm/L osmotic pressure
(B) Hypertonic to plasma
(C) Synonymous with normal saline
(D) 9 gm mEq/L solution
Answer: A
Explanation: Normal saline (0.9% NaCl) has an osmolarity of approximately 308 mOsm/L and is isotonic with plasma.

179. Pancreatitis causes elevation of plasma
(A) Lipase
(B) Aldolase
(C) Acid phosphatase
(D) Lipoprotein lipase

Answer: A
Explanation: Serum lipase is significantly elevated in acute pancreatitis and is more specific than amylase.

180. Complete lesion of oculomotor nerve causes
(A) Ptosis
(B) Blindness
(C) Pupil constriction
(D) Inability to lateral movement
Answer: A
Explanation: Oculomotor nerve palsy causes ptosis due to paralysis of the levator palpebrae superioris muscle.

181. Avascular structures include
(A) Enamel of the teeth
(B) Bone marrow
(C) Periosteum
(D) Retina
Answer: A
Explanation: Dental enamel is completely avascular and receives nutrients by diffusion from surrounding tissues.

182. Substance that can easily diffuse through cell membrane
(A) Glucose
(B) Protein
(C) Na^+
(D) Oxygen
Answer: D
Explanation: Oxygen is a small nonpolar molecule that readily diffuses across the lipid bilayer of cell membranes.

183. Blood-brain barrier formed by
(A) Endothelial cell
(B) Ependyma
(C) Oligodendrocyte
(D) Epithelial cells
Answer: A
Explanation: The blood-brain barrier is primarily formed by tight junctions between capillary endothelial cells.

184. Features of CSF in pyogenic meningitis
(A) Chronic renal failure
(B) Diabetes insipidus
(C) Diabetes mellitus
(D) Acute glomerulonephritis
Answer: Blank (Question error)

Explanation: In pyogenic meningitis, CSF typically shows increased neutrophils, increased protein, decreased glucose, and elevated opening pressure.

185. Major antibody content of the serum is
(A) α_1 fraction
(B) α_2 fraction
(C) γ fraction
(D) β fraction
Answer: C
Explanation: Most serum immunoglobulins migrate in the gamma (γ) globulin fraction during serum protein electrophoresis.

186. The followings are mainly intracellular parasites
(A) Echinococcus granulosus
(B) Leishmania donovani
(C) Trypanosoma
(D) COVID RNA virus
Answer: B
Explanation: Leishmania donovani survives and multiplies within macrophages and is therefore an intracellular parasite.

187. Following menopause there is increased secretion of
(A) FSH
(B) Oxytocin
(C) Prolactin
(D) Oestrogen
Answer: A
Explanation: Loss of ovarian estrogen production removes negative feedback on the pituitary, resulting in increased FSH secretion.

188. Biochemical disturbance occurs in fulminant hepatic failure is
(A) Metabolic alkalosis
(B) Hypoglycaemia
(C) High serum albumin
(D) Prolongation of prothrombin time
Answer: B, D
Explanation: Fulminant hepatic failure impairs gluconeogenesis and glycogen storage, leading to hypoglycaemia.Because the liver can no longer synthesize clotting factors (especially Factor VII, which has the shortest half-life), the prothrombin time prolongs dramatically.

189. Which type of epithelium is found in thyroid follicles
(A) Squamous
(B) Transitional
(C) Cuboidal
(D) Columnar
Answer: C

Explanation: Thyroid follicles are lined by simple cuboidal epithelium under normal physiological conditions.

190. Which among the following is protozoal infection
(A) Giardiasis
(B) Schistosomiasis
(C) Filariasis
(D) Hydatid disease
Answer: A
Explanation: Giardiasis is caused by Giardia lamblia, a protozoan parasite.

191. Ionising radiation—following is true
(A) Does not affect age
(B) Does not affect lungs
(C) Does not affect skin
(D) Affects the brain
Answer: D
Explanation: Ionising radiation can affect brain tissue, especially at high doses, although the sensitivity varies among tissues.

192. Coomb's test is used for detecting
(A) Rheumatoid factor
(B) Antinuclear factor
(C) Cold agglutinin
(D) Anti-insulin antibody
Answer: C
Explanation: The Coombs test is used to detect antibodies directed against red blood cells and may be positive in cold agglutinin disease.

193. Content of the broad ligament
(A) Testes
(B) Ovary
(C) Ureter
(D) Ovarian artery
Answer: D
Explanation: The ovarian artery travels within the suspensory ligament and is closely associated with the broad ligament.

194. Myoepithelial cells found in
(A) Sweat gland
(B) Parotid gland
(C) Adrenal gland
(D) Lacrimal gland
Answer: A, B, D
Explanation: Myoepithelial cells are present in exocrine glands such as sweat glands, salivary glands (parotid, submandibular), lacrimal glands and mammary gland.

195. Local blood vessels are dilated due to increased concentration of
(A) Endothelin
(B) Sodium ions
(C) Calcium ions
(D) Potassium ions
Answer: D
Explanation: Increased extracellular potassium concentration promotes local vasodilation and increases blood flow.

196. Hemorrhagic lesions may occur in
(A) Vitamin B deficiency
(B) Vitamin C deficiency
(C) Retinol deficiency
(D) Nephrotic syndrome
Answer: B
Explanation: Vitamin C deficiency causes defective collagen synthesis, resulting in capillary fragility and hemorrhagic lesions.

197. Structure passes through greater sciatic foramen
(A) Extensor of hip
(B) Gluteal nerve
(C) Flexor of the knee
(D) Adductor of hip
Answer: B
Explanation: The superior and inferior gluteal nerves pass through the greater sciatic foramen.

198. Major source of progesterone in early 8 weeks of pregnancy is
(A) Corpus luteum
(B) Maternal liver
(C) Cytotrophoblast
(D) Placental syncytiotrophoblast
Answer: A
Explanation: During the first 8 weeks of pregnancy, the corpus luteum is the primary source of progesterone.

199. In emphysema, pulmonary function test shows
(A) Decreased residual volume
(B) Increased FEV_1/FVC
(C) Increased total lung capacity
(D) Increased vital capacity
Answer: C
Explanation: Emphysema causes air trapping and hyperinflation, leading to an increased total lung capacity.

200. Hot air oven is used for sterilization of
(A) Scalpel
(B) Wire loop
(C) Needle
(D) Swab stick
Answer: A
Explanation: A hot air oven is used for dry heat sterilization of metal instruments, glassware, powders, and oils, including scalpels.