PROVISIONAL ANSWER KEY

Superintendent of Fisheries (SFT) (Advt No. 30/2016-17)

Date of Preliminary Test : 11/12/2016

Subject : Concerned Subject (Que 101-200)

101. Fish can be supplied with lesser capital investment and fewer man hours by doing,

(A) Induced breeding
(B) Fish capturing
(C) Fish culturing
(D) None of above

102. During induced breeding practises, pituitary glands must be preserved immediately because,

(A) Lipo proteins contained in them are degraded by the enzymatic action.
(B) Glycol- or muco- protein contained in them is degraded by the enzymatic action.
(C) Sulphur and p protein contained in them are degraded by the enzymatic action.
(D) Glycogen contained in them is degraded by the enzymatic action.

103. A male major carp brooders can be easily distinguished by roughness on the dorsal surface of its,

(A) Pectoral fins
(B) Dorsal fins
(C) Pelvic fins
(D) Caudal peduncles

104. Commonly used anaesthetics during induced breeding are,

(A) Propofol
(B) Etomidate
(C) MS 222 and Quinaldine
(D) Barbiturates

105. Hatchery production confers main benefits to the industry;

(A) Out of season production
(B) Genetic improvement
(C) Reduce dependence on wild-caught juveniles
(D) All of above mentioned

106. Mari culture is a specialized branch of aquaculture involving the cultivation,

(A) of organisms for food and other products in the ocean,
(B) of organisms for food and other products in the river,
(C) of organisms for food and other products in the lake,
(D) of organisms for food and other products in the pond,

107. Oysters, clams, mussels and scallops are the major groups,

(A) of arthropods farming
(B) of bivalves farming
(C) of Annelida farming
(D) of Protozoa farming

108. An exotic white legged shrimp is named as,

(A) Penaeus vannamei
(B) Penaeus monodon
(C) Macrobrachium rosenbergii
(D) Macrobrachium malcomsoni

109. Pearl is produced by the pearl oyster.

(A) Ostrea edulis
(B) Penaeus monodon
(C) Pinctada fucata
(D) Crassostrea gigas

110. An agar, similar to gelatine extensively used as culture medium, is obtained from,

(A) A red seaweed Gelidium .sp
(B) A green seaweed Ulva.sp
(C) A Diatom Fragilaria.sp
(D) A Protozoa Globigerina.sp

111. Macrobrachium rosenbergii in India is commonly known as,

(A) A seaweed
(B) A Scampi
(C) A tiger prawn
(D) A white prawn

112. The natural fisheries of the seas, estuaries, rivers, lagoons, large lakes etc. are called as,

(A) Cultured fisheries
(B) Controlled fisheries
(C) Wild fisheries
(D) None of above

113. Pen culture, cage culture, culture in reconditioned water are special types of,

(A) Aquaculture
(B) Plant culture
(C) Capture fisheries
(D) None of above

114. A traditional techniques of aquaculture e.g. dependence on natural productivity and little control over the stocks,

(A) Plant Aquaculture
(B) Extensive fish farming
(C) Intensive fish farming
(D) Semi intensive fish farming

115. Normally occurs in estuaries, deltas of rivers, lagoons and backwaters, which everywhere in the world are under tidal regime,

(A) Brackish water (B) Fresh water

(C) Sea water (D) Reservoir water

116. Scientific name for black rohu is,

(A) Labeo bata (B) Labeo gachua

(C) Labeo rohita (D) Labeo calabasu

117. The Central Institute of Fresh water Aquaculture (CIFA) head quarter is located at,

(A) Mumbai, India (B) Kochi, India

(C) Bhuvneshwar, India (D) Hyderabad, India

118. The Central Institute of Fisheries Education head quarter is located at,

(A) Mumbai, India (B) Kochi, India

(C) Chennai, India (D) Hyderabad, India

119. Depending on the distance from sea and seasonal variation due to monsoon precipitation, in brackish water ponds salinity usually ranges,

(A) 0.5 to 30 parts per thousand (‰) (B) 1.0 to 15 parts per thousand (‰)

(C) 5 to 25 parts per thousand (‰) (D) 15 to 50 parts per thousand (‰)

120. In brackish water following fishes can be cultivated,

(A) Mugil cephalus and Chanos chanos

(B) Labeo calabasu and Labeo gachua

(C) Boleophthalmus dussumieri and Boleophthalmus dentatus

(D) Catla catla and Cirrhina mrigala

121. It is a keel less raft formed by rigging together several logs, which are curved and Shaped like a canoe.

(A) It is a kind of fishing net.

(B) It is a kind of craft known as a Catamaran.

(C) It is a kind of hooks and line.

(D) None of above.

122. Dinghi and Naukas are carvel boats used for a variety of purposes including fishing operations,

(A) In Gujarat and Punjab

(B) In Patna and Bihar

(C) In Orissa and West Bengal

(D) In Kerala and West Bengal

123. At Tuticorin sea coast,

(A) Dinghi is in practice for fishing operations

(B) Dugout canoes are in practice for fishing operation

(C) Naukas are in practice for fishing operation

(D) Dugout canoes and Dinghi are in practice for fishing operation

124. In fisheries Grappling Devices are,

(A) Hand held gears that are generally used to target an individual fish or mammal

(B) Dugout canoes

(C) Are craft used for fishing operation.

(D) Devices are in practice to target a group of fishes.

125. In fisheries Stupefying Devices,

(A) Generally used to catch the arthropods and molluscans.

(B) Used to stun fish by using explosives or chemicals like dynamite or cyanide

(C) Craft used for fishing operation.

(D) In practice to target a group of mammals

126. Drying, salting, pickling and smoking are,

(A) Ancient methods of preserving fishes.

(B) Modern methods of preserving the fishes.

(C) Only used by research institutes for preserving the fishes.

(D) None of above applied in fisheries.

127. Freezing and Canning have taken on a large importance in fisheries are,

(A) Traditional methods of preserving fishes.

(B) Modern methods of preserving the fishes.

(C) Generally side stepped for preserving the fishes.

(D) Not useful at all in fisheries.

128. Surimi is a food product intended to mimic the meat of,

(A) Lobsters

(B) Crabs

(C) Shrimps and prawns

(D) All of above mentioned

129. After the usable portions are removed for human consumption, the remaining fish body – guts, bones, cartilage, scales, meat, etc. – are put into water and ground up are,

(A) Surimi

(B) Icing glass

(C) Fish hydrolysates

(D) All of above mentioned

130. A substance obtained from the swim bladders of fish, it is used for the clarification of wine and vinegar.

(A) Glass fibre Filter

(B) Icing glass

(C) Fish hydrolysates

(D) None of above

131. The programmes established by Q.A. to fulfil requirements for quality in fisheries,

(A) Is a quality control program

(B) Is a qualitative estimation program

(C) Is a quantitative estimation program

(D) Is both qualitative & quantitative estimation program

132. HACCP system is a,

(A) Hazard Analysis Critical Control Power

(B) Hazard Analysis Critical Control Point

(C) High Analysis Critical Control Point

(D) Hazardous And Critical Control Point

133. Checklist for ensuring seafood safety,

(A) Inspect fish for appearance and odour and reject fish of unacceptable quality

(B) Follow a cleaning schedule for all work areas and surfaces, using water containing 5 to 10 ppm of free chlorine.

(C) The harbour should be free from litter and other wastes

(D) All above mentioned.

134. Stern trawling is a type of,

(A) Large fishing Craft

(B) Large fishing Gear

(C) Small fishing craft

(D) Small fishing gear

135. Bull trawling is operated,

(A) Mechanically.

(B) With Three men powers.

(C) With One big boat which pulls the trawl.

(D) With Two boats which pull the trawl

136. The gillnet used to catch mackerel is known as Ayila

(A) In Vishakhapatnam

(B) In Chennai

(C) In Kerala

(D) In Gujarat.

137. Vala choonda mainly used for catching Vala in Kerala

(A) Tor tor

(B) Wallagu attu

(C) Puntius ticto

(D) Tor khudri

138. Scientific name for Giant tiger prawn is,

(A) Penaeus monodon (B) Penaeus indicus

(C) Punctius ticto (D) Macrobrachium rosenbergii

139. In coastal Kerala, the major types of crafts used in traditional fishery are,

(A) Catamarans (B) Dugout canoes

(C) Plank built boats (D) All of above mentioned

140. Lakes are classified according to their nutrient status,

(A) Oligotrophic (B) Aphotic

(C) Dysphotic (D) Photic

141. Open, linear systems with numerous small headwater streams that depend mainly on external nutrient inputs is,

(A) Open Ocean (B) River

(C) Estuary (D) Reservoir

142. Primarily extensive shallow swampy areas often associated with river or lake systems as riparian flood lands.

(A) Open ponds (B) Open wells

(C) Wetlands (D) Reservoir

143. Fishes can be obtained by employing artificial and scientific techniques in smaller inland areas like ponds, tanks, paddy fields etc. is a,

(A) Cultured fisheries (B) Captured fisheries

(C) Hydroponics (D) None of above

144. Scientific name of climbing perch is,

(A) Opheocephalus punctatus (B) Anabas testudineus

(C) Opheocephalus striatus (D) Tor tor

145. The population dynamics of fisheries is used by fisheries scientists to determine.

(A) Total populations
(B) Absolute fecundity
(C) Sustainable yields
(D) Relative fecundity

146. The basic accounting relation for population dynamics in fisheries is the BIDE (Birth, Immigration, Death, Emigration) model, shown as,

(A) $N_1 = N_0 + B + D + I - E$
(B) $N_1 = N_0 + B - D - I - E$
(C) $N_1 = N_0 - B - D + I - E$
(D) $N_1 = N_0 + B - D + I - E$

147. For the assessment of fish stock the following are necessary,

(A) The appropriate data bases
(B) Short and long-term projections of the yield and biomass
(C) To determine long-term biological reference points
(D) All above mentioned

148. In a fish stock assessment,

(A) Physical and fisheries data are collected
(B) Chemical and fisheries data are collected
(C) Only fisheries data are collected
(D) Biological and fisheries data are collected

149. For a single species or a group of species that certain gear and strategies are designed is called as,

(A) Catch species of the fishes
(B) By catch species of the fishes
(C) Target species of the fishes
(D) Non target species of the fishes

150. The total number or weight of fish captured, including all fish retained and those that are discarded is called as,

(A) Catch
(B) By catch
(C) Target species
(D) Non target species of the fishes

151. The portion of a non-targeted species catch taken in addition to the targeted species. It may include threatened, endangered, or protected species, as well as individuals of the target species below a desired or regulatory size. is called as,

(A) Catch
(B) By catch
(C) Target species
(D) Non target species of the fishes

152. If any person puts any poison, lime or toxic material into any water with intent to catch or destroy any fish will be punishable under,

(A) The Indian Fisheries Act, 1897
(B) The Indian Fisheries Act, 1998
(C) The Indian Fisheries Act, 1890
(D) The Indian Fisheries Act, 2001

153. A bill to provide for protection, conservation and development of fisheries in inland and territorial waters of the State of Gujarat,

(A) Gujarat Bill No.6 Of 2003
(B) Gujarat Bill No.5 Of 2003
(C) Gujarat Bill No.1 Of 2003
(D) Gujarat Bill No.7 Of 2003.

154. Dharoi,Kadana,Panam are large reservoir of,

(A) Kerala
(B) Punjab
(C) Gujarat
(D) Maharashtra

155. In Gujarat Harpodaon nehereus is commonly known as,

(A) Bumla
(B) Vichuda
(C) Jinga
(D) Khaga

156. Disease, parasites or pathogens may enter fish through, gills ingestion or through the digestive tract.

(A) Gills
(B) Penetration of egg membrane,
(C) Rupture of skin or wounds
(D) All of above

157. Disease caused by a fish louse is,

(A) Endo parasite on fish
(B) Ecto parasite on fish
(C) Pathogen
(D) None of above

158. Contraceacum sp and the Ligula intestinalis are,

(A) Endo parasites of fish body (B) Ecto parasites of fish body

(C) Predators (D) None of above

159. At a time of stress in fish aquaculture,

(A) Amino acids are given.

(B) Proteins are given.

(C) Vitamins A, B, C, D, and E and micro-nutrients such as Selenium are given

(D) Carbohydrates are given.

160. WSSV in shrimp caused by a virus belonging to a family,

(A) Baculoviridae (B) Penaenidae

(C) Cyprinidae (D) Cypronodontidae

161. Studies, manages, and conserves the wetlands, stream like aquatic ecosystems using a landscape perspective is,

(A) Landscape oceanography (B) Landscape limnology

(C) Landscape aquaculture (D) None of above

162. CRZ was issued by the Ministry of Environment and forest Government of India,

(A) 19 February, 1991 (B) 19 February, 1995

(C) 20 February, 1991 (D) 10 February, 1991

163. The areas designated as Ecologically Sensitive Areas such as mangrove, coral reefs, Turtle nesting grounds etc. come under,

(A) CMZ-I (B) CMZ-II

(C) CMZ-III (D) CMZ-IV

164. The toxins originate from sources exterior to the body, like environmental pollution (eg water, soil, and air) as well as food-borne toxins

(A) Necrotoxins (B) Endogenous toxins

(C) Exogenous toxins (D) Cyanotoxins

165. The presence of high levels of infectious harmful substances in the environment above their natural levels of concentration.

(A) Contaminants (B) Pollutants

(C) Exogenous toxins (D) Cyanotoxins

166. The study of lakes and ponds, rivers, springs, streams and wetlands.

(A) Autecology (B) Ecology

(C) Oceanography (D) Limnology

167. The studies of oceans /oceanography is a branch of,

(A) Chemical sciences (B) Physical sciences

(C) Biological science (D) Geography

168. The pH measurement of water comes under,

(A) Chemical analysis (B) Physical analysis

(C) Biological analysis (D) None of above

169. The material residue left in the vessel after evaporation of the sample and its subsequent drying in an oven at a temperature of 103-105^{o}C.

(A) Total dissolved solids (B) Total suspended solids

(C) Total solids (D) None of above

170. Carbonates and bicarbonates of calcium and magnesium cause,

(A) Temporary hardness (B) Permanent hardness

(C) Metal concentration (D) None of above

171. Sulphates and chlorides of calcium and magnesium cause,

(A) Temporary hardness (B) Permanent hardness

(C) Metal concentration (D) None of above

172. The oxidized forms of nitrogen and the end product of the aerobic decomposition of organic nitrogenous matter,

(A) Nitrifying bacteria (B) Ammonia

(C) Nitrates (D) Nitrites

173. The high concentrations may indicate pollution by sewage, industrial wastes, intrusion of seawater or other saline water.

(A) Chlorides
(B) Ammonia
(C) Nitrates
(D) Nitrites

174. It is a very important parameter in water analysis which serves as an indicator of the physical, chemical and biological activities of the water body.

(A) Heavy metals
(B) Dissolved Oxygen
(C) TDS
(D) TSS

175. Oxygen required by microorganisms for stabilizing biologically decomposable organic matter in water under aerobic conditions,

(A) BOD
(B) Dissolved Oxygen
(C) COD
(D) TSS

176. The oxygen equivalent to the organic content of the sample that is susceptible to oxidation by a strong chemical oxidant,

(A) BOD
(B) Dissolved Oxygen
(C) COD
(D) TDS

177. NIO head quarter is located in,

(A) Mumbai
(B) Goa
(C) Kerala
(D) Karnataka

178. Studies on free floating organisms found in oceans,

(A) Hydrology
(B) Biology
(C) Zoology
(D) Planktonology

179. Unit of length is used to measure the depth in oceans,

(A) Fathom
(B) Meter
(C) Kilometre
(D) Centimetre

180. In descending order by area,

(A) Atlantic, Pacific, Indian, Southern (Antarctic), and Arctic Oceans.

(B) Southern (Antarctic), Arctic Oceans. Pacific, Atlantic, Indian,

(C) Pacific, Atlantic, Indian, Southern (Antarctic), and Arctic Oceans

(D) Southern (Antarctic), Pacific, Atlantic, Indian, and Arctic Oceans.

181. A multidisciplinary study of faunas especially about how humans benefit from them and how we can protect them is,

(A) Fisheries (B) Applied Zoology

(C) Entomology (D) Parasitology

182. The study which covers the animal kingdom in general, from a purely biological perspective.

(A) Animal sciences (B) Zoology

(C) General sciences (D) Biological sciences

183. The study of structures and function as a whole of the organisms is called as,

(A) Cellular studies (B) Zoology

(C) Physiology (D) Biology

184. Binomial Nomenclature Rule is,

(A) The entire two-part name must be written in italics (or underlined when handwritten).

(B) The genus name is always written first.

(C) The genus name must be capitalized

(D) All above mentioned

185. The basic unit of classification is,

(A) Genus (B) Species

(C) Subphylum (D) Phylum

186. Agnatha is a group of,

(A) Cartilagous fish (B) Jawless fish

(C) Bony fish (D) Lung fish

187. Characteristic of Osteichthyes,

(A) Have more or less bony skeleton. (B) Jaws are absent

(C) Paired fins are absent (D) Gills are absent

188. South American Dipnoi is,

(A) Lepidosiren paradoxa (B) Protopterus.annectens

(C) Neoceratodus.forsteri (D) Protopterus.amphibius

189. Study of visible parts of the body is called as,

(A) Endocrinology (B) Anatomy

(C) Histology (D) Cell biology

190. The organ is used to detect movement and vibration in the surrounding water by the fish,

(A) Fins (B) Gills

(C) Lateral line (D) Fin rays

191. A metabolic process, by which an organism obtains energy by reacting with oxygen and glucose to give water, carbon dioxide and ATP (energy).

(A) Circulation (B) Cellular respiration

(C) Digestion (D) Excretion

192. Complete Interbranchial septum, which is supported by gill cartilages is found in,

(A) Elasmobranch (B) Holocephalan

(C) Teleost (D) Lung fishes

193. The movement of ions and molecules through a medium, from a region of high concentration to a region of low concentration,

(A) Osmosis (B) Diffusion

(C) Osmotic pressure (D) Reverse osmosis

194. Water movement from low osmolarity to high osmolarity,

(A) Osmosis (B) Diffusion

(C) Osmotic pressure (D) Reverse osmosis

195. The circulatory system of fish is comprised of,

(A) Static component (B) Dynamic component

(C) Static and dynamic components. (D) None of above

196. The last chamber of the fish heart in teleost is,

(A) Cornus arteriosus (B) Bulbus arteriosus

(C) Sinus venosus (D) Atrium

197. The juxtaglomerular apparatus is a specialized structure formed by,

(A) The proximal convoluted tubule and the glomerular afferent arteriole.

(B) The distal convoluted tubule and the glomerular efferent arteriole.

(C) The distal convoluted tubule and the Henle's loop.

(D) The distal convoluted tubule and the glomerular afferent arteriole

198. In case of hermaphroditism when female changes to male is called as,

(A) Protogyny (B) Protandry

(C) Parthenogenesis (D) Gynogenesis

199. Eclosion hormone playing very critical role during,

(A) Breeding (B) Development

(C) Moulting (D) Gynogenesis

200. Somatostatin is released from,

(A) Liver (B) Fish testes

(C) Fish ovaries (D) Delta cells of pancreas