

**KARNATAKA VETERINARY, ANIMAL AND FISHERIES SCIENCES
UNIVERSITY, BIDAR**
Post Graduate Entrance Examinations : 2021-22
MFSc : Group D

HALL TICKET NO.....

Date: 10th May 2022
Max Marks : 100
Duration : 2 Hrs.

Choose the correct answer from the four options given under each question and fill the relevant circle with black ball point pen in the OMR Sheet.

Note: 1) Do not use pencil for marking on the OMR Sheet.

2) Marking on the OMR sheet for more than one option for a question will be rendered invalid.

1. The science of study of diversity of organisms is referred to as
 - A. Systematics
 - B. Taxonomy
 - C. Classification
 - D. Ichthyology
2. One of the most variable yet important characters used in species description is
 - A. Meristic counts
 - B. Colour patterns
 - C. Karyotyping
 - D. Standard length
3. The gills of penaeid shrimps are
 - A. Dendrobranchiate
 - B. Hemibranchiate
 - C. Demibranchiate
 - D. Phyllobranchiate
4. In the classification of bivalve, the most important character used is
 - A. Nature of the foot
 - B. Shell morphology
 - C. Shell colouration
 - D. Teeth on radula
5. In a virgin stock of fish, Z is equal to
 - A. Natural mortality
 - B. Fishing mortality
 - C. Both natural mortality and fishing mortality
 - D. Fishing intensity

6. Of the various processes occurring in a population, from management point of view, the most important one is
- A. Recruitment
 - B. Growth
 - C. Natural mortality
 - D. Fishing mortality
7. Offshore fisheries management is the responsibility of
- A. State government
 - B. Central government
 - C. Both central and state governments
 - D. None of the above
8. The magnitude of natural mortality in the sea depends on
- A. Temperature
 - B. Salinity
 - C. Pollution
 - D. Predation
9. Of the various tropical bivalves cultured, form the largest quantity worldwide.
- A. Oysters
 - B. Mussels
 - C. Clams
 - D. Pearl oysters
10. The stipulated Cod end mesh size for trawlers is
- A. 0.20 mm
 - B. 0.25 mm
 - C. 0.30 mm
 - D. 0.35 mm
11. Logistic model was developed by
- A. Schaefer
 - B. Gulland
 - C. Daniel Pauly
 - D. None of the above
12. The word “virtual population” concept was introduced by
- A. Fry
 - B. Gulland
 - C. Munro
 - D. Graham

13. Pauly's method for estimation of natural mortality holds good for
- A. Crustaceans
 - B. Molluscs
 - C. Finfish
 - D. All of the above
14. 'Jheels' are commonly seen in the topographical feature of
- A. Brahmaputra
 - B. Godavary
 - C. Cauvrey
 - D. Tungabhadra
15. Among cephalopods presence of more than ten circumoral appendages are characteristics of the genus.
- A. *Loligo*
 - B. *Nautilus*
 - C. *Sepia*
 - D. Octopus
16. 'Physostomous' condition of gas bladder refers to
- A. Connection with oesophagus
 - B. No connection with oesophagus
 - C. Connection with Weberian apparatus
 - D. Alternate
17. Exploitation of fish stock at right age is called as
- A. Underfishing
 - B. Overfishing
 - C. Eumetric fishing
 - D. None of the these
18. The first United Nations conference on the Law of Sea (UNCLOS I) was held in Geneva in the year.
- A. 1950
 - B. 1954
 - C. 1956
 - D. 1958
19. Banning of the fishing in a particular time to protect brood fishes is called
- A. Growth overfishing
 - B. Recruitment overfishing
 - C. Biological overfishing
 - D. Ecological overfishing

20. United Nations Convention on Law of Sea came into force for establishment is
- A. 1994
 - B. 1992
 - C. 1996
 - D. 1998
21. Currently there are _____ Marine Protected Areas in India
- A. 31
 - B. 21
 - C. 41
 - D. 51
22. Govt. of India has imposed uniform fishing ban along the West Coast of India from (E)
- A. June 10th to July 31st
 - B. June 15th to August 15th
 - C. June 1st to July 31st
 - D. April 15th to May 31st
23. FAO adopted the code of conduct for responsible fisheries on
- A. October, 1996
 - B. January, 1996
 - C. September, 1995
 - D. October, 1995
24. 'Cheer fishing' is practiced in
- A. Godavary
 - B. Mahanadi
 - C. Cauvery
 - D. Tapi river
25. The most typical character of all mollusc is the presence of a
- A. Mantle
 - B. Foot
 - C. Shell
 - D. Soft body
26. The most successful global fisheries are reported from Ocean zones of
- A. Pacific
 - B. Indian
 - C. Atlantic
 - D. Arctic

27. Krill is included under the order
- A. Decapoda
 - B. Calanoida
 - C. Euphausiacea
 - D. Mysidacea
28. Golden mahseer is native of
- A. Ganga
 - B. Tunga
 - C. Cauvery
 - D. Narmada
29. Padu fishing is practiced in the lake
- A. Pulicat
 - B. Vembanad
 - C. Chilka
 - D. Loktak
30. Indian wild life protection act was established in
- A. 1980
 - B. 1982
 - C. 1970
 - D. 1972
31. Integrated fish farming is widely practiced in
- A. China
 - B. Japan
 - C. India
 - D. Cambodia
32. The nature of feeding habit of silver carp is
- A. Zooplankton feeder
 - B. Phytoplankton feeder
 - C. Omnivore
 - D. Detritus feeder
33. In carp polyculture, standard stoking density is
- A. 5000-10000
 - B. 8000-15000
 - C. 8000-10000
 - D. 10000-15000
34. Alum is used to reduce
- A. pH
 - B. Alkalinity
 - C. Ammonia
 - D. Turbidity

35. Highest N₂ content is available in the manure of
A. Poultry
B. Cattle
C. Piggery
D. Goat
36. This is an example for a predatory fish in carp ponds
A. *Thynichtys sandkhol*
B. *Acrossocheilus hexagonolepis*
C. *Channa striatus*
D. *Osteochilus thomassi*
37. This is not a fish poison of plant origin
A. Mahua oil cake
B. Derris root powder
C. Tea seed cake
D. Butex
38. The content of Nitrogen in liquid ammonia is
A. 12-16%
B. 13-18%
C. 20-21%
D. 18-20%
39. In the culture facility for freshwater prawn requires the item
A. Bamboo poles
B. Biofilm
C. Net in the pond
D. Hide outs
40. The ornamental fish which is believed to bring good luck, wealth and prosperity is
A. Arowana
B. Catfish
C. Loaches
D. Neon tetra
41. The optimum hardness for normal growth of majority of ornamental fish is
A. 60-100ppm
B. 80-250ppm
C. 100-300ppm
D. 60-80ppm
42. Daphnia should be collected from natural waters during
A. Early morning
B. Noon
C. Night
D. Late night

43. Aerosol particles are invisible to the human eyes
- A. Smaller than the wavelength of light
 - B. Bigger than the wave length of light
 - C. Due to volcanic eruptions
 - D. Due to dust storms
44. Genesis of cyclones is responsible for
- A. Rainfall
 - B. Drought
 - C. Air masses
 - D. Cold waves
45. Amount of insolation received on the earth depends on
- A. Solar output
 - B. Transparency of water
 - C. Precipitation
 - D. Humidity
46. Range of Albedo on black surface
- A. 90%
 - B. 0%
 - C. 20 %
 - D. 10%
47. Long term consequences of global warming are
- A. Deforestation
 - B. Melting of polar ice caps
 - C. Drought
 - D. Decrease of green house gases
48. Line connecting the place of highest average temperature is
- A. Horizontal temperature gradient
 - B. Heat equator
 - C. Isotherms
 - D. Temperature inversion
49. Average rate of temperature decrease with elevation is called
- A. Normal lapse rate
 - B. Actual lapse rate
 - C. Temperature inversion
 - D. Heat equator

50. Change in pressure with horizontal distance is known as
- A. Isobars
 - B. Pressure gradient
 - C. Periodic variation
 - D. Horizontal variation
51. The orientation and movement of fish within the school is regulated by
- A. Water temperature
 - B. Salinity
 - C. Currents
 - D. Food availability
52. Following is not included as a form of precipitation
- A. Fog
 - B. Rain
 - C. Snow
 - D. Sleet
53. Salinity of sea water expressed as a
- A. ppm
 - B. ppt
 - C. ppb
 - D. mg
54. Example of catastrophic waves are
- A. Tsunamis
 - B. Sea
 - C. Seiches
 - D. Swells
55. The osmotic regulations of fish and the buoyancy of pelagic eggs are determined by
- A. Water temperature
 - B. Salinity
 - C. Tidal currents
 - D. Pressure
56. First equilibrium theory of tides was developed by
- A. Sir John Murray
 - B. Newton
 - C. T.W. Vaughan
 - D. Knudsen

57. The productivity of the marsh is influenced by
- A. Currents
 - B. Tides
 - C. Waves
 - D. Evaporation
58. Factors responsible for increase of salinity
- A. Precipitation
 - B. Melting of ice
 - C. Evaporation
 - D. Inflow of fresh water
59. Saddle back disease is caused by
- A. *Flavobacterium sp*
 - B. *Flavobacterium columnare*
 - C. *Vibrio harveyi*
 - D. None of the above
60. *Edwardsiella tarda* is a bacterial pathogen that affects
- A. Cat fishes
 - B. Eels
 - C. Common carps
 - D. Both a & b
61. The causative agent of 'white spot' in fresh water fish
- A. *Saprolegnia sp.*
 - B. *Achlya sp.*
 - C. *Branchiomyces sp.*
 - D. *Ichthyophthirius multifiliis*
62. RSIV disease mainly affects which of the following fish
- A. Red sea bream
 - B. Carps
 - C. Shellfishes
 - D. None of the above
63. Bacteriophage is a
- A. Fungi
 - B. Virus
 - C. Bacteria
 - D. Paracite

64. Aggregates of macrophages in haematopoietic tissues of fish having pigment granules
- A. Plasma cell centers
 - B. T helper cells
 - C. Melanomacrophage centers
 - D. Granulocytes
65. Substances administered along with antigens to increase the antibody production
- A. Transferrins
 - B. Antibiotics
 - C. Adjuvants
 - D. Vaccines
66. Full form of MS222 is
- A. Methylsulphonate hydroxide
 - B. Tricane methane-sulphonate
 - C. Tricane methyl-sulphonate
 - D. Tri methane-sulphonate
67. Act of identification of disease is known as
- A. Prophylaxis
 - B. Diagnosis
 - C. Synthesis
 - D. Genesis
68. Cotton wool disease in fish is caused by
- A. *Saprolegnia sp.*
 - B. *Aphanomyces sp.*
 - C. *Ichthyophonus sp.*
 - D. *Exophiala sp.*
69. Fish lice is
- A. *Lernaea*
 - B. *Argulus*
 - C. Both (a) & (b)
 - D. None of the above
70. Teleosts Immunoglobulin M (IgM) is
- A. Pentamer
 - B. Dimer
 - C. Tetramer
 - D. Monomer
71. A complement component which is strongly chemotactic for neutrophils is
- A. C9
 - B. C5a
 - C. C3b
 - D. C5b

72. Ivermectin is most commonly used in fishes for treatment
- A. Ectoparasite
 - B. Endoparasite
 - C. Virus
 - D. All the above
73. The free board of the dyke can be calculated using the formula
- A. $0.3 \sqrt{H}$
 - B. $0.6 \sqrt{H}$
 - C. $0.9 \sqrt{H}$
 - D. $1.2 \sqrt{H}$
74. In earth work calculation, at any station if the formation line is above the existing ground, the ground is said to be
- A. Excavation
 - B. Embankment
 - C. Level ground
 - D. Steep ground
75. The process of fixing or establishing intermediate points in a survey line is known as
- A. Ranging
 - B. Chaining
 - C. Leveling
 - D. Contouring
76. The difference between moulded depth and moulded draft of the vessel is called as
- A. Length between perpendicular
 - B. Free board
 - C. Aft perpendicular
 - D. Loaded water plane
77. The product of the metacentric height and angle of heel is known as
- A. Righting lever
 - B. Righting moment
 - C. Weight
 - D. Displacement
78. The refrigerant commonly used in vapour absorption refrigeration system is
- A. Water
 - B. Aqua-Ammonia
 - C. Ammonia
 - D. Ice-water

79. Trapped air from refrigeration system is allowed to escape by using
- A. Safety valve
 - B. Purging valve
 - C. Kings valve
 - D. Solenoid valve
80. The type of freezer used for quick freezing of small fishes is
- A. Air blast freezer
 - B. Contact plate freezer
 - C. Immersion freezer
 - D. Tunnel freezer
81. The bait used for pole and line fishing is
- A. Natural
 - B. Dead
 - C. Artificial
 - D. Live
82. The instrument which is used to detect fish shoals around the fishing vessel is known as
- A. SONAR
 - B. Net sonde
 - C. Net telemeter
 - D. Fish finder
83. Denier system is indicated as
- A. Den
 - B. Tex
 - C. Ne
 - D. Nm
84. Small scoop nets are grouped under
- A. Falling Gear
 - B. Dragged gear
 - C. Surrounding Gear
 - D. Lift gear
85. One Nautical mile is equal to
- A. 6080 ft
 - B. 5280 ft
 - C. 1500 ft
 - D. 1880 ft

86. The rising of the vessel deck from the side to the centre is known as
- A. Bilge radius
 - B. Forward perpendicular
 - C. Camber
 - D. Rise of floor
87. The plane perpendicular to both the middle line and design water plane is known as
- A. Transverse plane
 - B. Water plane
 - C. Sheer plane
 - D. Half breadth plan
88. In a refrigeration system the function of a compressor is to
- A. Compress vapour
 - B. Compress vapour and liquid
 - C. Compress liquid
 - D. Either vapour or liquid
89. The device used for driving the fish into principal gear is known as
- a. Subsidiary gear
 - b. Auxiliary gear
 - c. Secondary gear
 - d. Tertiary gear
90. The most ideal place for the net hauler on board the fishing vessel is
- A. Bow part of the gill netter
 - B. Stern side of gill netter
 - C. Stern forward part of the gill netter
 - D. Backward part of the bow
91. Which is the selective enrichment medium used for isolation of Salmonella from shrimp
- A. XLD
 - B. Rappaport vassilidis
 - C. Lactose broth
 - D. BGA
92. Thiobarbituric acid value indicates
- A. SAPONIFICATION
 - B. Degree of unsaturation
 - C. Aldehyde formation
 - D. None

93. Marine fish oils are rich in
- A. Highly unsaturated fatty acids
 - B. Essential fatty acids
 - C. Squalene
 - D. Vitamin E
94. Spiral freezer is a modified version of
- A. Tunnel freezer
 - B. Cryogenic freezer
 - C. Fluidized bed freezer
 - D. Both a and b
95. Which among the following is used as a counter stain?
- A. Carbolfuchsin
 - B. Crystal violet
 - C. Malachite green
 - D. Safranine
96. Cadmium poisoning is known as
- A. Plumbism
 - B. Minamata disease
 - C. Itaiitai disease
 - D. Dancing cat fever
97. Heat transfer in canned sardine in brine is due to
- A. Conduction
 - B. Convection
 - C. Radiation
 - D. Both a and b
98. Cyanocobalamin is
- A. Vitamin B2
 - B. Vitamin B5
 - C. Vitamin B6
 - D. Vitamin B12
99. Which among the following is the byproduct produced in the intestine of Sperm whale?
- A. Squalene
 - B. Spermine
 - C. Ambergris
 - D. Both b and c
100. Which among the following is conditionally essential amino acid?
- A. Methionine
 - B. Cystein
 - C. Lysine
 - D. Histidine
