

UNIT – III

CHAPTER - 7

BODY FLUIDS AND CIRCULATION

TRY AND TEST YOURSELF



LEVEL – I (1 - 50 Questions)

1. What is the function of lymph?
 - a) Transport of O₂ into brain
 - b) Transport of CO₂ into lungs
 - c) Bring interstitial fluid in blood
 - d) Bring RBC and WBC in lymph node
2. Which one of the following plasma proteins is involved in the coagulation of blood?
 - a) Globulin
 - b) Fibrinogen
 - c) Albumin
 - d) Serum amylase
3. Which of the following WBCs are found in more numbers?
 - a) Eosinophil
 - b) Neutrophil
 - c) Basophil
 - d) Monocyte
4. Which of the following is not involved in blood clotting?
 - a) Fibrin
 - b) Calcium
 - c) Platelets
 - d) Bilirubin
5. Lymph is colourless because
 - a) WBC are absent
 - b) WBC are present
 - c) Hemoglobin is absent
 - d) RBC are absent
6. Blood group is due to the presence or absence of surface
 - a) Antigens on the surface of WBC
 - b) Antibodies on the surface of RBC
 - c) Antigens of the surface of RBC
 - d) Antibodies on the surface of WBC
7. A person having both antigen A and antigen B on the surface of RBCs belongs to blood group
 - a) A
 - b) B
 - c) AB
 - d) O
8. Erythroblastosis foetalis is due to the destruction of
 - a) Foetal RBCs
 - b) Foetus suffers from atherosclerosis
 - c) Foetal WBCs
 - d) Foetus suffers from mianmata
9. Dub sound of heart is caused by
 - a) Closure of atrio-ventricular valves
 - b) Opening of semi-lunar valves
 - c) Closure of semi-lunar valves
 - d) Opening of atrio-ventricular valves.
10. Why is the velocity of blood flow the lowest in the capillaries?
 - a) The systemic capillaries are supplied by the left ventricle, which has a lower cardiac output than the right ventricle.
 - b) Capillaries are far from the heart, and blood flow slows as distance from the heart increases.
 - c) The total surface area of the capillaries is larger than the total surface area of the arterioles.
 - d) The capillary walls are not thin enough to allow oxygen to exchange with the cells.
 - e) The diastolic blood pressure is too low to deliver blood to the capillaries at a high flow rate.
11. An unconscious patient is rushed into the emergency room and needs a fast blood transfusion. Because there is no time to check her medical history or determine her blood type, which type of blood should you as her doctor, give her?
 - a) A⁻
 - b) AB
 - c) O⁺
 - d) O⁻
12. Which of these functions could or could not be carried out by a red blood cell? Briefly justify your answer.
 - a) Protein synthesis
 - b) Cell division
 - c) Lipid synthesis
 - d) Active transport
13. At the venous end of the capillary bed, the osmotic pressure is
 - a) Greater than the hydrostatic pressure
 - b) Result in net outflow of fluids
 - c) Results in net absorption of fluids
 - d) No change occurs.

14. A patient's chart reveals that he has a cardiac output of 7500mL per minute and a stroke volume of 50 mL. What is his pulse rate (in beats / min)
- a) 50 b) 100 c) 150 d) 400
15. At any given time there is more blood in the venous system than that of the arterial system. Which of the following features of the veins allows this?
- a) relative lack of smooth muscles b) presence of valves
c) proximity of the veins to lymphatic's d) thin endothelial lining
16. The middle layer of heart is
- a) Myocardium b) Endocardium c) Pericardium d) Epicardium
17. The opening between the right auricle and right ventricle is guarded by
- a) Tricuspid valve b) bicuspid valve c) semi-lunar valve d) SA node
18. The opening and closing of the semi-lunar valves are achieved by
- a) Chordae tendinae b) Bundle of His c) Tricuspid valve d) Bicuspid valve
19. The electrical impulses in the heart is initiated by the
- a) Pacemaker cells b) Purkinje fibres c) Bundle of His d) Left auricle
20. An increase in the rate of heart beat is called
- a) Tachycardia b) Bradycardia c) Systole d) Diastol
21. The average blood volume in an adult is
- a) 5000 ml b) 50000 ml c) 50 ml d) 5000
22. The blood flowing into the capillary from an arteriole has a high _____ pressure.
- a) Homeostatic b) Hydrostatic c) Homostatic d) All of the above
23. Which is regulating homeostatic mechanism?
- a) Perfusion, to the heart and brain b) Cardio vascular system maintains blood flow
c) Both of these d) None of the above
24. Which is the character of fluid outside the cells?
- a) Intercellular b) Intracellular c) Extracellular d) All of the above
25. Liver receives oxygenated blood from the hearl through:
- a) hepatic portal vein b) hepatic vein c) hepatic artery d) Renalartery
26. Which is the process of maintenance of constant internal environment?
- a) Homostasis b) Homeostasis c) Heterostasis d) All of the above
27. Which is the character of fluid inside the cells?
- a) Extracellular b) Intracellular c) Intercellular d) All of the above
30. Which are involved in blood clotting?
- a) Globulin b) Albumin c) Prothrombinand Fibrinogen d) All of the above
31. _____ plasma protein is responsible for maintaining the osmotic pressure of blood.
- a) Globulin b) Prothrombin c) Fibrinogen d) Albumin
32. Which is maintained the osmotic pressure of the blood?
- a) Albumin b) Prothrombinand Fibrinogen c) Globulin d) All of the above
33. The average blood volume is about
- a) 5000ml b) 6000ml c) 5500ml d) 6500ml
34. Which does facilitate the transport of ions, hormones, lipids and assist in immune function
- a) Albumin b) Globulin c) Prothrombinand Fibrinogen d) All of the above
35. _____ plasma proteins are involved in blood clotting.
- a) Albumin and prothrombin b) Globulin and albumin
c) Prothrombin and fibrinogen d) Globulin and fibrinogen
36. Plasma mainly consists of water
- a) 80-90% b) 80- 92% c) 70-80% d) 72-80%
37. Healthy man has millions of RBC in mm³ of blood.
- a) 5.0 -5.5 b) 5.0 -6 c) 4.5 -5.0 d) 5.5 -5.6

38. The RBCs are devoid of ____.
- a) Ribosomes and endoplasmic reticulum b) Nucleus and mitochondria
c) Both of these d) None of the above
39. Which does include chlorides, carbonates and phosphates of potassium, sodium, calcium and magnesium?
- a) Organic constituents b) Inorganic constituents c) Both of these d) None of the above
40. Where is haemoglobin dissolved?
- a) Cell b) Cytoplasm c) Protoplasm d) All of the above
41. Which does include urea, amino acids, glucose, fats and vitamins?
- a) Organic constituents b) None of the above
c) Both of these d) Inorganic constituents
42. Which is produced while liver breaking the excess amino acids?
- a) Ammonia b) Urea c) Uric acid d) All of the above
43. Which are characterised by the presence of granules in the cytoplasm?
- a) Granulocyte b) Basophils c) Eosinophils d) Neutrophils
44. Which does the process help in differentiation of stem cells of the bone marrow to erythrocytes in adults?
- a) Haematocrit b) Erythropoiesis c) Erythropoietin d) Granulocyte
45. The absence of nucleus, mitochondria, ribosomes and endoplasmic reticulum organelles accommodates more haemoglobin thereby ____ the oxygen carrying capacity of the cell.
- a) Maximising b) Equalising c) Minimising d) No change
46. Healthy women has millions of RBC in mm³ of blood.
- a) 5.0 -5.5 b) 5.5-6.0 c) 4.5 -5.5 d) 4.5 -5.0
47. Which is expressed the ratio of red blood cells to blood plasma?
- a) Erythropoietin b) Granulocyte c) Haematocrit d) Erythropoiesis
48. Which is a hormone secreted by the kidneys in response to low oxygen?
- a) Erythropoietin b) Granulocyte c) Haematocrit d) Erythropoiesis
49. Which have distinctly bilobed nucleus and the lobes are joined by thin strands?
- a) Neutrophils b) Granulocyte c) Eosinophils d) Basophils
50. Human RBC has ____ number of nucleus.
- a) 3 b) 2 c) 0 d) 1

LEVEL – II (51 - 100 Questions)

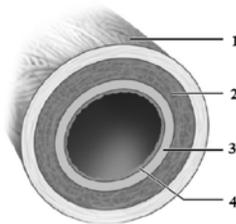
51. Which are phagocytic in nature and appear in large numbers in and around the infected tissues?
- a) Granulocyte b) Neutrophils c) Basophils d) Eosinophils
52. Which are differentiated in the bone marrow?
- a) Granulocyte b) Neutrophils c) Basophils d) Eosinophils
53. Which are also called heterophils?
- a) Basophils b) Neutrophils c) Eosinophils d) Granulocyte
54. Which are also called polymorphonuclear cells?
- a) Eosinophils b) Neutrophils c) Granulocyte d) Basophils
55. The average life span of RBCs in a healthy individual is:
- a) 102 days b) 201 days c) 120 days d) 21 days.
56. Where is nucleus large sized and constricted into several lobes but not joined by delicate threads?
- a) Granulocyte b) Eosinophils c) Neutrophils d) Basophils
57. Which does increase during certain types of parasitic infections and allergic reactions?
- a) Neutrophils b) Granulocyte c) Eosinophils d) Basophils
58. Which are non-phagocytic and constitute about 2-3% of the total WBCs?
- a) Basophils b) Neutrophils c) Eosinophils d) Granulocyte
59. After the life span of RBCs are over they get destroyed in the:
- a) kidneys b) bone marrow c) thymus d) spleen

60. Which the cytoplasmic granules are large sized, but fewer?
a) Eosinophils b) Neutrophils c) Granulocyte d) Basophils
61. Which are less numerous than any other type of WBCs constituting 0.5%- 1.0% of the total number of leucocytes?
a) Eosinophils b) Neutrophils c) Granulocyte d) Basophils
62. Differentiation of stem cells of the bone marrow to erythrocytes in adults is called:
a) erythropoiesis b) apoptosis c) coagulation d) embolus
63. Which constitute 28% of WBCs?
a) Monocytes b) Lymphocyte c) Agranulocytes d) Platelets
64. Which are characterised by the absence of granules in the cytoplasm?
a) Agranulocytes b) Platelets c) Monocytes d) Lymphocyte
65. Which secrete substances such as heparin, serotonin and histamines?
a) Neutrophils b) Granulocyte c) Eosinophils d) Basophils
66. Which are also involved in inflammatory reactions?
a) Eosinophils b) Neutrophils c) Granulocyte d) Basophils
67. Which are of two types, lymphocytes and monocytes?
a) Agranulocytes b) Lymphocyte c) Platelets d) Monocytes
68. are the types of WBCs which are involved in inflammatory reactions.
a) Neutrophils b) Basophils c) Eosinophils d) monocytes
69. Which of the central nervous system are the 'microglia', in the sinusoids of the liver they are called 'Kupffer cells' ?
a) Agranulocytes b) Platelets c) Macrophages d) Lymphocyte
70. Which are phagocytic cells that are similar to mast cells and have kidney shaped nucleus?
a) Agranulocytes b) Platelets c) Monocytes d) Lymphocyte
71. The macrophages of the liver are called:
a) microglia b) alveolar macrophages c) kupffer cells d) lymphocytes
72. Which have large round nucleus and small amount of cytoplasm?
a) Monocytes b) Lymphocyte c) Agranulocytes d) Platelets
73. Which constitute 1-3% of the total WBCs?
a) Platelets b) Lymphocyte c) Monocytes d) Agranulocytes
74. In which the two types of lymphocytes are B and T cells?
a) Monocytes b) Lymphocyte c) Agranulocytes d) Platelets
75. Which secrete substances involved in coagulation or clotting of blood?
a) Agranulocytes b) Monocytes c) Lymphocyte d) Platelets
76. Which are special cells in bone marrow?
a) Lymphocyte b) Agranulocytes c) Monocytes d) Megakaryocytes
77. Which of the central nervous system are the 'microglia in the pulmonary region they are the 'alveolar macrophages' ?
a) Platelets b) Lymphocyte c) Macrophages d) Agranulocytes
78. In which blood normally contains 1, 50,000 -3, 50,000 platelets mm³ of blood?
a) Agranulocytes b) Monocytes c) Lymphocyte d) Platelets
79. Which are also called thrombocytes that are produced from megakaryocytes and lack nuclei?
a) Agranulocytes b) Monocytes c) Lymphocyte d) Platelets
80. All agglutinogens contain _____.
a) Sucrose, D-galactose b) 11 terminal amino acids
c) N-acetyl glucosamine d) All of the above
81. Blood normally contains platelets mm⁻³ of blood.
a) 1,00,000 - 2,00,000 b) 1,50,000 -3,50,000
c) 3,50,000 -4,00,000 d) 2,50,000 -3,50,000

82. Depending on the presence or absence of ___ on the RBCs, blood group in individual belongs to four different types namely, A, B, AB and O.
a) Surface antigens b) Glycosyltransferase c) Agglutinins d) Natural antibodies
83. Which of the plasma of A, B and O individuals have?
a) Agglutinogens b) Natural antibodies c) Surface antigens d) Glycosyltransferase
84. Which is the reduction in platelet number can lead to clotting disorders that result in excessive loss of blood from the body?
a) Monocytes b) Lymphocyte c) Agranulocytes d) Platelets
85. Which is catalysed the attachments of the terminal amino acids are dependent on the gene products of A and B?
a) Natural antibodies b) Surface antigens c) Agglutinins d) lycosyltransferase
86. Which protein is converted to its active form called thrombin in the presence of calcium and vitamin K?
a) Erythroblastosisfoetalis b) Rh⁻
c) Rh⁺ d) Prothrombin
87. Which individuals who do not carry antigen D on the surface of the red blood cells ?
a) Prothrombin b) Rh⁻
c) Erythroblastosisfoetalis d) Rh⁺
88. The Rh factor protein is otherwise called present on the surface of the red blood cells, in majority of human.
a) B-antigen b) D -antigen c) c-antigen d) A-antigen
89. Which is a protein (D antigen) present on the surface of the red blood cells in majority (80%) of humans?
a) A group b) O group c) B group d) Rh factor
90. Which individuals who carry the antigen D on the surface of the red blood cells ?
a) Rh⁺ b) Erythroblastosis foetalis
c) Rh⁻ d) Prothrombin
91. Which does become fatal to the foetus because the child suffers from anaemia and jaundice?
a) Rh⁻ b) Prothrombin
c) Erythroblastosis foetalis d) Rh⁺
92. Which that filter the fluid from the lymphatic vessels of the skin are highly concentrated in the neck, inguinal, axillaries, respiratory and digestive tracts?
a) Lymph b) Heparin c) Serum d) Lymph nodes
93. Which is an anticoagulant produced in small quantities by mast cells of connective tissue which prevents coagulation in small blood vessels?
a) Serum b) Heparin c) Lymph d) Lymph nodes
94. Which meshwork after sometime fibrin fibrils contract, squeezing out a straw-coloured fluid?
a) Serum b) Lymph nodes c) Lymph d) Heparin
95. What is the fluid inside the lymphatics?
a) Lymph nodes b) Heparin c) Lymph d) Serum
96. Which is plasma without fibrinogen?
a) Serum b) Lymph c) Heparin d) Lymph nodes
97. The capillaries doesn't posses the layer of the blood vessel.
a) tunicamedia b) tunica intima c) tunicaExterna d) epicardium
98. Name the protein found in the middle layer of blood vessel.
a) Tunica externa b) Tunica intima c) Elastin d) Lymphocytes
99. What is the inner layer, supports the vascular endothelium?
a) Tunica media b) Tunica intima c) Lymphocytes d) Tunica externa
100. Which cells are found in the lymphatics?
a) Lymphocytes b) Tunica media c) Tunica intima d) Tunica externa

LEVEL – III (101 - 150 Questions)

101. Which are collected in the lymphatic fluid carried via the arterial blood and are recycled back to the lymph?
a) Lymphocytes b) Tunica media c) Tunica intima d) Tunica externa
102. What is the middle layer, composed of smooth muscles and an extra cellular matrix which contains a protein, elastin?
a) Tunica externa b) Tunica intima c) Tunica media d) Lymphocytes
103. Which are the thick walls, non- collapsible to withstand high pressure?
a) Arteries b) Small sphincter c) KiloPascal (KPa) d) Anastomoses
104. What are the blood vessels that carry blood away from the heart?
a) Arteries b) Small sphincter c) KiloPascal (KPa) d) Anastomoses
105. Which Layer of blood vessel is responsible for vasoconstriction and vasodilation?
a) Tunica externa b) Tunica intima c) Tunica media d) Lymphocytes
106. Which is the outer layer, composed of collagen fibres?
a) Lymphocytes b) Tunica media c) Tunica intima d) Tunica externa
107. Which are usually lie deep inside the body?
a) Arteries b) KiloPascal (KPa) c) Anastomoses d) Small sphincter
108. Which are thin walled and consist of single layer of squamous epithelium?
a) Capillaries b) Coronary artery c) Veins d) Open circulatory system
109. SI unit of mm Hg is
a) Small sphincter b) KiloPascal (KPa) c) Arteries d) Anastomoses
110. Which are absent in arteries and have a narrow lumen?
a) Valves b) Anastomoses c) Small sphincter d) KiloPascal (KPa)
111. Arteries do not always branch into arterioles, they can also form _____.
a) Small sphincter b) KiloPascal (KPa) c) Arteries d) Anastomoses
112. Which lies at the junction between the arterioles and capillaries to regulate the blood supply?
a) Anastomoses b) KiloPascal (KPa) c) Small sphincter d) Arteries
113. Complete double circulation is seen in.....
a) amphlbians b) crocodiles c) fishes d) annelids
114. Where is mixed blood ?
a) Capillaries b) Coronary artery c) Veins d) Open circulatory system
115. Find out correct one



- a) 1. Tunica externa 2. Tunica media 3. Tunica intima 4. Endothelium
b) 1. Tunica media 2. Tunica externa 3. Endothelium 4. Tunica intima
c) 1. Tunica externa 2. Tunica media 3. Tunica intima 4. Endothelium
d) 1. Tunica media 2. Tunica intima 3. Tunica externa 4. Endothelium
116. In which the capillary beds are the site for exchange of materials between blood and tissues?
a) Capillaries b) Open circulatory system
c) Coronary artery d) Veins
117. In which the blood volume in the capillaries is high but the flow of blood is slow?
a) Capillaries b) Veins
c) Open circulatory system d) Coronary artery

118. In which tunica media and elastin fibres are absent?
a) Capillaries b) Coronary artery c) Veins d) Open circulatory system
119. Which has haemolymph as the circulating fluid and is pumped by the heart, which flows through blood vessels into the sinuses?
a) Coronary artery b) Veins c) Capillaries d) Open circulatory system
120. Which are blood samples usually taken rather than artery because of low pressure?
a) Open circulatory system b) Veins
c) Coronary artery d) Capillaries
121. Which have thinner walls and a larger lumen and hence can be easily stretched?
a) Capillaries b) Veins
c) Open circulatory system d) Coronary artery
122. Which are unidirectional flow of blood due to the presence of semilunar valves that prevents backflow of blood?
a) Coronary artery b) Veins c) Capillaries d) Open circulatory system
123. Which is usually surround the heart in the manner of a crown?
a) Capillaries b) Open circulatory system
c) Coronary artery d) Veins
124. Which type of heart is in all vertebrates ?
a) Two chambered heart b) Closed circulatory system
c) Muscular chambered heart d) Haemocoel
125. Which blood is pumped by the heart and flows through blood vessels?
a) Haemocoel b) Closed circulatory system
c) Two chambered heart d) Muscular chambered heart
126. Sinuses are referred as _____.
a) Haemocoel b) Muscular chambered heart
c) Closed circulatory system d) Two chambered heart
127. Which is seen in Annelids, Cephalopods and Vertebrates?
a) Two chambered heart b) Closed circulatory system
c) Muscular chambered heart d) Haemocoel
128. Which is seen in Arthropods and most Molluscs?
a) Coronary artery b) Veins c) Capillaries d) Open circulatory system
129. What is the weight of adult heart?
a) 200 g b) 350 g c) 500 g d) 300 g
130. Which is made of special type of muscle in human heart?
a) Papillary muscles b) Cardiac muscle
c) Raymond de viessens d) Haemocoel
131. Which type of heart is in fishes ?
a) Muscular chambered heart b) Closed circulatory system
c) Haemocoel d) Two chambered heart
132. Which type of muscle is on the walls of the ventricles which thicker than the auricles?
a) Haemocoel b) Cardiac muscle
c) Papillary muscles d) Raymond de viessens
133. The structure of the heart was described by _____ in 1706
a) Raymond de viessens b) Haemocoel
c) Papillary muscles d) Cardiac muscle
134. The opening between the right atrium and the right ventricle is guarded by _____.
a) Tricuspid valve b) Semilunar valves c) Bicuspid valve d) Trabeculae carneae
135. Which is the middle layer of heart wall?
a) Endocardium b) Myocardium c) Epicardium d) Pericardial space

136. Which is the space between the membranes ?
a) Endocardium b) Myocardium c) Epicardium d) Pericardial space
137. Which is the outer layer of heart wall?
a) Epicardium b) Endocardium c) Myocardium d) Pericardial space
138. Which is the inner layer of heart wall?
a) Epicardium b) Pericardial space c) Endocardium d) Myocardium
139. Which fibres spread into the ventricles?
a) Pacemaker b) Purkinje fibres c) Bundle of His d) Stethoscope
140. The myocardium of the ventricle is thrown into irregular muscular ridges called
a) Tricuspid valve b) Semilunar valves c) Bicuspid valve d) Trabeculae carneae
141. The opening between the left atrium and the left ventricle is guarded by ____.
a) Semilunar valves b) Bicuspid valve c) Tricuspid valve d) Trabeculae carneae
142. Which runs down into the interventricular septum of heart?
a) Bundle of His b) Pacemaker c) Purkinje fibres d) Stethoscope
143. The opening of right and left ventricles into the pulmonary artery and aorta are guarded by aortic and pulmonary valves and are called _____.
a) Tricuspid valve b) Trabeculae carneae c) Semilunar valves d) Bicuspid valve
144. Which is the pressure in the auricles increases than that of the ventricular pressure?
a) Tachycardia b) Atrial systole c) Ventricular diastole d) Bradycardia
145. Which is a decreased heart rate ?
a) Ventricular diastole b) Bradycardia c) Tachycardia d) Atrial systole
146. Which does produce excitation through depolarisation of the heart?
a) Stethoscope b) Purkinje fibres c) Pacemaker d) Bundle of His
147. Which can be heard the two sounds during each cardiac cycle?
a) Pacemaker b) Purkinje fibres c) Bundle of His d) Stethoscope
148. Which is an increased heart rate?
a) Tachycardia b) Ventricular diastole
c) Bradycardia d) Atrial systole
149. Which is the pressure in the arteries as the chambers of the heart contracts?
a) Cardiac output b) Ventricular diastole
c) Systolic pressure d) Diastolic pressure
150. In which the atria contracts while the ventricles are still relaxed?
a) Bradycardia b) Tachycardia c) Ventricular diastole d) Atrial systole

LEVEL – IV (151 - 200 Questions)

151. In which AV valves are open while the semi lunar valves are closed?
a) Atrial systole b) Bradycardia
c) Ventricular diastole d) Tachycardia
152. Which is the amount of blood pumped out by each ventricle per minute?
a) Ventricular diastole b) Cardiac output
c) Diastolic pressure d) Systolic pressure
153. Which is the ventricles begins to relax, pressure in the arteries exceeds ventricular pressure, resulting in the closure of the semi lunar valves?
a) Ventricular diastole b) Diastolic pressure
c) Systolic pressure d) Cardiac output
154. Which is a small upward wave and indicates the depolarisation of the atria?
a) Sinu Auricular node b) Electrocardiogram
c) P wave d) T wave

190. Which of the following is not useful in blood clotting. (AFMC-96)
 a) Fibrin b) Calcium c) Platelets d) Bilirubin
191. In which of the following close circulation is found ? (CBSC-94)
 a) Cockroach b) Mosquito c) Housefly d) Tadpole
192. The wall of which part of the heart is very thick ? (AIIMS-99)
 a) Left atrium b) Left ventricle c) Right atrium d) Right ventricle
193. What is right for all veins ? (CBSC-2000)
 a) They carry oxygenated blood b) They carry Deoxygenated blood
 c) They directly open into vena cave d) None of the above
194. How lymph differs from blood ? (CPMT- 73,84)
 a) More RBC and less WBC b) Less RBC and more WBC
 c) RBC absent and less RBC d) RBC absent and more WBC
195. Which type of WBCs are found in maximum number ? (CPMT-88, DPMT -96)
 a) Eosiphil b) Neutrophil c) Acidophil d) Monocyte
196. What is pacemaker ?
 a) Instrument measuring Heartbeats
 b) Instrument measuring big arteries
 c) Atrio – ventricular node, which provides stimulation for heart beating
 d) Artificial sinuauricular node, which provides stimulation for heart beating
197. Which of the following statement is correct ? (BHU-93)
 a) All veins carry deoxygenated blood
 b) All arteries carry deoxygenated blood
 c) All veins carry deoxygenated blood except one
 d) All arteries carry deoxygenated blood except one
198. Regulation and initiation of heartbeat is indicated by
 a) AV Node – bundle of His muscule – SA node – purkinje fiber
 b) SA Node – purkinje fiber – AV Node – Bundle of His muscle
 c) Purkinje fiber – AV Node – SA node – Bundle of His muscle
 d) SA Node – AV Node – Bundle of His muscle – Purkinje fiber
199. Where Mitral valve is located and it join, (BHU-86, 2000, DPMT-86)
 a) Left atrium and left ventricle b) Left atrium and Right ventricle
 c) Right atrium and Left ventricle d) Right atrium and Right ventricle
200. What is responsible for systole ? (BHU-86,2000,DPMT-86)
 a) Entry of blood in lungs b) Entry of blood in heart
 c) Blood flow out of heart d) Blood flow out of vein

LEVEL – V (201 - 218 Questions)

201. What is the function of lymph ? (MPPMT-95)
 a) Transport of O₂ into brain b) Transport of CO₂ into lungs
 c) Bring interstitial fluid in blood d) Bring RBC and WBC in lymph node
202. Which is the correct statement for blood ? (APMEE – 96)
 a) WBC is more than RBC b) RBC is more than WBC
 c) RBC is less than platelets d) Platelets is less than RBC
203. Hepatic portal system starts from
 a) Digestive system to liver b) Kidney to liver
 c) Liver to heart d) Liver to Kidney
204. Blood circulation that stats in capillaries and ends in capaillaries is called (J & K CET 2010)
 a) Portal circulation b) Hepatic circulation
 c) Cardic circulation d) None of these

UNIT – III

CHAPTER - 8 EXCRETION

TRY AND TEST YOURSELF



LEVEL – I (1 - 50 Questions)

1. Concentration of urine depends upon which part of the nephron
 - a) Bowman's capsule - Isotonic
 - b) length of Henle's loop - Hypertonic
 - c) P.C.T. - Isotonic
 - d) net work of capillaries arising from glomerulus - Hypotonic
2. If Henle's loop is absent from a mammalian nephron, which of the following is the expected behaviour?
 - a) There will be no urine formation
 - b) There will be hardly any change in the quality and quantity of urine formed
 - c) The urine will be more concentrated
 - d) The urine will be more dilute
3. A person who is on a long hunger strike and is surviving only on water, will have
 - a) Less amino acids in his urine
 - b) Macula densa cells
 - c) Less urea in his urine
 - d) More sodium in his urine
4. What will happen if the stretch receptors of the urinary bladder wall are totally removed?
 - a) Micturition will continue
 - b) Urine will be continue to collect normally in the bladder
 - c) there will be micturition
 - d) urine will not collection the bladder
5. The end product of Ornithine cycle is
 - a) carbon dioxide
 - b) uric acid
 - c) urea
 - d) ammonia
6. Identify the wrong match
 - a) Bowman's capsule - Glomerular filtration
 - b) DCT - Absorption of glucose
 - c) Henle's loop - Concentration of urine
 - d) PCT - Absorption of Na⁺ and K⁺ ions
7. Podocytes are the cells present on the
 - a) Outer wall of Bowman's capsule
 - b) Inner wall of Bowman's capsule
 - c) neck of nephron
 - d) Wall glomerular capillaries
8. Glomerular filtrate contains
 - a) Blood without blood cells and proteins
 - b) Plasma without sugar
 - c) Blood with proteins but without cells
 - d) Blood without urea
9. Kidney stones are produced due to deposition of uric acid and
 - a) silicates
 - b) minerals
 - c) calcium carbonate
 - d) calcium oxalate
10. Aldosterone acts at the distal convoluted tubule and collecting duct resulting in the absorption of water through
 - a) Aquaporins
 - b) spectrins
 - c) GLUT
 - d) Chloride channels
11. The hormone which helps in the reabsorption of water in kidney tubules is
 - a) cholecystokinin
 - b) angiotensin II
 - c) antidiuretic hormone
 - d) pancreaseozymmin

12. Animal requiring minimum amount of water to produce urine are
 a) ureotelic b) ammonotelic c) uricotelic d) chemotelic
13. Malpighian tubules remove excretory products from
 a) mouth b) oesophagus c) haemolymph d) alimentary canal.
14. Which does help in collecting nitrogenous waste and expelling environment?
 a) Excretory system b) Uricoteles c) Ammonoteles d) Ammonia
15. The ____ animals can tolerate only narrow fluctuations in the salt concentration.
 a) Euryhaline b) Osmotic homeostasis
 c) Stenohaline d) Osmoregulators
16. The removal of ammonia or other metabolic alternatives such as urea and uric acid
 a) Osmotic homeostasis b) Stenohaline c) Osmoregulators d) Euryhaline
17. The animals are able to tolerate wide fluctuations in the salt concentrations
 a) Stenohaline b) Osmoregulators
 c) Osmotic homeostasis d) Euryhaline
18. Which does maintain the internal osmotic concentration ?
 a) Osmotic homeostasis b) Osmoregulators
 c) Euryhaline d) Stenohaline
19. ____ while in soil are ureoteles and when in water are ammonoteles.
 a) Primitive kidneys b) Earthworms c) Ureoteles d) Kidneys
20. Animals that excrete most of its nitrogen in the form of ammonia are called
 a) Uricoteles b) Ammonia c) Ammonoteles d) Excretory system
21. Which is produced during amino acid breakdown is toxic?
 a) Ammonoteles b) Ammonia c) Excretory system d) Uricoteles
22. Mammals and terrestrial amphibians mainly excrete urea and are called
 a) Ureoteles b) Kidneys c) Primitive kidneys d) Earthworms
23. Reptiles, birds, land snails and insects excrete uric acid crystals, with a minimum loss of water and are called ____.
 a) Ammonoteles b) Ammonia c) Excretory system d) Uricoteles
24. ____ have rennet cells, Metanephridia are the tubular excretory structures in annelids and molluscs.
 a) Insects b) Solenocytes c) Nematodes d) Flame cells
25. Vertebrates have complex tubular organs called ____.
 a) Primitive kidneys b) Earthworms c) Ureoteles d) Kidneys
26. Which are excretory structures with special cells in the Amphioxus?
 a) Nematodes b) Solenocytes c) Flame cells d) Insects
27. Most invertebrates have a simple tubular structure in the form of ____ called protonephridia and metanephridia.
 a) Ureoteles b) Kidneys c) Primitive kidneys d) Earthworms
28. Which are excretory structures with special cells in the Platyhelminthes?
 a) Flame cells b) Insects c) Nematodes d) Solenocytes
29. Each kidney weighs an average of ____ .
 a) 130-170 grams b) 120-150 grams c) 110-140 grams d) 120-170 grams
30. ____ of marine fishes produce little urine.
 a) Nephron b) Crustaceans
 c) Agglomerular kidneys d) Nematodes
31. Antennal glands or green glands perform excretory function in ____.
 a) Crustaceans b) Nephron c) Nematodes d) Agglomerular kidneys
32. The endothelium of glomerulus has many pores ____.
 a) Fenestrae b) Podocytes
 c) Simple squamous epithelium d) Filtration slits

33. Which is the structural and functional unit of kidneys?
a) Aglomerular kidneys b) Nephron c) Crustaceans d) Flame cells
34. Malpighian tubules are the excretory structures in most _____.
a) Flame cells b) Nematodes c) Solenocytes d) Insects
35. The centre of the inner concave surface of the kidney has a notch called the _____.
a) Renal corpuscle b) Renal columns of Bertini
c) Renal hilum d) Medullary pyramids
36. The medulla is divided into a few conical tissue masses called _____.
a) Medullary pyramids b) Renal columns of Bertini
c) Renal corpuscle d) Renal hilum
37. The Bowman's capsule and the glomerulus together constitute the _____.
a) Renal columns of Bertini b) Medullary pyramids
c) Renal hilum d) Renal corpuscle
38. The part of cortex that extends in between the medullary pyramids is the _____.
a) Renal corpuscle b) Renal columns of Bertini
c) Renal hilum d) Medullary pyramids
39. The distal convoluted tubule (DCT) of many nephrons open into a straight tube called _____.
a) Glomerulus b) Collecting duct
c) Juxta medullary nephrons d) Distal convoluted tubule
40. The openings between the foot processes of the podocytes are called _____.
a) Fenestrae b) Podocytes
c) Simple squamous epithelium d) Filtration slits
41. The external parietal layer of the Bowman's capsule is made up of _____.
a) Fenestrae b) Simple squamous epithelium
c) Filtration slits d) Podocytes
42. The external visceral layer is made of epithelial cells called _____.
a) Filtration slits b) Simple squamous epithelium
c) Podocytes d) Fenestrae
43. The ascending limb continues as a highly coiled tubular region in nephron is called the _____.
a) Distal convoluted tubule b) Juxta medullary nephrons
c) Collecting duct d) Glomerulus
44. The nitrogenous waste formed as a result of breakdown of amino acids is converted to urea in the liver by the _____.
a) Cortical nephrons b) Vasa recta c) Ornithine cycle d) Glomerular filtration
45. The efferent arteriole serving the juxta medullary nephron forms bundles of long straight vessel called _____.
a) Vasa recta b) Ornithine cycle c) Cortical nephrons d) Glomerular filtration
46. Vasa recta is absent or reduced in _____.
a) Ornithine cycle b) Cortical nephrons c) Vasa recta d) Glomerular filtration
47. Some nephrons have very long loop of Henle that run deep into the medulla and are called _____.
a) Glomerulus b) Collecting duct
c) Juxta medullary nephrons d) Distal convoluted tubule
48. First capillary bed of the nephron is the _____.
a) Distal convoluted tubule b) Juxta medullary nephrons
c) Collecting duct d) Glomerulus
49. The effective glomerular pressure of 10 mmHg results in _____.
a) Passive process b) 180l c) Glomerular pressure d) Ultra filtration
50. In which step of urine formation does the filtration of blood takes place in the glomerulus?
a) Ornithine cycle b) Cortical nephrons c) Vasa recta d) Glomerular filtration

LEVEL – II (51 - 100 Questions)

51. Kidneys produce about ____ of glomerular filtrate in 24 hours.
a) Passive process b) 180l c) Ultrafiltration d) Glomerular pressure
52. Which is the chief force that pushes water and solutes out of the blood and across the filtration membrane?
a) 180l b) Passive process c) Glomerular pressure d) Ultrafiltration
53. The glomerular filtration which is a _____.
a) Passive process b) Glomerular pressure c) 180l d) Ultrafiltration
54. The volume of the urine released is around _____.
a) 1.5 L per day b) Selective reabsorption c) Aquaporins d) Collecting duct
55. _____ involves movement of the filtrate back into the circulation.
a) 120-125mL/min b) 170-180 L per day c) Tubular reabsorption d) Renal clearance
56. Which is a parameter that reflects the amount of solute passing from the plasma to the urine in a given period of time?
a) 120-125mL/min b) Renal clearance c) 170-180 L per day d) Tubular reabsorption
57. The volume of filtrate formed per day is around _____.
a) Tubular reabsorption b) Renal clearance c) 120-125mL/min d) 170-180 L per day
58. Which is one of the parameter used to identify the efficiency of the kidney?
a) 120-125mL/min b) Renal clearance c) 170-180 L per day d) Tubular reabsorption
59. In adults the GFR is approximately _____.
a) 120-125mL/min b) Renal clearance c) Tubular reabsorption d) 170-180 L per day
60. The change in permeability to water is due to the presence of number of water-permeable channels called _____.
a) Collecting duct b) Selective reabsorption c) 1.5 L per day d) Aquaporins
61. Which as to be reabsorbed by the renal tubules as it contains certain substances needed by the body?
a) 1.5 L per day b) Selective reabsorption c) Aquaporins d) Collecting duct
62. ___ is permeable to water, secretes K^+ and reabsorbs Na^+ to produce concentrated urine.
a) 1.5 L per day b) Aquaporins c) Collecting duct d) Selective reabsorption
63. The solute concentration of a solution of water is _____.
a) Hypothalamus b) Osmolarity
c) Counter current exchange d) Tubular secretion
64. Substances such as H^+ , K^+ , NH_4^+ , creatinine and organic acids move into the filtrate from the peritubular capillaries into the tubular fluid is _____.
a) Tubular secretion b) Counter current exchange
c) Osmolarity d) Hypothalamus
65. _____ are used to treat high blood pressure.
a) Osmoreceptors b) Diabetes insipidus
c) Angiotensin Converting Enzyme inhibitors d) ADH
66. _____ in the hypothalamus are activated by changes in the blood volume, body fluid volume and ionic concentration.
a) Osmoreceptors b) Angiotensin Converting Enzyme inhibitors
c) ADH d) Diabetes insipidus
67. The vasa recta, maintains the medullary osmotic gradient via ____ by passive transport.
a) Hypothalamus b) Osmolarity
c) Counter current exchanger d) Tubular secretion
68. _____ facilitates reabsorption of water by increasing the number of aquaporins.
a) Diabetes insipidus b) ADH
c) Angiotensin Converting Enzyme inhibitors d) Osmoreceptors

84. ____ also called renal stone or nephrolithiasis.
a) Glomerulo nephritis b) Renal calculi
c) Pyleothotomy or lithotripsy d) Uremia
85. Which is the pressure exerted by the fluid in the Bowman's capsule?
a) Glomerulus b) Bowman's capsule hydrostatic pressure
c) Glomerular capillary pressure d) Aquaporins
86. ____ is a polypeptide hormone released by atrial myocytes.
a) Haemodialysis b) Renal calculi
c) Kidney transplantation d) Atrial natriuretic peptide
87. ____ involves transfer of healthy kidney from one person (donor) to another person with kidney failure.
a) Glomerulus b) Kidney transplantation
c) Haemodialysis d) Atrial natriuretic peptide
88. ____ or water channels are formed by specific plasma membrane proteins in the tubular cells.
a) Aquaporins b) Bowman's capsule hydrostatic pressure
c) Glomerulus d) Glomerular capillary pressure
89. The world's first successful human kidney transplantation was performed from one twins to another by ____.
a) Atrial natriuretic peptide b) Kidney transplantation
c) Joseph E d) Haemodialysis
90. ____ supply the renal tissue, involved in exchanges with the fluid in the tubular region.
a) Hypernephroma b) Juxtaglomerular apparatus
c) Peritubular capillaries d) Peritubular capillaries
91. ____ supply the renal tissue, involved in exchanges with the fluid in the tubular region.
a) Peritubular capillaries b) Juxtaglomerular apparatus
c) Hypernephroma d) Peritubular capillaries
92. Which is the fluid pressure exerted by the blood within the glomerular capillaries?
a) Bowman's capsule hydrostatic pressure b) Aquaporins
c) Glomerular capillary pressure d) Glomerulus
93. ____ is the ascending limb of Henle returns to the glomerular region of its own nephron.
a) Hypernephroma b) Juxtaglomerular apparatus
c) Peritubular capillaries d) Peritubular capillaries
94. Which is a tuft of capillaries that filters protein?
a) Bowman's capsule hydrostatic pressure b) Aquaporins
c) Glomerular capillary pressure d) Glomerulus
95. The first ever human kidney transplant performed in India was done at the King Edward Memorial Hospital at Bombay in May 1965, using a cadaver donor in a non-renal failure patient who had had ____.
a) Peritubular capillaries b) Peritubular capillaries
c) Juxtaglomerular apparatus d) Hypernephroma

NEET BASED QUESTIONS:

96. Main function of uriniferous tubules (MP PMT 1990)
a) Concentration of urine
b) Passage of urine
c) Reabsorption of useful substances from glomerular filtrate
d) Removal of urea and other waste from blood
97. The mechanism of urine formation in nephrone involves (CPMT 1992)
a) Ultrafiltration b) Secretion c) Reabsorption d) All of above

98. Which hormone induced the process of reabsorption from glomerulus? (JKCMME 92)
a) Oxytosin b) Vasopressin c) Relaxin d) Calcitonin
99. Glucose is reabsorbed from glomerular filtrate through (CBSE 1993)
a) Active transport b) Passive transport c) Osmosis d) Diffusion
100. Part not belonging to uriniferous tubule is (CBSE 1994)
a) Glomerules b) Henle's loop c) Distal convoluted tubule d) Connecting tubule

LEVEL – III (101 - 132 Questions)

101. The two kidneys lie (MP PMT 1995)
a) At the level of ovaries
b) At the same level
c) Left kidney at a higher level than the right one
d) Right kidney at a higher level than the left one
102. Which blood vessel takes blood away from kidney? (DPMT 1996)
a) Renal portal vein b) Renal vein
c) Afferent arteriole d) Efferent arteriole
103. Which hormone influences the activity of kidney? (BHU 1996)
a) Vasopressin b) Thyroxin
c) Vasopressin and aldosterone d) Gonadotrophin
104. Excretory product of birds and reptiles is (CPMT 1998)
a) Urea b) Uric acid c) Ammonia d) Creatinin
105. Blood which leaves liver and passes towards heart has higher concentration of (BHU 1999)
a) Bile b) Oxygen c) RBCs d) Urea
106. Urea is transformed through (AIIMS 2000)
a) RBCs b) WBCs c) blood plasma d) All of above
107. A person undergoing prolonged fasting his urine will be found to contain abnormal quantities of (MP PMT 2005)
a) Fats b) Amino acid c) Glucose d) Ketones
108. The net pressure gradient that cause the fluid to filter out the glomerulus into the capsule is (PMT 2005)
a) 50 mm Hg b) 75 mm Hg c) 20 mm Hg d) 30 mm Hg
109. In ornithine cycle which of the following waste are removed from the blood? (PMT 2005)
a) CO₂ and urea b) Ammonia and urea c) CO₂ and ammonia d) Urea and urine
110. Angiotensinogen is a protein produced and secreted by. (AIPMT 2006)
a) Juxta glomerular (JG) cells b) Macula densa cells
c) Endothelial cells of blood vessels d) Liver cells
111. A person who is in a long hunger strike and is surviving only on water will have (AIPMT 2007)
a) Less amino acids in his urine b) More glucose in his blood
c) Less urea in his urine d) More sodium in his urine
112. Uric acid is the chief nitrogenous component of the excretory product of (AIIPMT 2009)
a) Earthworm b) Cockroach c) Frog d) Man
113. The principal nitrogenous excretory compound in human is synthesized (AIIPMT 2010)
a) in kidney but eliminated mostly through liver
b) in kidney as well as eliminated by kidneys
c) in the liver but eliminated mostly through kidneys
d) In the liver and also eliminated mostly by the same bile
114. Uricotelic mode of excreting nitrogenous waste is found in (AIIPMT 2011)
a) Reptiles and birds b) Birds and annelids
c) Amphibians and reptiles d) Insects and amphibians

115. A fall in glomerular filtration rate (GFR) (AIPMT 2012)
 a) Juxta glomerular cells to release renin b) Adrenal cortex to release aldosterone
 c) Adrenal medulla to release adrenaline d) Posterior pituitary to release ADH
116. Haemodialysis is also called as artificial (Har.PMT 2002, Kerala 2002)
 a) Liver b) Lung c) Heart d) Kidney
117. Which one is an accessory excretory organ? (CET 2002)
 a) Liver b) Stomach c) intestine d) Heart
118. Part of nephron involved in active reabsorption of sodium is (JIPMER 2002/NEET 2016)
 a) PCT b) Ascending limb of Henle's loop
 c) Bowman's capsule d) DCT
119. Haemodialysis helps the patient having (JIPMER 2004)
 a) Goitre b) Anaemia c) Uremia d) Diabetes
120. Lungs expel (MH 2005)
 a) CO₂ b) H₂O c) CO₂ and water d) CO₂ and water vapors
121. The glomeruli are continued to the (CPMT 88)
 a) Medulla b) Calyces c) Cortex d) Renal Pelvis
122. The kidney of adult mammals is (MP PMT 99)
 a) Opisthonephron b) pronephros c) Mesonephros d) Metanephros
123. A kidney stone is (CPMT 88, Manipal 05, Kerala 2003)
 a) Blockage by fats b) Deposition of sand in kidney
 c) A salt such as oxalate crystallised in pelvis d) Blockage by proteins
124. Which of the following is both osmoregulator as well as nitrogenous product (DPMT 07)
 a) NH₃ b) Urea c) Uric acid d) All of these
125. Which of these is not a ketone body (CPMT 04)
 a) Acetoacetic acid b) Acetone
 c) Succinic acid d) Betahydroxybutyric acid
126. Excretory organs of cockroach are (Kerala PMT 07)
 a) Malpighian corpuscles b) Malpighian tubules
 c) Hepatic caecae d) Green glands
127. Juxtaglomerular cells of renal cortex synthesize a hormone called: (BHU 2007)
 a) ADH b) Oxytocin c) Renin d) Urochrom
128. Which blood vessel carries least amount of urea? (HAR PMT 2005)
 a) Pulmonary vein b) renal artery c) renal vein d) Hepatic portal vein
129. Human urine is usually acidic because: (RE-AIPMT 2015)
 a) hydrogen ions are actively secreted into the filtrate
 b) the sodium transporter exchanges one hydrogen ion for each sodium ion, in peritubular capillaries
 c) excreted plasma proteins are acidic
 d) potassium and sodium exchange generates acidity
130. Grafted kidney may be rejected in a patient due to (RE-AIPMT 2015)
 a) Innate immune response b) Humoral immune response
 c) Cell-mediated immune response d) Passive immune response
131. In mammals, which blood vessel would normally carry largest amount of urea? (AIPMT/NEET 2016)
 a) Renal Vein b) Dorsal Aorta c) Hepatic Vein d) Hepatic Portal Vein
132. Which of the following statements is correct? (NEET 2017)
 a) The descending limb of loop of Henle is impermeable to water.
 b) The ascending limb of loop of Henle is permeable to water
 c) The descending limb of loop of Henle is permeable to electrolytes.
 d) The ascending limb of loop of Henle is impermeable to water

UNIT – IV

CHAPTER - 9 LOCOMOTION AND MOVEMENT

TRY AND TEST YOURSELF



LEVEL – I (1 - 50 Questions)

1. Muscles are derived from
 - a) ectoderm
 - b) mesoderm
 - c) endoderm
 - d) neuro ectoderm
2. Muscles are formed by
 - a) myocytes
 - b) leucocytes
 - c) osteocytes
 - d) lymphocytes
3. The muscles attached to the bones are called
 - a) skeletal muscle
 - b) cardiac muscle
 - c) involuntary muscle
 - d) smooth muscles
4. Skeletal muscles are attached to the bones by
 - a) tendon
 - b) ligament
 - c) pectin
 - d) fibrin
5. The bundle of muscle fibres is called
 - a) Myofibrils
 - b) fascicle
 - c) sarcomere
 - d) sarcoplasm
6. The pigment present in the muscle fibre to store oxygen is
 - a) myoglobin
 - b) troponin
 - c) myosin
 - d) actin
7. The functional unit of a muscle fibre is
 - a) sarcomere
 - b) sarcoplasm
 - c) myosin
 - d) actin
8. The protein present in the thick filament is
 - a) myosin
 - b) actin
 - c) pectin
 - d) leucin
9. The protein present in the thin filament is
 - a) myosin
 - b) actin
 - c) pectin
 - d) leucin
10. The region between two successive Z-discs is called a
 - a) sarcomere
 - b) microtubule
 - c) myoglobin
 - d) actin
11. Each skeletal muscle is covered by
 - a) epimysium
 - b) perimysium
 - c) endomysium
 - d) hypomysium
12. Knee joint is an example of
 - a) saddle joint
 - b) hinge joint
 - c) pivot joint
 - d) gliding joint
13. Name of the joint present between the atlas and axis is
 - a) synovial joint
 - b) pivot joint
 - c) saddle joint
 - d) hinge joint
14. ATPase enzyme needed for muscle contraction is located in
 - a) actinin
 - b) troponin
 - c) myosin
 - d) actin
15. Acetabulum is located in
 - a) collar bone
 - b) hip bone
 - c) shoulder bone
 - d) thigh bone
16. Synovial fluid is found in
 - a) Ventricles of the brain
 - b) Spinal cord
 - c) immovable joint
 - d) freely movable joints.
17. Inflammation of joints due to accumulation of uric acid crystals is called as
 - a) Gout
 - b) myasthenia gravis
 - c) osteoporosis
 - d) osteomalacia
18. Appendicular skeleton is
 - a) girdles and their limbs
 - b) vertebrae
 - c) skull and vertebral column
 - d) ribs and sternum

-
19. The type of movement exhibits by the macrophages are
a) flagellar b) ciliary c) muscular d) amoeboid
20. The pointed portion of the elbow is
a) acromion process b) glenoid cavity
c) olecranon process d) symphysis
21. ____ movement of hands, legs, jaws, tongue are caused by the contraction and relaxation of the muscle.
a) Macrophages b) Flagellar movement
c) Ciliary movement d) Muscular movement
22. Which type of movement occurs in the cells which are having flagella or whip-like motile organelle?
a) Ciliary movement b) Macrophages
c) Flagellar movement d) Muscular movement
23. Which cells exhibit amoeboid movement for engulfing pathogens?
a) Macrophages b) Flagellar movement
c) Ciliary movement d) Muscular movement
24. Which type of movement occurs in the respiratory passages and genital tracts?
a) Flagellar movement b) Ciliary movement
c) Macrophages d) Muscular movement
25. The sperm cells show _____.
a) Macrophages b) Muscular movement
c) Flagellar movement d) Ciliary movement
26. The connective tissue covering the whole muscle is the _____.
a) Epimysium b) Perimysium c) Sarcolemma d) Endomysium
27. Skeletal muscle is attached to the bone by a bundle of collagen fibres known as _____.
a) Mesoderm b) Fascicle c) Tendon d) Myocytes
28. Muscles are specialized tissues which are derived from the embryonic _____.
a) Mesoderm b) Tendon c) Myocytes d) Fascicle
29. Each muscle is made up of bundles of muscle fibres called _____.
a) Myocytes b) Mesoderm c) Tendon d) Fascicle
30. Muscles are made of cells called ____ and constitute 40 – 50 percent of body weight in an adult.
a) Tendon b) Myocytes c) Mesoderm d) Fascicle
31. Which is a red- coloured respiratory pigment of the muscle fibre?
a) Anisotropic bands b) Myoglobin c) Glycosomes d) Sarcoplasm
32. The muscle fibre is surrounded by the
a) Sarcolemma b) Perimysium
c) Endomysium d) Epimysium
33. The covering around each fascicle is the _____.
a) Sarcolemma b) Perimysium
c) Endomysium d) Epimysium
34. The cytoplasm of the muscle fibre is called the _____.
a) Sarcoplasm b) Glycosomes
c) Myoglobin d) Anisotropic bands
35. Muscle fibre has multiple oval nuclei just beneath its _____.
a) Endomysium b) Perimysium c) Epimysium d) Sarcolemma
36. Each H-zone is bisected vertically by a dark line called the _____.
a) Z-disc b) H-Zone c) M-line d) Isotropic bands
37. The light I-bands of myofibril is called _____.
a) Isotropic bands b) M-line c) H-Zone d) Z-disc
-

38. ____ are the granules of stored glycogen that provide glucose during the period of muscle fibre activity.
 a) Myoglobin b) Sarcoplasm c) Glycosomes d) Anisotropic bands
39. Each dark band has a lighter region in its middle called the ____.
 a) Z-disc b) H-Zone c) M-line d) Isotropic bands
40. The dark A-bands of myofibril is called ____.
 a) Sarcoplasm b) Glycosomes c) Myoglobin d) Anisotropic bands
41. Each myosin molecule is made up of a monomer called ____.
 a) Actin b) Sarcomere c) Meromyosin d) G-actin
42. Which is the functional unit of the skeletal muscle?
 a) Sarcomere b) Meromyosin c) Actin d) G-actin
43. The light I-bands also have a darker mid line area called the ____.
 a) M-line b) H-Zone c) Isotropic bands d) Z-disc
44. ____ is the principal constituent of the thin filament.
 a) Sarcomere b) Actin c) G-actin d) Meromyosin
45. ____ is a protein found in the cytoskeleton and muscle cells.
 a) Meromyosin b) Actin c) Sarcomere d) G-actin
46. ____ is the creation of tension in the muscle which is an active process.
 a) Acetycholine b) Andrew F. Huxley and Rolf Niedergerke
 c) Contraction d) F-actin
47. Actin has polypeptide subunit called ____.
 a) F-actin b) Acetycholine
 c) Contraction d) Andrew F. Huxley and Rolf Niedergerke
48. Actin has polypeptide subunit called ____.
 a) Meromyosin b) Actin c) Sarcomere d) G-actin
49. Sliding filament theory in 1954, ____ proposed the sliding-filament theory to explain muscle contraction.
 a) Contraction b) Andrew F. Huxley and Rolf Niedergerke
 c) F-actin d) Acetycholine
50. ____ is a polymer of monomeric G-actins.
 a) F-actin b) Andrew F. Huxley and Rolf Niedergerke
 c) Acetycholine d) Contraction

LEVEL – II (51 - 100 Questions)

51. A single glycogen molecule may contain ____.
 a) Neuromuscular junction b) Adenosine triphosphate
 c) Skeletal Muscle Glycogen Analysis is d) 5000 glucose units
52. The junction between the motor neuron and the sarcolemma of the muscle fibre is called the ____.
 a) 5000 glucose units b) Neuromuscular junction
 c) Skeletal Muscle Glycogen Analysis d) Adenosine triphosphate
53. Which is a neurotransmitter found throughout the nervous system?
 a) F-actin b) Contraction
 c) Andrew F. Huxley and Rolf Niedergerke d) Acetycholine
54. ____ is a standard method to measure muscle glycogen.
 a) Neuromuscular junction b) Adenosine triphosphate
 c) Skeletal Muscle Glycogen Analysis d) 5000 glucose units
55. Which is a nucleotide molecule consisting of adenine, ribose and three phosphate molecules?
 a) Adenosine triphosphate b) 5000 glucose units
 c) Skeletal Muscle Glycogen Analysis d) Neuro muscular junction

71. _____ is a large opening found at the posterior base of the skull.
a) Atlas b) Foramen magnum c) Hyoid bone d) Sternum
72. A single U-shaped _____ is present at the base of the buccal cavity
a) Hyoid bone b) Atlas c) Foramen magnum d) Sternum
73. The cranial bones form the hard protective outer covering of the brain and called the
a) Endoskeleton b) Exoskeleton c) Brain box d) External auditory meatus
74. The large hole in the temporal bone is the
a) Exoskeleton b) Brain box
c) Endoskeleton d) External auditory meatus
75. It is the only one bone without any joint.
a) Hyoid bone b) Foramen magnum c) Sternum d) Atlas
76. The last 11th and 12th pairs of ribs are not connected ventrally. Therefore, they are called as 'floating ribs' or
a) Vertebro-chondral ribs b) Vertebro-sternal ribs
c) Vertebral ribs d) Acromion
77. The first seven pairs of ribs are called 'true ribs' or _____.
a) Vertebro-sternal ribs b) Vertebro-chondral ribs
c) Acromion d) Vertebral ribs
78. _____ is articulated with the occipital condyles
a) Sternum b) Foramen magnum c) Atlas d) Hyoid bone
79. The 8th, 9th and 10th pairs of ribs do not articulate directly with the sternum but joined with the cartilaginous part of the seventh rib are called 'false ribs' or _____.
a) Vertebro-sternal ribs b) Vertebro-chondral ribs
c) Acromion d) Vertebral ribs
80. _____ is a flat bone on the mid ventral line of the thorax
a) Atlas b) Foramen magnum
c) Hyoid bone d) Sternum
81. The _____ is a heavy structure specialized for weight bearing.
a) Glenoid cavity b) Humerus
c) Olecranon process d) Pelvic girdle
82. The skeleton of the arm, the region between the shoulder and elbow is the _____.
a) Humerus b) Pelvic girdle c) Olecranon process d) Glenoid cavity
83. The pectoral girdle has a slightly elevated ridge called the spine which projects as a flat, expanded process called the _____.
a) Vertebro-sternal ribs b) Vertebral ribs
c) Vertebro-chondral ribs d) Acromion
84. _____ is situated at the upper end of the ulna which forms the pointed portion of the elbow.
a) Humerus b) Pelvic girdle
c) Olecranon process d) Glenoid cavity
85. The head of humerus articulates with the _____ of the scapula and forms the shoulder joint.
a) Pelvic girdle b) Glenoid cavity c) Olecranon process d) Humerus
86. The _____ is a curved bar of bone.
a) Ischium b) Tarsus c) Acetabulum d) Metatarsus
87. _____ is muscle cell membrane capable of propagating action potentials.
a) Ilium b) Sarcolemma c) Sarcomere d) Myoglobin
88. The _____ is the superior flaring portion of the hip bone.
a) Sarcomere b) Sarcolemma c) Myoglobin d) Ilium
89. _____ is Heme containing protein that binds molecular oxygen in muscle cells.
a) Myoglobin b) Sarcolemma c) Ilium d) Sarcomere

90. ____ is the functional contractile unit of striated muscle.
 a) Myoglobin b) Ilium c) Sarcomere d) Sarcolemma
91. The external surface of the entire bone except the joint surface is covered by a double-layered membrane called the ____.
 a) Endosteum b) Periosteum c) Osteoblasts d) Metaphysis
92. The _____ consists of five bones called metatarsals.
 a) Tarsus b) Acetabulum c) Ischium d) Metatarsus
93. The head of femur articulates with the ____ of the pelvis to form the hip joint.
 a) Tarsus b) Acetabulum c) Ischium d) Metatarsus
94. The region where the diaphysis and epiphyses meet is called the ____.
 a) Metaphysis b) Osteoblasts c) Periosteum d) Endosteum
95. The ____ is made up of seven bones called tarsals.
 a) Ischium b) Metatarsus c) Tarsus d) Acetabulum
96. _____ are immovable fixed joints in which no movement between the bones.
 a) Motor neuron b) Lever system
 c) Fibrous joints or Synarthroses d) Cartilaginous joints or Amphiarthroses
97. Internal bone surfaces are covered with a delicate connective tissue membrane called the _____.
 a) Metaphysis b) Osteoblasts c) Periosteum d) Endosteum
98. The inner osteogenic layer consists of _____.
 a) Periosteum b) Metaphysis c) Osteoblasts d) Endosteum
99. ____ transmits nervous impulses from the spinal cord to effectors.
 a) Cartilaginous joints or Amphiarthroses b) Motor neuron
 c) Fibrous joints or Synarthroses d) Lever system
100. It is movement takes place along the joints which act as fulcrum of the lever.
 a) Lever system b) Fibrous joints or Synarthroses
 c) Motor neuron d) Cartilaginous joints or Amphiarthroses

LEVEL – II (101 - 150 Questions)

101. This is due to lack of ATP and accumulation of lactic acid by anaerobic breakdown of glucose.
 a) Tetany b) Myasthenia gravis
 c) Synovial joints or Diarthroses joints d) Muscle fatigue
102. It is an auto immune disorder affecting the action of acetylcholine at neuromuscular junction leading to fatigue.
 a) Synovial joints or Diarthroses joints b) Myasthenia gravis
 c) Muscle fatigue d) Tetany
103. ____ are slightly movable joints in which the joint surfaces are separated by a cartilage.
 a) Lever system b) Fibrous joints or Synarthroses
 c) Motor neuron d) Cartilaginous joints or Amphiarthroses
104. ____ rapid muscle spasms occur in the muscles due to deficiency of parathyroid hormone.
 a) Myasthenia gravis b) Synovial joints or Diarthroses joints
 c) Tetany d) Muscle fatigue
105. ____ are freely movable joints, the articulating bones are separated by a cavity.
 a) Synovial joints or Diarthroses joints b) Myasthenia gravis
 c) Muscle fatigue d) Tetany
106. ____ is the synovial membranes become inflamed and there is an accumulation of fluid in the joints.
 a) Rheumatoid arthritis b) Osteoporosis
 c) Gouty arthritis or gout d) Endurance
107. ____ is actually a muscle tear.
 a) Arthritis b) Muscle pull c) Atrophy d) Osteoarthritis

108. ____ is the bone ends of the knees and other freely movable joints wear away as a person ages.
 a) Arthritis b) Muscle pull c) Atrophy d) Osteoarthritis
109. ____ decline or cessation of muscular activity results in the condition.
 a) Atrophy b) Muscle pull c) Osteoarthritis d) Arthritis
110. ____ is a degenerative disease that damages the joints.
 a) Osteoarthritis b) Muscle pull c) Arthritis d) Atrophy
111. It occurs due to deficiency of vitamin D and hormonal imbalance
 a) Gouty arthritis or gout b) Rheumatoid arthritis
 c) Osteoporosis d) Endurance
112. ____ is inflammation of joints due to accumulation of uric acid crystals.
 a) Endurance b) Gouty arthritis or gout
 c) Osteoporosis d) Rheumatoid arthritis
113. ____ help to prevent falls which is a common problem in older adults.
 a) Balance exercises b) Flexibility exercises c) Strength exercises d) Endurance
114. ____ or aerobic activities increase the breathing and heart rate.
 a) Osteoporosis b) Gouty arthritis or gout
 c) Rheumatoid arthritis d) Enduranc
115. ____ make the muscles stronger.
 a) Strength exercises b) Osteoporosis
 c) Endurance d) Muscle pull
116. ____ help to stretch body muscles for more freedom of joint movements.
 a) Strength exercises b) Osteoporosis
 c) Flexibility exercises d) Muscle pull
117. Which gets deposited in synovial joints?
 a) Enduranc b) Osteoporosis c) Atrophy d) Gouty arthritis or gout

NEET BASED QUESTIONS:

118. Which is the longest bone of fore limb? (CPMT- 2002)
 a) Humerus b) Femur c) Carpals d) Fibula
119. In which bone triangular acromion is present? (CPMT- 2002)
 a) Radias b) Scapula c) Femur d) Humerus
120. Humerus bone is found: (DPMT- 1985)
 a) Radias b) Ulna c) Arm d) Fore arm
121. Hinge joint occurs between: (CPC – 2003)
 a) Humerus and radio-ulna b) Femur and pelvic girdle
 c) Humerus and Pectoral girdle d) Skull and atlas
122. Total numbers of vertebrae in human skeleton. (JIMERT 2002)
 a) 30 b) 32 c) 33 d) 35
123. Number of bones present in an arm is: (AFMC – 2004)
 a) 30 b) 32 c) 35 d) 40
124. Ribs are attached to: (Wardha- 2001)
 a) Scapula b) Sternum c) Clavicle d) Ilium
125. In humans, coccyx is formed by the fusion of vertebrae (NCERT- 1978)
 a) 3 b) 4 c) 5 d) 6
126. What is formed by the bones of pectoral girdle, pelvic girdle and limbs? (CPMT- 1987)
 a) Body skeleton b) External skeleton
 c) Axial skeleton d) Appendiclr skeleton
127. Number of floating ribs in human body is: (JIMER- 2000)
 a) 6 pairs b) 5 pairs c) 3 pairs d) 2 pairs

148. Lack of the relaxation between successive stimuli in sustained muscle contraction is known as (AIPMT / NEET 2016)
 a) Fatigue b) Tetanus c) Tonus d) Spasm
149. Acromion process is part of (B.V. 2003)
 a) Vertebral column b) Pelvic girdle c) Femur d) Pectoral girdle
150. In mammals the lower jaw is made of (Kerala -2000)
 a) Maxilla b) Dentary c) Mandible d) Ethmoid

LEVEL – IV (151 - 179 Questions)

151. Inter-articular disc occur in (B.H.U. -1997)
 a) Wall of heart b) Wall of liver
 c) Pubic symphysis d) In between two vertebrae
152. Acetabulum is part of (C.E.T. chd. 2000)
 a) Pelvic girdle b) Pectoral girdle c) Form arm d) Upper arm
153. The function unit of contractile system of a striated muscles is (C.M.E.E.-2004)
 a) Sarcomere b) Z-band c) Cross bridge d) Myofibril
154. Fibrous joints are present between (M.P.P.M.T. -2000)
 a) Thumb and metatarsal b) Humerus and radio-ulna
 c) Bones of skull d) Glenoid cavity and pectoral girdle
155. Joint of sternum and ribs is (C.B.S.E. -2000)
 a) Cartilaginous b) Fibrous joint c) Angular joint d) Hinge joint
156. During & vigorous exercise, glucose is converted into (C.P.M.T.- 2000)
 a) Glycogen b) pyruvic acid c) Starch d) Lactic acid
157. Synovial fluid is present in (Har. P.M.T. – 2000)
 a) Spinal cavity b) Cranial cavity c) Freely movable joints d) Fixed joints
158. Synovial fluid is secreted by (B.V.-2001)
 a) Blood b) Cartilage c) Bone d) Synovial membrane
159. Iliac of pelvic girdle is articulated with sacrum for (B.V.-2001)
 a) Bending b) Jumping c) Support d) Running
160. Anisotropic band are made up of (A.M.U.- 2001)
 a) Myosin filaments b) Actin filaments c) Elastin filaments d) Both A and B
161. Socket in pelvic girdle in which head of femur articulates is formed by fusion of (Uttaranchal – 2001)
 a) Ischium and pubis b) Ilium and pubis
 c) Ilium and ischium d) Both a and b
162. The movable skull bone is (Wardha-2002)
 a) Maxilla b) Vomer c) Mandible d) All the above
163. Gliding joint occur between (B.V. – 2002)
 a) Prezygapophysis and postzygapophysis
 b) Acetabulum and femur
 c) Pelvis girdle and femur
 d) Humerus and radius.
164. Red muscle are rich in (J.I.P.M.E.R.-2002)
 a) Golgi bodies b) Mitochondria c) Lysosomes d) Ribosomes.
165. Joint between atlas and axis is (A.F.M.C. – 2003)
 a) Pivot b) Hinge c) Angular d) Saddle
166. The longest bone amongst the following is (B.V – 2003)
 a) Radius b) ulna c) Humerus d) Femur
167. Joint between metacarpals and phalanges is (B.V – 2003)
 a) Ball and socket b) Pivot c) Saddle d) Hinge

168. ATP-ase needed for muscle contraction is present over (C.B.S.E.-2004)
 a) Actin b) Troponin c) Myosin d) Actin
169. Make correct pairs from the column -I and column - II. (Orissa JEE – 2010)

Column -I	Column - II
Types of synovial joint Bones involved	
(P) Ball and socket	(i) Carpal and metacarpal of thumb
(Q) Hinge	(ii) Atlas and axis
(R) Pivot	(iii) Frontal and parietal
(S) Saddle	(iv) Knee
	(v) Humerus and pectoral girdle

- a) (P-ii) (Q-iv) (R-ii)(S-v) b) (P-ii) (Q -iii) (R- i) (S – v)
 c) (P-iii)(Q-v) (R-iv)(S-ii) d) (P-v) (Q -iv) (R- ii) (S – i)
170. Major protein in the thick filament of skeletal muscle fiber is (MP PMT 2011)
 a) Tropomyosin b) Myosin c) Actin d) Troponin
171. True joints are (Wardha 2005)
 a) Synchronroses b) Syndesmoses c) Synovial d) Ball and socket
172. The pivot joint between atlas and axis is a type of (2016)
 a) cartilaginous joint b) synovial joint c) saddle joint d) fibrous joint
173. Name the ion responsible for unmasking of active sites for cross-bridge activity during muscle contraction (NEET 2016)
 a) sodium b) potassium c) calcium d) magnesium
174. Sliding filament theory can be best explained as (NEET 2015)
 a) when myofilaments slide pass each other actin filaments shorten while myosin filaments do not shorten
 b) actin and myosin filaments shorten and slide pass each other
 c) actin and myosin filaments do not shorten but rather slide pass each other
 d) when myofilaments slide pass each other myosin filaments shorten while actin filaments do not shorten
175. Osteoporosis is an age related disease of skeletal system, may occur due to (NEET 2016)
 a) decreased level of oestrogen
 b) accumulation of uric acid leading to inflammation of joints
 c) immune disorder affecting neuromuscular junction leading to fatigue
 d) high concentration of Ca⁺⁺ and Na⁺⁺
176. Smooth muscles are (NEET-2. 2016)
 a) involuntary, fusiform, non-striated b) voluntary, multinucleated, cylindrical
 c) Involuntary, cylindrical, striated d) Voluntary, spindle shaped, uninucleated,
177. Glenoid cavity articulates (AIPMT 2015)
 a) Scapula with acromion b) clavicle with scapula
 c) humerus with scapula d) clavicle with acromion
178. Which of the following joints would allow no movements? (AIPMT Retest 2015)
 a) Fibrous joint b) cartilaginous joint
 c) synovial joint d) ball and socket joint
179. Which of the following is not a function of the skeletal system? (AIPMT Retest 2015)
 a) Production of erythrocytes b) storage of minerals
 c) production of body heat d) locomotion

UNIT – IV

CHAPTER - 10

NEURAL CONTROL AND COORDINATION

TRY AND TEST YOURSELF



LEVEL – I (1 - 50 Questions)

- Which structure in the ear converts pressure waves to action potentials?
 - Tympanic membrane
 - Organ of Corti
 - Oval window
 - Semicircular canal
- Which of the following pairings is correct?
 - Sensory nerve – afferent
 - Motor nerve- afferent
 - Sensory nerve – ventral
 - Motor nerve – dorsal
- During synaptic transmission of nerve impulse, neurotransmitter (P) is released from synaptic vesicles by the action of ions (Q). Choose the correct P and Q.
 - P = Acetylcholine, Q = Ca^{++}
 - P = Acetylcholine Q = Na^+
 - P = GABA, Q = Na^+
 - P = Cholinesterase, Q = Ca^{++}
- Examine the diagram of the two cell types A and B given below and select the correct option.



- Cell-A is the rod cell found evenly all over retina
 - Cell-A is the cone cell more concentrated in the fovea centralis
 - Cell-B is concerned with colour vision in bright light
 - Cell-A is sensitive to bright light intensities
- Assertion: The imbalance in concentration of Na^+ , K^+ and proteins generates action potential.
Reason: To maintain the unequal distribution of Na^+ and K^+ , the neurons use electrical energy.
 - Both Assertion and Reason are true and Reason is the correct explanation of the Assertion.
 - Both Assertion and Reason are true but the Reason is not the correct explanations of Assertion.
 - Assertion is true, but Reason is false.
 - Both Assertion and Reason are false.
 - Match the following human spinal nerves in column I with their respective number in column II and choose the correct option.

COLUMN I	COLUMN II
P. Cervical nerves	i. 5 pairs
Q. Thoracic nerve	ii. 1 pair
R. Lumbar nerve	iii. 12 pair
S. Coccygeal nerve	iv. 8 pair

- (P-iv), (Q-iii), (R-i), (S-ii)
- (P-iii), (Q-i), (R-ii), (S-iv)
- (P-iv), (Q-i), (R-ii), (S-iii)
- (P-ii), (Q-iv), (R-i), (S-iii)

-
7. Which part of the human brain is concerned with the regulation of body temperature?
a) Cerebellum b) Cerebrum c) Medulla oblongata d) Hypothalamus
8. The respiratory centre is present in the
a) Medulla oblongata b) Hypothalamus c) Cerebellum d) Thalamus
9. Which of the following cranial nerve controls the movement of eye ball ?
a) trochlear nerve b) optic nerve c) Olfactory nerve d) vagus nerve.
10. The abundant intracellular cation is
a) H⁺ b) K⁺ c) Na⁺ d) Ca⁺⁺
11. Which of the following statements is wrong regarding conduction of nerve impulse?
a) In a resting neuron, the axonal membrane is more permeable to K⁺ ions and nearly impermeable to Na⁺ ions.
b) Fluid outside the axon has a high concentration of Na⁺ ions and low concentration of K⁺, in a resting neuron.
c) Ionic gradients are maintained by Na-K pumps across the resting membrane, which transport 3Na ions outwards for 2K⁺ into the cell.
d) A neuron is polarized only when the outer surface of the axonal membrane possess a negative charge and its inner surface is positively charged.
12. All of the following are associated with the myeline sheath except
a) Faster conduction of nerve impulses
b) Nodes of Ranvier forming gaps along the axon
c) Increased energy output for nerve impulse conduction
d) Saltatory conduction of action potential
13. Several statements are given here in reference to cone cells which of the following option indicates all correct statements for cone cells ?
Statements
(i) Cone cells are less sensitive in bright light than Rod cells
(ii) They are responsible for colour vision
(iii) Erythropsin is a photo pigment which is sensitive to red colour light
(iv) They are present in fovea of retina
a) (iii), (ii) and (i) b) (ii) , (iii) and (iv)
c) (i), (iii) and (iv) d) (i), (ii) and (iv)
14. Which of the following statement concerning the somatic division of the peripheral neural system is incorrect?
a) Its pathways innervate skeletal muscles
b) Its pathways are usually voluntary
c) Some of its pathways are referred to as reflex arcs
d) Its pathways always involve four neurons
15. When the potential across the axon membrane is more negative than the normal resting potential, the neuron is said to be in a state of
a) Depolarization b) Hyperpolarization c) Repolarization d) Hypopolarization
16. The non-nervous special cells called
a) Neuroglia b) Efferent neurons c) Afferent neurons d) Interneurons
17. ____ receives sensory input from internal and external environment.
a) Motor functions b) Sensory functions c) Neurons d) Autonomic functions
18. The neural system comprises of highly specialized cells called ____.
a) Neurons b) Autonomic functions
c) Motor functions d) Sensory functions
19. ____ means reflex actions.
a) Neurons b) Motor functions c) Sensory functions d) Autonomic functions
-

58. ____ is the 'seat of intelligence'.
a) Cerebrum b) Corpus callosum c) Cerebral cortex d) Association areas
59. The superficial region of the cerebrum is called ____.
a) Association areas b) Cerebral cortex c) Corpus callosum d) Cerebrum
60. The areas other than sensory and motor areas are called ____.
a) Cerebrum b) Corpus callosum c) Cerebral cortex d) Association areas
61. ____ connects the hypothalamus with the pituitary gland.
a) Satiety centre b) Infundibulum c) Mammillary bodies d) Hypothalamus
62. Which regulates sleep and wake cycle?
a) Pineal body b) Choroid plexus c) Epithalamus d) Melatonin
63. The anterior part of epithalamus is vascular ____.
a) Melatonin b) Choroid plexus c) Pineal body d) Epithalamus
64. Just behind the choroid plexus, the epithalamus forms a short stalk which ends in a rounded body called ____.
a) Epithalamus b) Melatonin c) Pineal body d) Choroid plexus
65. ____ forms the floor of the diencephalon.
a) Hypothalamus b) Mammillary bodies c) Infundibulum d) Satiety centre
66. The ____ is located between the diencephalon and the pons.
a) Corpora quadrigemina b) Brain stem c) Mid brain d) Emotional brain
67. The limbic system is called ____ because it plays a primary role in the regulation of pleasure, pain, anger, fear, sexual feeling and affection.
a) Emotional brain b) Mid brain c) Brain stem d) Corpora quadrigemina
68. ____ that are involved in olfactory reflexes and emotional responses to odour.
a) Infundibulum b) Hypothalamus c) Mammillary bodies d) Satiety centre
69. ____ is the part of the brain between the spinal cord and the diencephalon.
a) Emotional brain b) Brain stem c) Corpora quadrigemina d) Mid brain
70. Hypothalamus also acts as the ____.
a) Infundibulum b) Hypothalamus c) Mammillary bodies d) Satiety centre
71. ____ forms the posterior most part of the brain.
a) Cerebellum b) Rhombencephalon c) Pons varoli d) Medulla oblongata
72. ____ is the second largest part of the brain.
a) Medulla oblongata b) Cerebellum c) Pons varoli d) Rhombencephalon
73. Which acts as a reflex centre for vision and hearing?
a) Brain stem b) Emotional brain c) Mid brain d) Corpora quadrigemina
74. ____ forms the hind brain.
a) Rhombencephalon b) Pons varoli c) Cerebellum d) Medulla oblongata
75. ____ lies in front of the cerebellum between the midbrain and the medulla oblongata.
a) Rhombencephalon b) Medulla oblongata c) Pons varoli d) Cerebellum
76. The ____ is a long, slender, cylindrical nervous tissue.
a) Spinal cord b) Cervical enlargement c) Caudaequina d) Lumbar enlargement
77. The ventricle III is continuous with the ventricle IV in the hind brain through a canal called ____.
a) Cerebro spinal fluid b) Septum pellucidum
c) Aqueduct of Sylvius d) Lateral ventricles I and II
78. The C- shaped space found inside each cerebral hemisphere forms the ____.
a) Lateral ventricles I and II b) Aqueduct of Sylvius
c) Septum pellucidum d) Cerebro spinal fluid
79. Choroid plexus is a network of blood capillaries found in the roof of the ventricles and forms ____.
a) Lateral ventricles I and II b) Aqueduct of Sylvius
c) Septum pellucidum d) Cerebro spinal fluid

80. Lateral ventricles I and II are separated from each other by a thin membrane called the ____.
- a) Lateral ventricles I and II b) Septum pellucidum
c) Cerebro spinal fluid d) Aqueduct of Sylvius
81. _____ neuron takes the sensory impulse to the grey (afferent) matter of the spinal cord.
- a) Sensory Receptor b) Sensory Neuron
c) Motor Neuron d) Interneurons
82. The _____ serves the lower limbs.
- a) Spinal cord b) Cervical enlargement
c) Caudaequina d) Lumbar enlargement
83. The thick bundle of elongated nerve roots within the lower vertebral canal is ____.
- a) Lumbar enlargement b) Caudaequina
c) Cervical enlargement d) Spinal cord
84. The _____ serves the upper limb.
- a) Caudaequina b) Spinal cord
c) Cervical enlargement d) Lumbar enlargement
85. Which is a sensory structure that responds to a specific stimulus?
- a) Sensory Receptor b) Sensory Neuron
c) Motor Neuron d) Interneurons
86. The conditioned reflex was first demonstrated by ____.
- a) Conditioned reflex b) Unconditional reflex
c) Pavlov d) Cerebral cortex
87. _____ is an inborn reflex for an unconditioned stimulus.
- a) Unconditional reflex b) Pavlov
c) Conditioned reflex d) Cerebral cortex
88. One or two interneurons may serve to transmit the impulses.
- a) Motor Neuron b) Sensory Neuron
c) Interneurons d) Sensory Receptor
89. _____ is a response to a stimulus that has been acquired by learning.
- a) Cerebral cortex b) Conditioned reflex
c) Pavlov d) Unconditional reflex
90. It transmits impulse from CNS to the effector organ.
- a) Interneurons b) Sensory Neuron
c) Sensory Receptor d) Motor Neuron
91. Speech and swallowing is ____.
- a) Trigeminal nerve b) Vagus c) Trochlear nerve d) Hypoglossal
92. Rotation of the eye ball is ____.
- a) Vagus b) Trochlear nerve c) Trigeminal nerve d) Hypoglossal
93. The _____ controls the conditioned reflex.
- a) Conditioned reflex b) Unconditional reflex
c) Pavlov d) Cerebral cortex
94. Regulation of the visceral organs is ____.
- a) Hypoglossal b) Trochlear nerve
c) Vagus d) Trigeminal nerve
95. Functioning of facial parts is ____.
- a) Trigeminal nerve b) Trochlear nerve
c) Hypoglossal d) Vagus
96. _____ whose cell body is in the brain or spinal cord.
- a) Preganglionic neuron b) Exteroceptors
c) Postganglionic neuron d) Autonomic ganglion

97. The ____ is the part of the peripheral neural system associated with the voluntary control of body movements.
- a) Cranial nerves
b) Autonomic neural system
c) Somatic neural system
d) Spinal nerves
98. There are 12 pairs of ____.
- a) Cranial nerves
b) Autonomic neural system
c) Somatic neural system
d) Spinal nerves
99. There are 31 pairs of ____.
- a) Somatic neural system
b) Spinal nerves
c) Cranial nerves
d) Autonomic neural system
100. The ____ is auto functioning and self governed
- a) Somatic neural system
b) Spinal nerves
c) Cranial nerves
d) Autonomic neural system

LEVEL – III (101 - 150 Questions)

101. ____ provide information about position and movements of the body.
- a) Sebaceous glands b) Proprioceptors c) Interoceptors d) Lacrymal glands
102. ____ are located at or near the surface of the body.
- a) Preganglionic neuron b) Postganglionic neuron
c) Autonomic ganglion d) Exteroceptors
103. ____ consists of axon of preganglionic neuron and cell bodies of postganglionic neuron.
- a) Exteroceptors b) Autonomic ganglion
c) Postganglionic neuron d) Preganglionic neuron
104. ____ are located in the visceral organs and blood vessels.
- a) Interoceptors b) Lacrymal glands c) Sebaceous glands d) Proprioceptors
105. ____ conveys nerve impulses from autonomic ganglia to visceral effector organs.
- a) Autonomic ganglion b) Preganglionic neuron
c) Postganglionic neuron d) Exteroceptors
106. Fibrous layer of eye is ____.
- a) Aqueous humor b) Choroid c) Sclera d) Crystalline
107. ____ located in the upper lateral region of each orbit, secrete tears.
- a) Sebaceous glands b) Proprioceptors c) Interoceptors d) Lacrymal glands
108. ____ at the base of the eyelashes are called ciliary glands
- a) Proprioceptors b) Interoceptors c) Sebaceous glands d) Lacrymal glands
109. The cells are accumulated with the proteins called ____.
- a) Sclera b) Crystalline c) Aqueous humor d) Choroid
110. Watery fluid is called ____ in eye.
- a) Aqueous humor b) Sclera c) Crystalline d) Choroid
111. Smooth muscle present in the ciliary body is called the ____.
- a) Retina b) Accommodation c) Ciliary muscle d) Canal of schlemm
112. At the junction of the sclera and the cornea, is a channel called ____.
- a) Accommodation b) Canal of schlemm c) Ciliary muscle d) Retina
113. Vascular layer of eye is ____.
- a) Sclera b) Crystalline c) Aqueous humor d) Choroid
114. Sensory layer of eye is ____.
- a) Retina b) Canal of schlemm c) Accommodation d) Ciliary muscle
115. The ability of the eyes to focus objects at varying distances is called ____.
- a) Ciliary muscle b) Canal of schlemm c) Retina d) Accommodation

116. ____ is sensitive, red, to long wavelength close to 560 nm.
a) Erythropsin b) Chloropsin c) Astigmatism d) Presbyopia
117. Which is devoid of photo receptors?
a) Hypermetropia b) Blind spot c) Myopia d) Fovea centralis
118. A small depression present in the centre of the yellow spot is called ____.
a) Fovea centralis b) Myopia c) Blind spot d) Hypermetropia
119. The affected person can see only the distant objects clearly ____.
a) Blind spot b) Fovea centralis c) Myopia d) Hypermetropia
120. The affected person can see the nearby objects _____.
a) Fovea centralis b) Hypermetropia c) Myopia d) Blind spot
121. Wax producing sebaceous glands called ____ in the external auditory meatus.
a) Eustachian tube b) Ceruminous glands c) Middle ear d) Cataract
122. ____ is due to the rough (irregular) curvature of cornea or lens.
a) Chloropsin b) Erythropsin c) Presbyopia d) Astigmatism
123. ____ is sensitive, green, to medium wavelength of 530 nm.
a) Astigmatism b) Chloropsin c) Presbyopia d) Erythropsin
124. Due to aging, the lens loses elasticity and the power of accommodation ____.
a) Erythropsin b) Astigmatism c) Presbyopia d) Chloropsin
125. Due to the changes in nature of protein, the lens becomes opaque ____.
a) Cataract b) Middle ear c) Ceruminous glands d) Eustachian tube
126. The ____ is a sensory ridge located on the top of the Basilar membrane.
a) Basilar membrane b) Perilymph c) Organ of corti d) Stereocilia
127. Scala vestibuli and scala tympani are filled with ____.
a) Perilymph b) Organ of corti c) Basilar membrane d) Stereocilia
128. The ____ is a small air-filled cavity in the temporal bone.
a) Ceruminous glands b) Cataract c) Middle ear d) Eustachian tube
129. The scala media and scala tympani are separated by a membrane called ____.
a) Stereocilia b) Basilar membrane
c) Organ of corti d) Perilymph
130. A tube called ____ connects the middle ear cavity with the pharynx
a) Cataract b) Middle ear
c) Ceruminous glands d) Eustachian tube
131. ____ may be due to the blockage of ear canal with earwax.
a) Perilymph b) 20 times
c) Tectorial membrane d) Conductive deafness
132. The pressure exerted on the oval window is about ____ more than that on the tympanic membrane.
a) Perilymph b) 20 times
c) Tectorial membrane d) Conductive deafness
133. Protruding from the apical part of each hair cell is hair like structures ____.
a) Organ of corti b) Basilar membrane c) Perilymph d) Stereocilia
134. ____ a roof like structure overhanging the organ of corti throughout its length.
a) Tectorial membrane b) Perilymph
c) 20 times d) Conductive deafness
135. The increased pressure generates pressure waves in the fluid of ____.
a) Conductive deafness b) 20 times
c) Perilymph d) Tectorial membrane
136. The sense of taste is considered to be the most pleasurable of all senses ____.
a) Gustatory receptor b) Skin c) Gustatory hairs d) Papillae

154. Given below is a table comparing the effects of sympathetic and parasympathetic nervous system for four features (1-4) which one feature is correctly described? (A.I.I.M.S.2006)
- | Feature | sympathetic nervous system | parasympathetic nervous system |
|---------|-----------------------------------|--------------------------------|
| a) | Salivary gland- inhibit secretion | -stimulate secretion |
| b) | pupil of the eye- dilate | -constricts eye |
| c) | heart -rate decreases- | increases |
| d) | intestinal -stimulates | -inhibits peristalsis |
155. Cranial nerves supplying eyes muscles are: (Pb.P.M.T.1997)
- a) 4, 5, 6 b) 3, 4, 5 c) 4, 6, 7 d) 3,4,6
156. Which of the following disorder is not hereditary (J.K.C.M.E.E 2005)
- a) sickle cell anaemia b) haemophilia c) colour blindness d) cataract
157. Glands responsible for secreting tears are: (H.P.P.M.T 2005)
- a) glands of moll b) lacrimal glands c) meibomian glands d) glands of zeis
158. Which of the following cranial nerves are mixed: (BHU 2007)
- A) glossopharyngeal B) trigeminal C) vagus D) auditory
- a) A, B and C are correct b) A and C are correct
- c) A and B are correct d) B and D are correct
159. To What the respiratory canter of brain are sensitive?
- a) High CO₂ Concentration in blood b) Blood supply to brain
- c) High O₂ Concentration in blood d) More blood supply to lungs
160. Nasal epithelium is formed of: (C.M.C 2003)
- a) columnar epithelium b) keratinised epithelium
- c) pseudostratified epithelium d) glandular epithelium
161. Space between piamater and arachnoid is (J.K.C.M.E.E 2003)
- a) subdural b) supra archnoid c) eqidural d) subarachnoid
162. Which one is mixed nerve?
- a) oculomotor b) trochler c) hypoglossal d) glossopharyngeal
163. Visual area is localized in (A.I.E.E.E 2004)
- a) occipital lobe b) parietal lobe c) frontal lobe d) temporal lobe
164. In hypothalamus are located various canters of (J.I.P.M.E.R 2004)
- a) circulation b) sleep c) memory d) body temperature
165. Which option is correct for the few statements are given for the function of cerebrum, which of few following option is shows all correct statements.
- i) to control the sensitivity, movement, memory, vocabulary etc. through the
 ii) to control the vision and adaptation through the occipital and frontal lobes
 iii) to control the contraction of voluntary muscles through the frontal lobe
 iv) to control the temperature, taste, touch, pain etc, through the parietal lobe
- a) (i),(ii),(iii) b) (iii),(iv),(i) c) (i),(iii),(iv) d) (i),(ii)
166. Column I lists the part of the human brain and column II lists the functions. Match the two columns and identify the correct choice from those given. (K.C.E.T 2005)

Column I	Column II
a. cerebrum	p. controls the pituitary
b. cerebellum	q. control vision and hearing
c. hypothalamus	r. control the rate of heart beat
d. midbrain	s. seat of intelligence
	t. maintains body posture

- a) (a=s);(b=t);(c=p);(d=q) b) (a=t);(b=s);(c=r);(d=q)
- c) (a=t);(b=r);(c=p);(d=q) d) (a=t);(b=s);(c=q);(d=p)

UNIT – IV

CHAPTER - 11

CHEMICAL COORDINATION AND INTEGRATION

TRY AND TEST YOURSELF



LEVEL – I (1 - 50 Questions)

1. The maintenance of constant internal environment is referred as
 - a) Regulation
 - b) homeostasis
 - c) co-ordination
 - d) hormonal control
2. Which of the following are exclusive endocrine glands?
 - a) Thymus and testis
 - b) adrenal and ovary
 - c) parathyroid and adrenal
 - d) pancreas and parathyroid
3. Which of the following hormone is not secreted under the influence of pituitary gland?
 - a) thyroxine
 - b) insulin
 - c) oestrogen
 - d) glucocorticoids
4. Spermatogenesis in mammalian testes is controlled by
 - a) Luteinising hormone
 - b) Follicle stimulating hormone
 - c) FSH and prolactin
 - d) GH and prolactin
5. Serum calcium level is regulated by
 - a) Thyroxine
 - b) FSH
 - c) Pancreas
 - d) Thyroid and parathyroid
6. Iodised salt is essential to prevent
 - a) rickets
 - b) scurvy
 - c) goitre
 - d) acromegaly
7. Which of the following gland is related with immunity?
 - a) Pineal gland
 - b) adrenal gland
 - c) thymus
 - d) parathyroid gland
8. Which of the following statement about sex hormones is correct?
 - a) Testosterone is produced by Leydig cells under the influence of luteinizing hormone
 - b) Progesterone is secreted by corpus luteum and softens pelvic ligaments during child birth
 - c) Oestrogen is secreted by both sertoli cells and corpus luteum
 - d) Progesterone produced by corpus luteum is biologically different from the one produced by placenta.
9. Hypersecretion of GH in children leads to
 - a) Cretinism
 - b) Gigantism
 - c) Graves disease
 - d) Tetany
10. A pregnant female delivers a baby who suffers from stunted growth, mental retardation, low intelligence quotient and abnormal skin. This is the result of
 - a) Low secretion of growth hormone
 - b) Cancer of the thyroid gland
 - c) Over secretion of pars distalis
 - d) Deficiency of iodine in diet.
11. Which one of the following statement is correct
 - a) Calcitonin and thymosin are thyroid hormones
 - b) Pepsin and prolactin are secreted in stomach
 - c) Secretin and rhodopsin are polypeptide hormones
 - d) Cortisol and aldosterone are steroid hormones
12. Which of the given option shows all wrong statements for thyroid gland

Statements

 - i) It inhibits process of RBC formation
 - ii) It helps in maintenance of water and electrolytes
 - iii) Its more secretion can reduce blood pressure
 - iv) It Stimulates osteoblast
 - a) (i) and (ii)
 - b) (iii) and (iv)
 - c) (i) and (iv)
 - d) (i) and (iii)

31. ___ is a peptide hormone that stimulates the adrenal cortex to secrete glucocorticoids and mineralocorticoids.
- a) Negative feedback mechanism b) Adrenocortico tropic hormone
c) Thyroid Stimulating Hormone d) Follicle stimulating hormone
32. ___ is a glycoprotein hormone which is also known as interstitial cell stimulating hormone.
- a) Luteinizing hormone b) Luteotropic hormone
c) Oxytocin d) Vasopressin or antidiuretic hormone
33. _____ is a glycoprotein hormone which regulates the functions of the gonads.
- a) Adrenocortico tropic hormone b) Thyroid Stimulating Hormone
c) Negative feedback mechanism d) Follicle stimulating hormone
34. It is the largest endocrine gland in the body.
- a) Melatonin b) Conarium c) Thyroid gland d) Isthmus
35. ___ is located behind the third ventricle of brain.
- a) Conarium b) Isthmus c) Thyroid gland d) Melatonin
36. _____ is a peptide hormone which promotes reabsorption of water.
- a) Luteinizing hormone b) Oxytocin
c) Vasopressin or antidiuretic hormone d) Luteotropic hormone
37. Which plays a central role in the regulation of circadian rhythm of our body?
- a) Isthmus b) Melatonin c) Thyroid gland d) Conarium
38. ___ is a peptide hormone which stimulates vigorous contraction of the smooth muscles of uterus.
- a) Luteinizing hormone b) Vasopressin or antidiuretic hormone
c) Luteotropic hormone d) Oxytocin
39. Parathyroid hormone is a ___ hormone.
- a) Thymus gland b) Iodine c) Hypercalcemic d) Thyrocalcitonin
40. The parafollicular cells or 'C' cells of thyroid gland secrete a hormone ____.
- a) Thyrocalcitonin b) Hypercalcemic c) Iodine d) Thymus gland
41. _____ is a polypeptide hormone, which regulates the blood calcium and phosphate .
- a) Thyrocalcitonin b) Thymus gland c) Hypercalcemic d) Iodine
42. Thyroid's two lateral lobes are connected by a median tissue mass ____.
- a) Melatonin b) Conarium c) Thyroid gland d) Isthmus
43. ___ is essential for the normal synthesis of thyroid hormones.
- a) Hypercalcemic b) Iodine c) Thyrocalcitonin d) Thymus gland
44. Zona reticularis secretes
- a) Major metabolic hormones b) Glucocorticoids
c) Mineralocorticoids d) Androgen, Oestrogen and glucocorticoides
45. Zona glomerulosa secretes
- a) Glucocorticoids b) Mineralocorticoids
c) Major metabolic hormones d) Androgen, Oestrogen and glucocorticoides
46. ___ is partially an endocrine and partially a lymphoid organ.
- a) Thyrocalcitonin b) Hypercalcemic c) Iodine d) Thymus gland
47. Hormones of the thyroid gland are often called the ____.
- a) Major metabolic hormones b) Glucocorticoids
c) Mineralocorticoids d) Androgen, Oestrogen and glucocorticoides
48. Zona fasciculate secretes
- a) Mineralocorticoids b) Major metabolic hormones
c) Glucocorticoids d) Androgen, Oestrogen and glucocorticoides
49. ___ regulates water and electrolyte balance of our body.
- a) Mineralocorticoids b) Pancreas
c) Adrenalin d) Aldosterone

71. Females have a pair of ____ located in the pelvic region of the abdomen.
a) Oestrogen b) Leydig cells c) Ovaries d) Testis
72. ____ prepares the uterus for implantation of the fertilized ovum.
a) Renin b) Progesterone c) Atrial natriuretic factor d) Oestrogens
73. ____ is responsible for the maturation of reproductive organs.
a) Ovaries b) Leydig cells c) Testis d) Oestrogen
74. ____ acts on the gastric glands.
a) Gastro-intestinal tract b) Gastrin c) Secretin d) Cholecystokinin
75. Cardiocytes on the atrial wall's secretes an important peptide hormone ____.
a) Progesterone b) Oestrogens c) Atrial natriuretic factor d) Renin
76. ____ is essential for the formation of placenta.
a) Renin b) Progesterone c) Atrial natriuretic factor d) Oestrogens
77. ____ secretes hormones such as gastrin, cholecystokinin (CCK), secretin and gastric inhibitory peptides.
a) Gastro-intestinal tract b) Cholecystokinin c) Gastrin d) Secretin
78. ____ is secreted by juxta glomerular cells.
a) Atrial natriuretic factor b) Progesterone c) Oestrogens d) Renin
79. ____ acts on acini cells of pancreas to secrete bicarbonate ions and water.
a) Gastro-intestinal tract b) Cholecystokinin c) Gastrin d) Secretin
80. ____ is an active form of vitamin D3.
a) Gastric inhibitory peptide b) Calcitriol c) Erythropoietin d) Dwarfism
81. ____ is secreted by duodenum in response to the presence of fat and acid.
a) Gastro-intestinal tract b) Secretin c) Cholecystokinin d) Gastrin
82. ____ is secreted by the JGA cells of the kidney.
a) Erythropoietin b) Dwarfism c) Gastric inhibitory peptide d) Calcitriol
83. ____ is secreted by proximal tubules of nephron.
a) Dwarfism b) Calcitriol c) Gastric inhibitory peptide d) Erythropoietin
84. ____ inhibits gastric secretion and motility.
a) Dwarfism b) Calcitriol c) Gastric inhibitory peptide d) Erythropoietin
85. ____ is due to hyposecretion of growth hormone (GH) in children.
a) Calcitriol b) Erythropoietin c) Gastric inhibitory peptide d) Dwarfism
86. In infants, hypothyroidism causes ____.
a) Acromegaly b) Gigantism c) Cretinism d) Myxedema
87. ____ is due to hypersecretion of growth hormone (GH) in children.
a) Gigantism b) Cretinism c) Acromegaly d) Myxedema
88. ____ is due to excessive secretion of growth hormone in adults.
a) Myxedema b) Acromegaly c) Cretinism d) Gigantism
89. ____ is caused due to the hyposecretion of parathyroid hormone.
a) Myxedema b) Simple goiter c) Grave's disease d) Tetany
90. Hyposecretion of thyroid in adults causes ____.
a) Myxedema b) Tetany c) Simple goiter d) Grave's disease
91. ____ is otherwise called Gull's disease.
a) Gigantism b) Cretinism c) Acromegaly d) Myxedema
92. ____ is also known as Endemic goitre.
a) Tetany b) Grave's disease c) Simple goiter d) Myxedema
93. ____ is also called as thyrotoxicosis.
a) Simple goiter b) Grave's disease c) Myxedema d) Tetany
94. ____ is otherwise known as Diabetes mellitus.
a) Hyperglycaemia b) Polyphagia c) Polyurea d) Polydipsia

95. ___ is caused due to excess secretion of cortisol.
 a) Hyperparathyroidism b) Hypoglycaemia
 c) Cushing's syndrome d) Addison's disease
96. ___ is caused due to excess PTH in blood.
 a) Hyperparathyroidism b) Addison's disease
 c) Hypoglycaemia d) Cushing's syndrome
97. ___ is due to increased secretion of insulin.
 a) Cushing's syndrome b) Addison's disease
 c) Hyperparathyroidism d) Hypoglycaemia
98. ___ is caused due to hypo secretion of glucocorticoids and mineralocorticoids.
 a) Hypoglycaemia b) Addison's disease
 c) Cushing's syndrome d) Hyperparathyroidism
99. ___ conversion of non- carbohydrate form like amino acids and fat into glucose.
 a) Diabetes insipidus b) Gluconeogenesis
 c) Ketosis d) Feed back mechanisms
100. ___ means excessive intake of food.
 a) Polydipsia b) Polyurea c) Polyphagia d) Hyperglycaemia

LEVEL – III (101 - 151 Questions)

101. ___ means excessive urination.
 a) Polydipsia b) Polyurea c) Polyphagia d) Hyperglycaemia
102. ___ breakdown of fat into glucose results in accumulation of ketone bodies.
 a) Ketosis b) Feed back mechanisms c) Diabetes insipidus d) Gluconeogenesis
103. ___ means excessive consumption liquids due to thirst.
 a) Polyurea b) Hyperglycaemia c) Polyphagia d) Polydipsia
104. ___ cyclic adenosine mono phosphate acts as a second messenger.
 a) Peptide hormone b) Signaling cascade c) cAMP d) Hormones
105. ___ acts as a first messenger in the cell.
 a) Peptide hormone b) cAMP c) Hormones d) Signaling cascade
106. ___ is caused due to hyposecretion of vasopressin.
 a) Gluconeogenesis b) Ketosis c) Diabetes insipidus d) Feed back mechanisms
107. ___ generate the production of second messengers such as cyclic AMP.
 a) cAMP b) Hormones c) Peptide hormone d) Signaling cascade
108. ___ control the secretion of endocrine glands.
 a) Diabetes insipidus b) Gluconeogenesis c) Ketosis d) Feed back mechanisms
109. ___ is breaking of a body part.
 a) cAMP b) Tyrosine c) Phosphodiesterases d) Autonomy
110. Which regulates cellular metabolism is catalyzed by the enzyme adenylate cyclase?
 a) cAMP b) Tyrosine c) Phosphodiesterases d) Autonomy
111. The actions of cAMP are terminated by _____.
 a) cAMP b) Phosphodiesterases c) Autonomy d) Tyrosine
112. The effect brought out by cAMP within the cell is known as _____.
 a) Peptide hormone b) cAMP c) Hormones d) Signaling cascade
113. Thyroid hormone is synthesised from
 a) cAMP b) Autonomy c) Tyrosine d) Phosphodiesterases
114. ___ is also known as paleo mammalian brain.
 a) Limbic system b) Oxytocin c) Melanocytes d) Thymus gland
115. ___ plays a vital role in cell mediated immunity.
 a) Limbic system b) Oxytocin c) Melanocytes d) Thymus gland

116. Melanin containing cells are ____.
- a) Limbic system b) Melanocytes c) Thymus gland d) Oxytocin
117. ____ helps during child birth.
- a) Melanocytes b) Thymus gland c) Oxytocin d) Limbic system
118. Alternation of haploid sexual and diploid asexual generation of an animal ____.
- a) Alternation of generation b) Catecholamines c) Acidosis d) Dioecious
119. ____ condition characterised by lower blood pH, due to the increase of keto acids.
- a) Alternation of generation b) Catecholamines c) Acidosis d) Dioecious
120. ____ animals, male and female reproductive organs occur in separate individuals.
- a) Acidosis b) Dioecious c) Alternation of generation d) Catecholamines
121. Naturally occurring amines that function as neuro transmitters.
- a) Alternation of generation b) Acidosis c) Dioecious d) Catecholamines

NEET BASED QUESTIONS:

122. If Adenohypophysectomy is done in adult, then which of the followings is the correct statement (CPMT 1996)
- a) Gigantism b) Acromegaly
c) B.M.R will be affected d) It will affect growth of testis and ovary
123. The immediate cause of induction of ovulation in the human female is the large plasma surge of :
- a) LH b) Estrodiol c) FSH d) Progesterone
124. Glucagon and insulin are: (CMEET 1995)
- a) Secreted from same cell and are same in function
b) Secreted from same cells but are opposite in function
c) Antagonistic secretion action and similar function
d) Secreted from different cells but are opposite in function
125. What is the function of enterogastrone? (C.B.S.E1994)
- a) It stimulates the secretion of digestive juices in the stomach
b) It stimulates the flow of pancreatic juice
c) It regulates the flow of bile
d) It inhibits the secretion of gastric juice
126. Ca⁺ metabolism is regulated by : (C.P.M.T 1997)
- a) ACTH b) Thyroxin c) Parathormone d) Epinephrine
127. Heavy jaws, long face, long extremities are caused by:
- a) under secretion of hormone of posterior lobe of pituitary
b) over secretion of hormone of anterior lobe of pituitary after puberty
c) under secretion of hormone of anterior lobe of pituitary
d) over secretion of hormone of posterior lobe of pituitary
128. Which one of the following is not a second messenger in hormone action? (AIPMT 2006)
- a) cGMP b) Calcium c) Sodium d) cAMP
129. Mainly which of the following hormones control menstrual cycle in human being (CET, 1997)
- a) FSH, LH, Estrogen b) oxytocin c) TH d) ACTH
130. FSH and LH hormones together are called: (MPPMT 1997)
- a) GTH b) Stress removing hormones
c) Emergency hormones d) Neurohormones
131. Chemically the hormones are (C.B.S.E 2004)
- a) Steroids only b) Proteins, steroids and biogenic amines.
c) Proteins only d) Biogenic amines only
132. Feeling the tremors of an earthquake a scared resident of seventh floor of a multistoried building starts climbing down the stairs rapidly. Which hormone initiated this action ? (C.B.S.E 2007)
- a) Gastricin b) Thyroxine c) Adrenaline d) Glucagon

UNIT – V

CHAPTER - 12

TRENDS IN ECONOMIC ZOOLOGY

TRY AND TEST YOURSELF



LEVEL – I (1 - 50 Questions)

- Which one of the following is not related to vermiculture?
 - Maintains soil fertility
 - Breakdown of inorganic matter
 - Gives porosity, aeration and moisture holding capacity
 - Degradation of non biodegradable solid waste
 - A and B is correct
 - C and D is correct
 - B and D is not correct
 - A and C is not correct
- Which one of the following is not an endemic species of earthworm?
 - Perionyx
 - Lampito
 - Eudrillus
 - Octochaetona
- Match the following

1. Bombyxmori	- a) Champa	- I) Muga
2. Antheraeaassamensis	- b) Mulberry	- II) Eri
3. Antheraeamylitta	- c) Arjun	- III)Tassar
4. Attacusricini	- d) Castor	- IV) Mulberry

Select the correct one.

 - 1 – b – IV
 - 2 – a – I
 - 3 - c - III
 - 4 - d - II
- Silk is obtained from
 - Lacciferlacca
 - Nosemabombycis
 - Attacusricini
 - Attacusmylitta
- Assertion : Nuptial flight is a unique flight taken the queen bee followed by several drones.
Reason : The queen bee produces a chemical substance called pheromone. The drones in that area are attracted to the pheromone and then mating takes place.
 - Assertion and reason is correct but not related
 - Assertion and reason is incorrect but related
 - Assertion and reason is correct but related
 - Assertion and reason is incorrect but not related
- Rearing of honey bee is called
 - Sericulture
 - Lac culture
 - Vermiculture
 - Apiculture
- Which of the statement regarding Lac insect is TRUE?
 - A microscopic, resinous crawling scale insect
 - Inserts its proboscis into plant tissue suck juices and grows
 - Secretes lac from the hind end of body.
 - The male lac insect is responsible for large scale production of lac.
- Aquaponics is a technique which is
 - A combination of aquaculture and fish culture
 - A combination of aquaculture and hydroponics
 - A combination of vermiculture and hydroponics
 - A combination of aquaculture and prawn culture.
- Inland fisheries are
 - deep sea fishing
 - capturing fishes from sea coast
 - Raising and capturing fishes in fresh water
 - oil extraction from fish

10. Prawn belongs to the class
 a) crustacea b) Annelida c) Coelenterata d) Echinodermata
11. Pearl oyster belongs to the Class
 a) Gastropoda b) Cephalopoda c) Scaphapoda d) Pelecypoda
12. Induced breeding technique is used in
 a) Marine fishery b) Capture fishery c) Culture fishery d) Inland fishery
13. Isinglass is used in
 a) Preparation b) Clearing of wines c) Distillation of wines d) Preservation of wines
14. Assertion : The best quality of pearl is known as lingha pearl and obtained from marine oysters.
 Reason : Nacre is secreted continuously by the epithelial layer of the mantle and deposited around the foreign particle
 a) Assertion is true, Reason is false b) Assertion and Reason are false
 c) Assertion is false But Reason is true d) Assertion and Reason are true
15. Choose the correctly matched pair
 a) Egg layers – Brahma b) Broiler types - Leghorn
 c) Dual purpose – White Plymouth rock d) Ornamental breeds – Silkie
16. ____ are called as “biological indicators of soil fertility”.
 a) Earthworms b) Humus formers c) Humus feeders d) Vermicast
17. ____ is the primary goal of vermiculture.
 a) Vermitech b) Economic Zoology c) Vermicompost d) Vermiculture
18. ____ is a branch of science that deals with economically useful animals.
 a) Economic Zoology b) Vermiculture c) Vermicompost d) Vermitech
19. Applications of earthworm in technology of composting and bioremediation of soils and other activities is called _____.
 a) Vermicompost b) Economic Zoology c) Vermiculture d) Vermitech
20. ____ is the process of using earthworms to decompose organic food waste.
 a) Vermitech b) Vermiculture c) Economic Zoology d) Vermicompost
21. Some earthworm species have been introduced from other countries _____.
 a) Vermibed b) Exotic species c) Endemic d) Vermicompost
22. The ____, are burrowing worms that are useful in making the soil porous, and mixing and distributing humus through out the soil.
 a) Vermicast b) Humus formers c) Earthworms d) Humus feeders
23. The breakdown of organic matter by the earthworms and its elimination is called _____.
 a) Humus feeders b) Vermicast c) Humus formers d) Earthworms
24. The ____, dwell on the surface and feed on organic matter.
 a) Humus feeders b) Earthworms c) Humus formers d) Vermicast
25. There are different ____ species of earthworms cultured in India for vermicomposting.
 a) Endemic b) Vermicompost c) Vermibed d) Exotic species
26. The earthworm has a number of ____ including numerous protozoa.
 a) Vermiwash b) Vermicompost c) Internal parasites d) Drilospheres
27. ____ is a liquid collected after the passage of water through a column of vermibed.
 a) Vermiwash b) Vermicompost c) Internal parasites d) Drilospheres
28. ____ is the compost produced by the action of earthworms in association with all other organisms in the compost unit.
 a) Vermibed b) Exotic species c) Vermicompost d) Endemic
29. Vermiwash is obtained from the burrows or ____ formed by earthworms.
 a) Internal parasites b) Drilospheres c) Vermiwash d) Vermicompost
30. The ____ should not be exposed to direct sunlight and hence shade may be provided.
 a) Vermicompost b) Exotic species c) Endemic d) Vermibed

31. Silkworms belonging to subtropical regions like India lay ___ type of eggs.
 a) Silk road b) Diapause c) Sericulture d) Non-diapause
32. Production of silk from the silk worm, by rearing practices on a commercial scale is called _____.
 a) Silk road b) Sericulture c) Non-diapause d) Diapause
33. _____ is excellent organic manure for sustainable agro-practices.
 a) Internal parasites b) Drilospheres c) Vermiwash d) Vermicompost
34. The _____ type is laid by silkworms inhabiting the temperate regions.
 a) Sericulture b) Silk road c) Diapause d) Non-diapause
35. The _____ passing through Baghdad, Tashkent, Damascus and Istanbul was used for silk transport.
 a) Silk road b) Diapause c) Sericulture d) Non-diapause
36. _____ is the white coloured bed of the pupa whose outer threads are irregular.
 a) Cocoon b) About 20°C - 25°C c) Morigulture d) Voltinism
37. _____ develops salivary glands, stops feeding and undergoes pupation in silk.
 a) Sericulture b) Spinneret c) Moulting d) Caterpillar
38. _____ is an agro-based industry.
 a) Sericulture b) Moulting c) Caterpillar d) Spinneret
39. The secreted fluid of silk moth comes out through _____.
 a) Caterpillar b) Sericulture c) Moulting d) Spinneret
40. The eggs after ten days of incubation of silk, hatch into larva called as _____.
 a) Moulting b) Caterpillar c) Sericulture d) Spinneret
41. The method of obtaining silk thread from the cocoon is known as _____.
 a) Stifling b) Post cocoon processing c) 45 days d) Reeling
42. These larvae are kept in trays inside a rearing house at a temperature of
 a) Cocoon b) Morigulture c) Voltinism d) About 20°C - 25°C
43. _____ is the number of broods raised per year in silkworm.
 a) Morigulture b) Voltinism c) Cocoon d) About 20°C - 25°C
44. The cultivation of mulberry is called as _____.
 a) Voltinism b) Cocoon c) Morigulture d) About 20°C - 25°C
45. The maturity of silkworm larvae is achieved in about _____.
 a) 45 days b) Post cocoon processing
 c) Reeling d) Stifling
46. Only about one-half of the silk of each cocoon is reelable, the remainder is used as a silk waste and formed into _____.
 a) 45 days b) Raw silk c) Spun silk d) Charakhas
47. The process of removing the threads from the killed cocoon is called _____.
 a) Stifling b) Post cocoon processing
 c) 45 days d) Reeling
48. Threads from several cocoons are wound together on ___ to form the reels of raw silk.
 a) Spun silk b) Charakhas c) 45 days d) Raw silk
49. The process of killing the cocoons is called _____.
 a) 45 days b) Reeling c) Stifling d) Post cocoon processing
50. At this stage the salivary glands (silk glands) starts secreting silk to spin cocoons.
 a) 45 days b) Raw silk c) Spun silk d) Charakhas

LEVEL – II (51 - 100 Questions)

51. _____ is a most dominant and serious viral disease.
 a) Flacherie b) Nosemabombycis c) Pebrine d) Grasserie
52. _____ is a dangerous disease to in silkworms.
 a) Pebrine b) Grasserie c) Flacherie d) Nosemabombycis

53. ____ is obtained and processed through several treatments.
a) 45 days b) Spun silk c) Charakhas d) Raw silk
54. ____ generally occurs in the mature larvae of silkworm.
a) Nosemabombycis b) Pebrine c) Flacherie d) Grasserie
55. Pebrine disease in silkworms is caused by _____, a protozoan.
a) Flacherie b) Nosemabombycis c) Pebrine d) Grasserie
56. Which is an Indian bee?
a) Apis indica b) Apis adamsoni c) Apis mellifera d) Division of labour
57. Which is Rock bee?
a) Apiculture b) Muscardine c) Apis dorsata d) Apis florea
58. Among the fungal diseases of silkworm, white _____ is common.
a) Muscardine b) Apis dorsata c) Apiculture d) Apis florea
59. Which is little bee?
a) Muscardine b) Apis dorsata c) Apiculture d) Apis florea
60. Care and management of honey bees on a commercial scale _____.
a) Apis dorsata b) Apiculture c) Muscardine d) Apis florea
61. A unique flight takes place by the queen bee followed by several drones.
a) Royal Jelly b) Nuptial flight c) Workers d) Pheromone
62. In honey bees, a highly organized ____ is found.
a) Apis adamsoni b) Apis mellifera c) Apis indica d) Division of labour
63. Which is an European bee?
a) Apis adamsoni b) Apis mellifera c) Apis indica d) Division of labour
64. Which is an African bee?
a) Apis indica b) Division of labour c) Apis adamsoni d) Apis mellifera
65. Queen bee is a functional female bee present in each hive and feeds on _____.
a) Royal Jelly b) Pheromone c) Nuptial flight d) Workers
66. The ____ is the functional male member of the colony.
a) Royal Jelly b) King of the colony c) Drone d) Worker Cell
67. ____ are sterile females and smallest but yet function as the main spring of the complicated machinery in the colony.
a) Royal Jelly b) Pheromone c) Nuptial flight d) Workers
68. When the queen bee loses its capacity to lay eggs, another worker bee starts feeding on the ____ and develops into a new queen.
a) Royal Jelly b) Drone c) Worker Cell d) King of the colony
69. The queen bee produces a hormonal chemical substance called _____.
a) Nuptial flight b) Royal Jelly c) Pheromone d) Workers
70. Worker bee lives in a chamber called _____.
a) Drone b) Worker Cell c) Royal Jelly d) King of the colony
71. The lower portions of honeycombs for _____.
a) Apisdorsata b) Brood cells c) Swarming d) Brood rearing
72. During ____ the drones follows the queen, copulates and dies after copulation.
a) Swarming b) Apisdorsata c) Brood cells d) Brood rearing
73. In ____ the brood cells are of similar in size and shape.
a) Brood rearing b) Brood cells c) Apisdorsata d) Swarming
74. The sole duty of the drone is to fertilize the virgin queen hence called _____.
a) Worker Cell b) Royal Jelly c) Drone d) King of the colony
75. ____ is a sheet of bee wax, on both sides of which the exact shape of different cells of the comb is made in advance.
a) Bee gloves b) Comb foundation c) Queen Excluder d) Bee veil

76. The young stages of honey bees accommodate the lower and central cells of the hive called the _____.
a) Apisdorsata b) Brood cells c) Swarming d) Brood rearing
77. Every sheet of wax is known as _____.
a) Comb Foundation b) Top cover c) Inner cover d) Super
78. _____ is the basal part of the hive on which the hive is constructed.
a) Bottom board b) Stand c) Langstroth d) Brood chamber
79. _____ is the most important part of the hive.
a) Langstroth b) Bottom board c) Stand d) Brood chamber
80. The _____ bee hive is made up of wood and consists of six parts.
a) Langstroth b) Bottom board c) Stand d) Brood chamber
81. _____ is situated above the stand and forms the proper base for the hive.
a) Stand b) Langstroth c) Bottom board d) Brood chamber
82. _____ is meant for protecting the colonies from rains.
a) Inner cover b) Super c) Comb Foundation d) Top cover
83. _____ is also a chamber without cover and base.
a) Inner cover b) Super c) Comb Foundation d) Top cover
84. _____ is utilized to prevent the entry of queen bee from the brood chamber into the super chamber.
a) Queen Excluder b) Bee veil c) Bee gloves d) Comb foundation
85. _____ is a wooden piece used for covering the super with many holes for proper ventilation.
a) Comb Foundation b) Top cover c) Inner cover d) Super
86. _____ is a long knife which helps in removing the cap from the combs.
a) Hive Tool b) Smoker c) Uncapping knife d) Bee brush
87. _____ is used to scare the bees during hive maintenance.
a) Smoker b) Uncapping knife c) Hive Tool d) Bee brush
88. _____ are used by bee keepers for protecting their hands while inspecting the hives.
a) Queen Excluder b) Bee veil c) Bee gloves d) Comb foundation
89. _____ is a device made of fine nettings to protect the bee-keeper from bee sting.
a) Comb foundation b) Queen Excluder c) Bee gloves d) Bee veil
90. _____ is a flat, narrow and long piece of iron which helps in scraping.
a) Uncapping knife b) Hive Tool c) Smoker d) Bee brush
91. _____ is a device which prevents the escape of queen.
a) Queen introducing cage b) Honey Extractor
c) Feeder d) Hive Entrance Guard
92. _____ is a basin with sugar syrup covered by grass to feed the bees during drought season.
a) Hive Entrance Guard b) Feeder
c) Honey Extractor d) Queen introducing cage
93. _____ is a large brush often employed to brush off bees from honey combs particularly at the time of extraction.
a) Smoker b) Uncapping knife c) Hive Tool d) Bee brush
94. _____ is a pipe made of wire nets used for keeping the queen for about 24 hours.
a) Queen introducing cage b) Honey Extractor
c) Feeder d) Hive Entrance Guard
95. _____ is a stainless-steel device which spins the combs rapidly to extract honey.
a) Feeder b) Queen introducing cage
c) Honey Extractor d) Hive Entrance Guard
96. The yellow colour of wax is due to the presence of ____ pigments.
a) Carotenoid b) Lac c) Lac culture d) Hyper-parasitism
97. _____ is secreted by the abdomen of the worker bees at the age of two weeks.
a) Propolis b) Bee wax c) Honey d) Pure wax

98. The ____ is white in colour.
a) Honey b) Propolis c) Bee wax d) Pure wax
99. ____ is the healthier substitute for sugar.
a) Honey b) Bee wax c) Pure wax d) Propolis
100. Which is derived from pollen grains?
a) Bee wax b) Honey c) Propolis d) Pure wax

LEVEL – III (101 - 150 Questions)

101. The collection of lac from the host plant is known as ____.
a) Mature lac b) Harvesting c) Ari lac d) Inoculation
102. The caterpillars of lac parasites feed upon lac insects showing
a) Lac culture b) Carotenoid c) Lac d) Hyper-parasitism
103. The culture of lac insect using techniques for the procurement is ____
a) Hyper-parasitism b) Lac culture c) Lac d) Carotenoid
104. The process of introducing lac insect on the host plant is called ____.
a) Inoculation b) Ari lac c) Harvesting d) Mature lac
105. The quality of ____ depends upon the quality of the hostplant.
a) Hyper-parasitism b) Lac culture c) Lac d) Carotenoid
106. The seed lac is sun dried and then melted to produce ____.
a) Lac b) Seed lac c) Shellac d) Stick lac
107. The mature harvesting of lac produces ____.
a) Ari lac b) Harvesting c) Inoculation d) Mature lac
108. After grinding, dusts and fine particles are removed called ____.
a) Shellac b) Seed lac c) Stick lac d) Lac
109. Immature harvesting of lac produces ____.
a) Harvesting b) Inoculation c) Ari lac d) Mature lac
110. Lac cut from the host plant is called ____.
a) Stick lac b) Shellac c) Seed lac d) Lac
111. ____ is otherwise known as raft based method.
a) Aquaponics b) Aquaculture c) Hydroponics d) Deep water culture
112. ____ is growing plants in non-soil media and nutrient-laden water.
a) Deep water culture b) Hydroponics c) Water culture d) Aquaponics
113. ____ is largely used as a sealing wax and adhesive.
a) Seed lac b) Stick lac c) Shellac d) Lac
114. ____ microbes in water can convert the waste materials into usable forms.
a) Aquavertica b) Nutrient Film technique
c) Media based method d) Soil
115. ____ involves the passage of nutrient rich water through a narrow trough.
a) Media based method b) Nutrient Film technique
c) Soil d) Aquavertica
116. ____ involves growing plants in inert planting media like clay pellets.
a) Media based method b) Nutrient Film technique
c) Soil d) Aquavertica
117. ____ is otherwise known as vertical aquaponics.
a) Soil b) Nutrient Film technique
c) Aquavertica d) Media based method
118. ____ method is applicable for home and hobby scale system.
a) Media based method b) Nutrient Film technique
c) Soil d) Aquavertica

119. ____ is a technique which is a combination of aquaculture.
a) Aquaponics b) Vermiculture c) Hydroponics d) Deep water culture
120. In India, aquaponics was started in ____.
a) 2012 b) 2003 c) 2013 d) 2014
121. ____ spend most of its life in river mouths.
a) Brackish water fishes b) Marine Fisheries
c) Estuarine fish d) Mariculture
122. ____ is a branch of science that deals with the farming of aquatic organisms.
a) Weeds b) Pesticides c) Aquaculture d) Pisciculture
123. Use of ____ is avoided and hence it is eco-friendly.
a) Pesticides b) Aquaculture c) Weeds d) Pisciculture
124. Culturing of fishes is called fish culture or
a) Weeds b) Pesticides c) Aquaculture d) Pisciculture
125. The plants are cultured in confined conditions, growth of ____ is completely absent.
a) Aquaculture b) Weeds c) Pesticides d) Pisciculture
126. ____ is commonly known as the brine shrimp.
a) fish breeding b) Artemia c) Metahaline culture d) Breeding ponds
127. ____ are more common in Bengal and Kerala.
a) Marine Fisheries b) Estuarine fish
c) Brackish water fishes d) Mariculture
128. Culturing of animals in the salinity ranges from 36 - 40% is called ____.
a) Metahaline culture b) fish breeding c) Artemia d) Breeding ponds
129. ____ deal with fishing operations along seacoasts.
a) Brackish water fishes b) Mariculture
c) Marine Fisheries d) Estuarine fish
130. Culturing of animals in the water salinity ranges from 30 - 35% is called ____.
a) Estuarine fish b) Brackish water fishes
c) Marine Fisheries d) Mariculture
131. ____ are special types of ponds where natural riverine conditions.
a) Fish seed b) Natural breeding c) Breeding d) Induced breeding
132. Light and temperature also play an important role in ____.
a) Metahaline culture b) Breeding ponds c) fish breeding d) Artemia
133. The first step in fish culture is the ____ of fishes.
a) Breeding b) Natural breeding c) Induced breeding d) Fish seed
134. ____ lives in high saline waters because of its high osmoregulatory capacity.
a) Breeding ponds b) Artemia c) fish breeding d) Metahaline culture
135. For proper breeding special types of ponds are prepared called ____.
a) Metahaline culture b) fish breeding c) Artemia d) Breeding ponds
136. The fertilized eggs are removed and kept into hatching ____.
a) Benchijal b) Gonadotropin hormone
c) Hapas d) Hypophysation
137. ____ developed to improve the quality of fish seed .
a) Natural breeding b) Breeding c) Fish seed d) Induced breeding
138. Induced breeding is also done by ____.
a) Hypophysation b) Gonadotropin hormone
c) Benchijal d) Hapas
139. The ____ secreted by the pituitary gland influences spawning in fishes.
a) Benchijal b) Gonadotropin hormone
c) Hapas d) Hypophysation

140. The ____ is commonly collected from breeding grounds.
a) Natural breeding b) Breeding c) Fish seed d) Induced breeding
141. ____ should be devoid of weeds and predatory fishes.
a) Nursery ponds b) Hatching pits c) Rearing pond d) Stocking ponds
142. The fertilized eggs are kept in
a) Hatching pits b) Rearing pond c) Nursery ponds d) Stocking ponds
143. The ____ should be free from toxicants and predators.
a) Nursery ponds b) Hatching pits c) Rearing pond d) Stocking ponds
144. The newly hatched fries are transported from the hatching happa to ____.
a) Rearing pond b) Nursery ponds c) Hatching pits d) Stocking ponds
145. The spawn collecting net is commonly called ____.
a) Gonadotropin hormone b) Hypophysation
c) Hapas d) Benchijal
146. Which is responsible for the meaty flavor of the flesh?
a) Histidine b) Fish meal c) Fish oil d) Isinglass
147. Well grown fishes are taken out for ____.
a) Exotic fishes b) Marketing c) Composite fish farming d) Harvesting
148. The mixed farming is termed ____ or polyculture.
a) Marketing b) Harvesting c) Composite fish farming d) Exotic fishes
149. ____ is done to capture the fishes from the water.
a) Harvesting b) Exotic fishes c) Composite fish farming d) Marketing
150. The fishes imported into a country for fish culture are called ____.
a) Marketing b) Harvesting c) Composite fish farming d) Exotic fishes

LEVEL – IV (151 - 198 Questions)

151. Agricultural lime should be applied to absorb excess CO₂ in prawn ____.
a) Lingha Pearl b) Moulting c) Pearl oysters d) Macrobrachium rosenbergii
152. ____ is commonly seen in rivers, fields and low-saline estuaries.
a) Macrobrachium rosenbergii b) Pearl oysters c) Moulting d) Lingha Pearl
153. ____ are sedentary animals.
a) Lingha Pearl b) Moulting c) Pearl oysters d) Macrobrachium rosenbergii
154. The pearl beds produce best quality of pearls called as ____.
a) Moulting b) Macrobrachium rosenbergii c) Pearl oysters d) Lingha Pearl
155. ____ is prepared from fish waste after extracting oil from the fish.
a) Fish oil b) Histidine c) Fish meal d) Isinglass
156. ____ is derived from fish liver and from the fish body.
a) Fish meal b) Fish oil c) Histidine d) Isinglass
157. ____ is a high-grade collagen produced from dried air bladder of certain fishes.
a) Fish meal b) Fish oil c) Histidine d) Isinglass
158. The breeding between unrelated animals is called ____.
a) Inbreeding b) Animal husbandry c) Recovery period d) Outbreeding
159. The period of floating raft in pearl oyster of 6 to 7 days is known as ____.
a) Recovery period b) Animal husbandry c) Outbreeding d) Inbreeding
160. Breeding between animals of the same breed for 4-6 generations is called ____.
a) Recovery period b) Outbreeding c) Inbreeding d) Animal husbandry
161. ____ is the practice of breeding and raising livestock cattles.
a) Inbreeding b) Animal husbandry c) Recovery period d) Outbreeding
162. ____ is essential for the purpose of meat, eggs and feather production.
a) Poultry farming b) Leghorn c) 100 chicken breeds d) Chittagong

