

**PAPER-II- FISHERIES SCIENCE-II**

**INITIAL KEY**

1. Bheries is the traditional fish farming in

**West Bengal**

2. Average productivity of FFDA ponds are

**3000 Kg/ha/year**

3. Which of the following is commonly known as Asian green mussel

***Perna viridis***

4. Larval development of blue swimmer crab (*Portunus pelagicus*) comprises of

**4 Zoeal stage and 1 megalopa stage**

5. Indian Pearl Oyster is

***Pinctada fucata***

6. D shaped larvae in *Perna indica* obtained after -----hours of fertilization

**24 h**

7. The scientific name of cobia is

***Rachycentron canadum***

8. Orange spotted grouper are

**Eurythermal and Euryhaline**

9. Larval feeding of cobia or Indian pompano starts with

**Rotifers**

10. The feed of Indian pompano fingerlings should contains

**45% Protein**

11. Seaweed farming originated in Japan long ago with the culture of

**Poryphyra**

12. Poryphyra carpospores germinate on mollusc shell and give rise to

**Conchocelis stage**

13. Which of the following is called as Pacific Oyster

**C. gigas**

14. *Scylla serrata* is commonly known as

**Mud crab**

15. The causative agent of Epizootic Ulcerative Syndrome (EUS) is

**Aphanomyces**

16. *Aeromonas salmonicida* causes

**Furunculosis**

17. For disinfection of hatchery, the recommended concentration of available chlorine is

**200 ppm**

18. Infectious Pancreatic Necrosis (IPN) is a

**Viral disease**

19. Spring Viremia of Carp (SVC) is caused by

**Rhabdovirus**

20. Whirling disease is caused by

**Myxosoma**

21. Each 5 mg/L of formalin added to a pond chemically removes

**1.0 mg/L of dissolved oxygen**

22. Potassium permanganate

**Both Reduces biological oxygen demand and Oxidize organic matter**

23. Which is commonly called as “Razor Fish”?

**Notopterus chitala**

24. *Hilsha ilisha* is

***Planktonivorous***

25. Which of the following is not an exotic fish?

**Eutropichthys vacha**

26. Scientific name of green tiger shrimp

***Penaeus semisulcatus***

27. *Macrobrachium rosenbergii* commonly called as

**Giant freshwater prawn**

28. Which is a bottom dwelling fish?

**Mrigal**

29. Asian seabass is

**Protandrous hermaphrodite**

30. Parental care seen in

***Channa striata***

31. Giant river prawn is

**Omnivorous with bottom feeding habit**

32. Which of the following is an exotic catfish?

***Pangasianodon hypophthalmus***

33. *Mystus seenghala* belongs to the family

**Bagridae**

34. Scientific name of golden mahseer is

***Tor putitora***

35. Ornamental fish native to India.

**Both Dwarf gourami and Zebra danio**

36. Scientific name of Malabar labeo is

***L. dussumieri***

37. Which is called as freshwater shark?

***W. attu***

38. Larval stages of *M. rosenbergii* is

39. Which of the following is mainly insectivorous in the adult stage?

**Climbing perch**

40. *Channa striata* is commonly called as

**Striped murrel**

41. Duration of larval stages in *M. rosenbergii* at 28-32°C temperature is

**23-32 days**

42. Which is called sun catfish?

**Horabagrus brachysoma**

43. GtH1 also called as

**FSH**

44. Jayanti rohu is developed by

**CIFA**

45. Pituitary releases

**GtH**

46. Adenohypophysis in teleosts secretes

**All of the given options**

47. For longer storage, pituitary gland can be preserved in

**Glycerine**

48. Carp pituitary glands collected during

**Summer**

49. The recommended dose (ml/Kg body weight of fish) of GnRH based hormone for female carps is

**0.5**

50. Origin of Pituitary is

**Ectothermal**

51. Which of the following is known as bullseye snakehead?

**Channa marulius**

52. The perfect composition of fishes to utilize pond niche are

**Silver carp: Catla: Rohu: Mrigal**

53. Among the Integrated fish farming, which one of the following shows highest integration with fish.

**Duck**

54. Accessory respiratory organs are well developed in

**Anabas testudineus**

55. Bony fishes comes under the Phylum

**Chordate**

56. Which of the following is a prolific breeder?

**Tilapia**

57. Which of the following is not true about lime?

**decreases carbonate content in water**

58. Removal of microbial contaminants from contaminated bivalve by placing them in tanks of clean water is called

**Depuration**

59. In intensive aquaculture, the most expensive input is

**Feed**

60. Which of the following is called as back swimmer?

**Notonecta**

61. Which of the following traditional shrimp trapping system have maximum productivity?

**Pokkali field**

62. Who has given Pearl sac theory?

**Tokichi Nishikawa**

63. Which among the following is largest pearl oyster?

**Pinctada maxima**

64. Which chemical is used for oyster valve opening during conditioning before bead implantation?

**Menthol**

65. Which one of the following edible oyster is found only in marine environment?

**Saccostrea cucullata**

66. Which one of the following is herbivorous?

**Milk fish**

67. Which of the following shrimp culture system is commonly practiced in India?

**Semi-intensive system**

68. Which of the following fish feeds mainly on lab-lab?

**Milk fish**

69. Which among the following net is used for collection of Milk fish fry from wild?

**Surf net**

70. Which of the following shrimp culture system uses auto-stocking method of stocking?

**Extensive**

71. The Chemmeenketu technique of seed stocking is used by

**Kerala farmers**

72. Pearl spot cultured mainly in

**Kerala**

73. Induced breeding and seed production technology for seabass was developed by

**CIBA**

74. Which of the following country is the largest producer of pearl?

**Japan**

75. Pokkali fields are present in

**Kerala**

76. Which form of nitrogenous waste is toxic to fish?

**NH<sub>3</sub> & NO<sub>2</sub>**

77. *Channa striata* is the state fish of

**Telangana**

78. Which one of the following is carnivorous?

**Grouper**

79. The WSSV mainly affected the growout culture of

**P. monodon**

80. The coastal low lying field in Goa is known as

**Khazan lands**

81. Which of the following fish induced breeding and seed production technology is not available in India?

**Snapper**

82. Kareemeen is common name of

**Pearl spot**

83. What should be the optimum pH for fish culture?

**7.5 - 8.5**

84. What should be the stocking density in super-intensive farming system of shrimp?

**> 100/m<sup>2</sup>**

85. The ammonia toxicity to fish increase with

**increase of pH**

86. Winkler method is used for measurement of

**Dissolved Oxygen**

87. The infective stage of *Ichthyophthirius multifiliis* is

**Tomites**

88. The highest fecundity is exhibited by

**Grouper**

89. The first attempt to breed major carps in confined water was by \_\_\_\_\_ technique

**Wet bundh breeding**

90. Veliger is the larval form of

**Mollusc**

91. Which of the following is not a synthetic hormone?

**HCG**

92. The color of fertilized egg of *Channa striata* is

**Yellowish**

93. Secchi disc is used to measure?

**Turbidity**

94. Carps belong to the family?

**Cyprinidae**

95. Which of the following fish is used for biological aquatic weed control?

**Grass carp**

96. Which nation ranks second in world aquaculture production?

**India**

97. In fish culture ponds inlet and outlet are constructed on?

**Opposite side**



98. Ich disease in freshwater fish is caused by?

**Protozoans**

99. Hypophysation method was first used in?

**Brazil**

100. Algal bloom is caused by?

**Filamentous algae**

101. What is MAP ?

**Modified atmosphere packaging**

102. In IQF melting point of ice is lowered to \_\_\_\_\_ at a pressure of \_\_\_\_\_

**-22<sup>0</sup>C ; 207.5 MPa**

103. Which institute developed solar fish drier?

**CIFT**

104. In which process fat hydrolysing enzyme destroyed?

**Extrusion**

105. The carcinogenic compound present in smoked fish product is

**3,4 benzopyrene**

106. In radiation preservation of fish, which of the following bacteria is destroyed?

**Both Listeria and Salmonella**

107. Kamaboko is \_\_\_\_\_

**Boiled fish paste**

108. Thermal processing is also known as

**Canning**

109. Which of the following is a non-thermal processing method?

**Pulse light preservation**

110. What is IQF?

**Individually quick frozen**

111. Fish mince for preparation of Surimi, readily forms gel due to

**Unfolding and cross linking of actomyosin**

112. The IQF products stored at \_\_\_\_\_ °C

**-30**

113. Prawn cutlets can be classified under \_\_\_\_\_ product

**Battered and breaded**

114. Which of the following is also known as “High Hydrostatic Pressure”?

**HPP**

115. Butterfly fan tail is one of the forms of

**Prawn**

116. Battered and breaded products are stored at \_\_\_\_\_ °C

**-20**

117. The main source of fish body oil in India is

**Oil sardine**

118. Shark liver contains \_\_\_\_\_ % of oil

**60-75**

119. Which is used as the base for fish noodles?

**Surimi**

120. Chitosan is soluble in

**None of the above**

121. Which variety of shark fin fetches higher price?

**White**

122. Squalene is present in

**All of the given options**

123. Which of the following product used as milk replacer and food flavouring agent?

**Fish hydrolysates**

124. In India, isinglass is produced from the airbladder of

**Both Eels and Catfishes**

125. The base material for fish wafer is

**Both Fish mince and Starch**

126. Wet rendering process for manufacture of fish meal is used for

**Both Fatty fish and Offal**

127. Fish meal contains \_\_\_\_\_ % fat

**5-10**

128. Chitin is deacetylated by heating at 90-95<sup>0</sup>C with \_\_\_\_\_

**Caustic soda**

129. The lustrous effect in pearl essence is due to

**Guanine**

130. Which shark teeth fetches high price due to its shape and size?

**Tiger shark**

131. Surgical sutures prepared from

**Gut of fish**

132. Type-B FPC contains \_\_\_\_\_ % of fat

**3.0**

133. The p<sup>H</sup> of fish silage with the addition of formic acid is

**4**

134. Which enzyme used for preparation of fish hydrolysates?

**All of the given options**

135. Shark bones are processed for use as a source of

**Chondroitin sulphate**

136. Organism which swims freely regardless of movement of surrounding water is

**Pleuston**

137. Heleoplankton means

**Pond plankton**

138. Ceratium is a

**Dianoflagellates**

139. Red water phenomenon is mainly due to dominance of

**Dianoflagellates**

140. The total weight of all organisms in a unit area or volume a given time

**Biomass**

141. The primary production in aquatic ecosystem depends mainly on

**All of the given options**

142. The region between photic and aphotic zone is called as

**Dysphotic zone**

143. Free floating macrophytes

**Salvinia**

144. Which of the following is an emergent aquatic macrophyte?

**Typha**

145. Ciliated corona in the head is present in

**Rotifers**

146. Thermal stratification in lakes generally occurs in

**Metalimnion**

147. Organisms attached or clinging to stems and leaves of the plants or any other object projected above the bottom is called

**Periphyton**

148. The shallow water region with light penetration to the bottom and occupied by rooted plants in lakes is called

**Littoral zone**

149. Temporary plankton is also called as

**Meroplankton**

150. The size of microplankton is

**50-500  $\mu\text{m}$**