

CCE(P)-2015
FISHERIES

PBS-14-14

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

Subject Code :

1 4

Test Booklet No. :

00770

TEST BOOKLET FISHERIES

Time Allowed : 2 (Two) Hours

Full Marks : 200

INSTRUCTIONS

1. The name of the Subject, Roll Number as mentioned in the Admission Certificate, Test Booklet No. and Subject Code shall be written legibly and correctly in the space provided on the Answer Sheet with black ball pen.
2. Space provided for Series in the Answer Sheet is not applicable for Optional Subject. So the space shall be left blank.
3. All questions carry equal marks. Your total marks will depend only on the number of correct responses marked by you in the Answer Sheet.
4. No candidate shall be admitted to the Examination Hall/Room 20 minutes after commencement of distribution of the paper. The Supervisor of the Examination Hall/Room will be the time-keeper and his/her decision in this regard is final.
5. No candidate shall leave the Examination Hall/Room without prior permission of the Supervisor/Invigilator. No candidate shall be permitted to hand over his/her Answer Sheet and leave the Examination Hall/Room before expiry of the full time allotted for each paper.
6. No Mobile Phone, Pager, etc., are allowed to be carried inside the Examination Hall/Room by the candidates. Any Mobile Phone, Pager, etc., found in possession of the candidate inside the Examination Hall/Room, even if on off mode, shall be liable for confiscation.
7. No candidate shall have in his/her possession inside the Examination Hall/Room any book, notebook or loose paper, except his/her Admission Certificate and other connected paper permitted by the Commission.
8. Complete silence must be observed in the Examination Hall/Room. No candidate shall copy from the paper of any other candidate, or permit his/her own paper to be copied, or give, or attempt to give, or obtain, or attempt to obtain irregular assistance of any kind.
9. After you have completed filling in all your responses on the Answer Sheet and the Examination has concluded, you should hand over to the Invigilator *only the Answer Sheet*. You are permitted to take away with you the Test Booklet.
10. Violation of any of the above Rules will render the candidate liable to expulsion from the Examination Hall/Room and disqualification from the Examination, and according to the nature and gravity of his/her offence, he/she may be debarred from future Examinations and Interviews conducted by the Commission for appointment to Government Service.
11. Smoking inside the Examination Hall/Room is strictly prohibited.
12. This Test Booklet contains one sheet (two pages) for Rough Work at the end.

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[No. of Questions : 100]

SEAL

CCE (P) - 2015
FISHERIES

1. A food chain in fishpond ends with

- (A) carnivore animals
- (B) large herbivores
- (C) decaying organisms
- (D) omnivore animals

2. Larval stages in *Macrobrachium rosenbergii* are

- (A) 21
- (B) 8
- (C) 11
- (D) 10

3. Pearl is formed by the secretion of

- (A) shell
- (B) mantle tissue
- (C) intestinal tissue
- (D) gonadal tissue

4. Sea bass is considered as

- (A) euryhaline
- (B) stenohaline
- (C) thermohaline
- (D) None of the above

5. Which of the following is a protozoan ciliate?

- (A) Epistylis
- (B) Vortecella
- (C) Trichodina
- (D) Ichthyobodo

6. Fish poison of plant origin is

- (A) aldrin
- (B) nuvan
- (C) thiometon
- (D) Mahua oil cake

7. Mooring system is associated with

- (A) pen culture
- (B) cage fish culture
- (C) prawn culture
- (D) raceways

8. Most preferable plankton for four days' old IMC spawn is

- (A) copepod
- (B) cladoceran
- (C) rotifer
- (D) cyclop

9. Aflatoxins are formed as a result of growth of

- (A) gram +ve bacteria
- (B) yeasts
- (C) toxic algae
- (D) moulds

10. The stocking density of carp brooders is

- (A) 1000–1500 kg ha⁻¹
- (B) 3000–3500 kg ha⁻¹
- (C) 2000–2500 kg ha⁻¹
- (D) 4000–4500 kg ha⁻¹

11. Pungus is which of the following types of breeder?

- (A) Annual breeder
- (B) Seasonal breeder
- (C) Prolific breeder
- (D) None of the above

12. The bighead carp (*Aristichthys nobilis*) competes for food with

- (A) Grass carp
- (B) Catla
- (C) Rohu
- (D) Silver carp

13. Dropsy in fish usually is caused by

- (A) *Aeromonas* species
- (B) *Trichodina* species
- (C) *Pseudomonas* species
- (D) None of the above

14. 'Kataha' fisheries are practiced in

- (A) India
- (B) Bangladesh
- (C) Japan
- (D) China

15. The composition of ovaprim is essentially based on

- (A) Alikunhi method
- (B) Linpe method
- (C) Peter's method
- (D) Sunder Raj method

16. *Clarias batrachus* attains maturity at

- (A) 6 months
- (B) 1 year
- (C) 2 years
- (D) more than 2 years

17. Tambak is related with culture of

- (A) catfish
- (B) tilapia
- (C) trout
- (D) milkfish

18. Turbidity in water is controlled by the chemical

- (A) NaCl
- (B) KMnO_4
- (C) lime
- (D) gypsum

19. In fish, protein digestion begins from

- (A) mouth
- (B) stomach
- (C) alimentary track
- (D) esophagus

20. DMSO is a/an

- (A) extender
- (B) cryopreservative
- (C) cryoprotectant
- (D) None of the above

21. About 80% mangroves in India are located in

- (A) Kerala
- (B) West Bengal
- (C) Karnataka
- (D) Andhra Pradesh

22. In Assam, the most economically important ectoparasite of carps is

- (A) Dactylogyrus
- (B) Lernaea
- (C) Angulus
- (D) Gyrodactylus

23. Dhir beel is situated in

- (A) Dhubri district
- (B) Goalpara district
- (C) Nagaon district
- (D) Lower Kamrup district

24. The feeding habit of young *Pangasius sutchi* is

- (A) planktivorous
- (B) cannibalistic
- (C) carnivorous
- (D) carnivorous and cannibalistic

25. Pen culture practice was originated in

- (A) Japan
- (B) China
- (C) Norway
- (D) Cambodia

26. For productive water body, nitrogen, phosphorus and carbon ratio should be

- (A) 4 : 4 : 101
- (B) 16 : 1 : 106
- (C) 18 : 8 : 4
- (D) 1 : 16 : 100

27. The percentage share of animal protein provided by fish to the global population is

- (A) 10%
- (B) 15%
- (C) 17%
- (D) 50%

28. Gracilaria is a

- (A) red alga
- (B) green alga
- (C) brown alga
- (D) None of the above

29. Which disease is known as egtved disease?

- (A) Viral hemorrhagic septicemia
- (B) Infectious hematopoietic necrosis
- (C) Spring viremia of carp
- (D) Infectious pancreatic necrosis

30. Majority of the aquaculture species is

- (A) seasonal breeder
- (B) annual breeder
- (C) prolific breeder
- (D) biannual breeder

31. Infusoria is a/an

- (A) mollusc
- (B) crustacean
- (C) insect
- (D) protozoan

32. The major cultivable fish groups come under which family?

- (A) Clupeidae
- (B) Salmonidae
- (C) Siluridae
- (D) Cyprinidae

33. Widely used chemical in controlling floating aquatic weed is

(A) CuSO_4

(B) 2, 4-D

(C) diuron

(D) simazine

34. The vitamin that also acts as antioxidant is

(A) inositol

(B) pantothenic acid

(C) vitamin C

(D) lysine

35. Fecundity is related with which fishes?

(A) Male

(B) Female

(C) Male and female

(D) Hermaphrodite

36. Average protein level in carps diet is

(A) 20%–30%

(B) 32%–38%

(C) 22%–30%

(D) None of the above

37. GnRH is released from

(A) hypothalamus

(B) ovary

(C) liver

(D) testis

38. The common name of Vallisnaria is

(A) elephant grass

(B) eelgrass

(C) hornwort

(D) napier grass

39. Methyl testosterone is used for

(A) faster growth

(B) color enhancement in fish

(C) preventing deformities

(D) sex inversion

40. Katal fishing in Assam beels is normally done in

(A) summer season

(B) winter season

(C) all the seasons

(D) None of the above

41. An oxidizing disinfectant that does not contain chlorine is

- (A) CaO
- (B) Ca(OH)_2
- (C) CaCO_3
- (D) ozone

42. Sodium benzoate is a/an

- (A) test enhancer
- (B) preservative
- (C) antioxidant
- (D) antibacterial

43. Z in population dynamics means

- (A) fishing mortality
- (B) fishing error
- (C) fishing yield
- (D) fishing method

44. The bacteria which converts ammonia into nitrite is

- (A) lactobacillus
- (B) Nitrobacter
- (C) nitrosomonas
- (D) pseudomonas

45. Govind Sagar reservoir is situated on which of the following rivers?

- (A) Sutlej
- (B) Mahanadi
- (C) Cauvery
- (D) Beas

46. Hybrid vigor is known as

- (A) polyploidy
- (B) crossbreeding
- (C) intergeneric mating
- (D) heterosis

47. Hybridoma is a cell formed by fusion of

- (A) melanin cells with B lymphocyte
- (B) meninges cells with antibody cell
- (C) myeloma cells with T lymphocyte
- (D) myeloma cells with B lymphocyte

48. Cotton-wool disease in fish is caused by

- (A) Achlya species
- (B) Saprolegnia species
- (C) Exophila species
- (D) Gyrodactyla species

49. Gynogenesis in fish usually results in

- (A) all male population
- (B) all sterile population
- (C) all hermaphrodite population
- (D) all female population

50. Gonadotropin is a/an

- (A) peptide hormone
- (B) cholesterol-rich hormone
- (C) steroid hormone
- (D) enzyme

51. The adhesive nature of eggs in some fishes is due to

- (A) slime
- (B) mucoid
- (C) glue
- (D) alkaloid

52. Purse seine is used to catch

- (A) shoal-forming fish
- (B) solitary fish
- (C) demersal fish
- (D) slow-moving fish

53. Temperature of dry ice is

- (A) -78.7°C
- (B) -80°C
- (C) -196.4°C
- (D) -108°C

54. C_{14} technique is used to measure

- (A) primary productivity
- (B) dissolved oxygen
- (C) carbon dioxide
- (D) None of the above

55. The best extension method to gain confidence of farmers is

- (A) farm visit
- (B) method demonstration
- (C) result demonstration
- (D) group meeting

56. In fish body, more fat is present in the

- (A) anterior region
- (B) posterior region
- (C) dorsal region
- (D) ventral region

57. Extension methods are

- (A) formal
- (B) time bound
- (C) informal
- (D) logistic

58. The number of pigs required to fertilize one hectare of pond water is

- (A) 30-40
- (B) 5-6
- (C) 20-25
- (D) 45-60

59. Sukati is a

- (A) salted fish product
- (B) fermented fish product
- (C) canned product
- (D) smoked fish product

60. The quantitative study of demand and supply relationships is called

- (A) price analysis
- (B) risk analysis
- (C) economic analysis
- (D) None of the above

61. Increase in carbon dioxide leads to warming of the earth is called

- (A) global warming
- (B) phototaxis
- (C) greenhouse effect
- (D) None of the above

62. Chemical used in controlling obnoxious gas is

- (A) zeolite
- (B) alum
- (C) gypsum
- (D) lime

63. NACA is situated in

- (A) Philippines
- (B) Bangkok
- (C) Malaysia
- (D) Thailand

64. Pokkali paddy field exists in which of the following States of India?

- (A) Kerala
- (B) West Bengal
- (C) Goa
- (D) Tamil Nadu

65. A fishery project is said to be profitable, when benefit-cost ratio is

- (A) equal to one
- (B) less than one
- (C) more than one
- (D) None of the above

66. Sargasm is a

- (A) freshwater weed
- (B) seaweed
- (C) brackish-water weed
- (D) cold-water weed

67. Isinglass is obtained from

- (A) skin
- (B) muscle
- (C) air bladder
- (D) intestine

68. All societies that have acceptable and unacceptable forms of behaviour are called

- (A) cooperation norms
- (B) social norms
- (C) extension norms
- (D) All of the above

69. Which form of ammonia is more toxic to fish?

- (A) Ionized ammonia
- (B) Unionized ammonia
- (C) Ammonium chloride
- (D) None of the above

70. Well-known shellfish toxin is

- (A) okadaic acid and odmoic acid
- (B) scombrotoxin
- (C) tetrodotoxin
- (D) ciguatoxin

71. The most preferred natural food of all carp spawns is

- (A) phytoplankton
- (B) zooplankton
- (C) small insect larvae
- (D) bacteria

72. O-level fish culture means

- (A) seeds are stocked
- (B) no artificial feeds
- (C) zero management
- (D) no fish stocked

73. The major storage lipid of fish is

- (A) triglyceride
- (B) cholesterol
- (C) lecithin
- (D) None of the above

74. The duckweed species is

- (A) Lemna
- (B) Spirodela
- (C) Wolffia
- (D) All of the above

75. The term 'dermal denticles' refers to

- (A) cycloid scales
- (B) placoid scales
- (C) ctenoid scales
- (D) All of the above

76. Which is the largest river system in India?

- (A) The Ganga
- (B) The Indus
- (C) The Brahmaputra
- (D) The Mahanadi

77. Ranching is associated with

- (A) fish seed release in natural habitat
- (B) recreation
- (C) angling
- (D) disease

78. Density of water is inversely proportional to

- (A) salinity
- (B) temperature
- (C) dissolved oxygen
- (D) depth of water

79. Rampani net is used to catch

- (A) sardine
- (B) Bombay duck
- (C) mackerel
- (D) Indian salmon

80. Aquatic insects in nursery pond can be controlled by applying

- (A) Mohua oil cake
- (B) gossypol
- (C) soap oil emulsion
- (D) bleaching powder

81. The name 'plankton' is coined by

- (A) Ritcher
- (B) Hynes
- (C) Hensen
- (D) Boyd

82. Supply curve is

- (A) upward sloping
- (B) downward sloping
- (C) parallel to X-axis
- (D) parallel to Y-axis

83. "Price of the commodity increases the quantity of demand decreased and vice versa." This follows

- (A) law of demand
- (B) law of supply
- (C) law of indifference
- (D) None of the above

84. The first KVK was established in India in

- (A) Puducherry
- (B) Hyderabad
- (C) Gujarat
- (D) Assam

85. Which is a true fish?

- (A) Starfish
- (B) Jellyfish
- (C) Cuttlefish
- (D) Catfish

86. Chilka lake is a

- (A) lagoon
- (B) bberry
- (C) backwater
- (D) mudbank

87. Application of gypsum in ponds corrects the

- (A) pH
- (B) turbidity
- (C) hardness
- (D) ammonium toxicity

88. Penaeid eggs are hatched into

- (A) larvae
- (B) nymph
- (C) alvin
- (D) nauplius

89. Sacromere is a part of

- (A) bone
- (B) muscle
- (C) blood
- (D) urine

92. The floodplain wetlands of Manipur are locally known as

- (A) Tal
- (B) Beel
- (C) Pat
- (D) Charha

90. 'Minamata disease' is caused by

- (A) cadmium
- (B) mercury
- (C) iron
- (D) aluminum

93. The major fishing craft used in the reservoirs of penninsular India is

- (A) coracle
- (B) wooden boat
- (C) dugout canoe
- (D) mechanized boat

91. Which of the following minerals is involved in genetic coding?

- (A) Copper
- (B) Calcium
- (C) Phosphorus
- (D) Selenium

94. Acid food is usually subjected to

- (A) sterilization
- (B) pasteurization
- (C) Both (A) and (B)
- (D) None of the above

95. The fish that cannot utilize urea nitrogen is

(A) Magur

(B) Common carp

(C) Mulletts

(D) Catla

96. The mesophilic bacteria responsible for 'sulphur stinker' spoilage is

(A) *C. nigrificans*

(B) *C. batulum*

(C) *Bacillus subtilis*

(D) *B. thermophilus*

97. If the absolute value of price elasticity is greater than one, demand is said to be

(A) elasticity

(B) inelastic

(C) unitary elasticity

(D) All of the above

98. Which is an active gear?

(A) Gill net

(B) Trawl net

(C) Trap net

(D) Cast net

99. A short series of lectures is known as

(A) brain storming

(B) panel

(C) symposium

(D) debate

100. Fish that can be used as biological control of mosquito is

(A) Singhi

(B) Molly

(C) Gambusia

(D) Loach
