

No. of Pages. 20

Code No.

**Y – 3036**

Register Number :

Time : 2 Hours

Name :

Max.Marks : 100

**Entrance Examination for Admission to the P.G. Courses in the  
Teaching Departments, 2026**

**CSS**

**APPLIED AQUACULTURE**

**GENERAL INSTRUCTIONS**

1. The Question Paper is having 100 Objective Questions, each carrying one mark.
2. The answers are to be marked **only** in the “**OMR Sheet**” provided.
3. **Negative marking** : **0.25 marks** will be deducted for each wrong answer .

**INSTRUCTIONS FOR FILLING THE OMR SHEET**

- The OMR sheet should not be folded or crushed.
- Use only blue/black ball point pen to fill the circles.
- Use of pencil is strictly prohibited.
- Circles should be darkened completely and properly.
- Cutting and erasing on this sheet is not allowed.
- Do not leave any stray marks on the sheet.
- Do not use marker or white fluid to hide the mark.

• **WRONG METHODS**



**CORRECT METHOD**



**DO NOT WRITE HERE**

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Choose appropriate answer from the options in the questions.

**(100 × 1 = 100 marks)**

1. The free-swimming form of cnidarians is called:
  - A. Medusa
  - B. Larva
  - C. Polyp
  - D. Planula
  
2. Deficiency of dopamine is associated with:
  - A. Alzheimer' s disease
  - B. Parkinson's disease
  - C. Diabetes
  - D. Asthma

3. DNA fingerprinting was developed by:
- |                     |                   |
|---------------------|-------------------|
| A. Watson and Crick | B. Charles Darwin |
| C. Mendel           | D. Alec Jeffreys  |
4. Immunoglobulins are also known as:
- |               |             |
|---------------|-------------|
| A. Antibodies | B. Hormones |
| C. Enzymes    | D. Vitamins |
5. Which country is the largest producer of fish in the world?
- |          |          |
|----------|----------|
| A. India | B. China |
| C. USA   | D. Japan |
6. The Kule wetlands are famous for:
- |                           |                     |
|---------------------------|---------------------|
| A. Desert ecosystem       | B. Mountain forests |
| C. Inundated paddy fields | D. Coral reefs      |
7. A high Feed Conversion Ratio (FCR) indicates:
- Better feed efficiency
  - Faster growth
  - Poor feed utilisation efficiency
  - High Oxygen levels
8. Aquaculture system with low input and dependence on natural food is:
- |                   |              |
|-------------------|--------------|
| A. Intensive      | B. Extensive |
| C. Semi-intensive | D. RAS       |



16. The body cavity in arthropods is:
- A. True coelom
  - B. Haemocoel
  - C. Pseudocoel
  - D. Coelenteron
17. Which coenzyme is reduced during glycolysis?
- A. FAD
  - B. ATP
  - C.  $\text{NAD}^+$
  - D. ADP
18. Which of the following is an essential amino acid in humans?
- A. Lysine
  - B. Alanine
  - C. Glutamic acid
  - D. Glycine
19. Which of the following is a primary lymphoid organ?
- A. Bone marrow
  - B. Spleen
  - C. Lymph node
  - D. Tonsil
20. The technique used to produce monoclonal antibodies is called:
- A. PCR
  - B. hybridoma technology
  - C. Gel electrophoresis
  - D. Cloning
21. Which fishing gear is commonly used in riverine capture fisheries worldwide?
- A. Trawls
  - B. Purse seine
  - C. Gill net
  - D. Longlines

22. The Ramsar Convention is primarily concerned with:
- A. Marine fisheries
  - B. wetland conservation
  - C. Forest management
  - D. Climate change .
23. Which of the following is used to remove aquatic weeds before stocking?
- A. Netting
  - B. Herbicides
  - C. Manual removal
  - D. All of the above
24. Which process converts ammonia into nitrite and nitrate in aquaculture systems?
- A. Photosynthesis
  - B. Nitrification
  - C. Respiration
  - D. Denitrification
25. Sudden drop in dissolved oxygen in ponds usually occurs during:
- A. Afternoon
  - B. Evening
  - C. Midnight to early morning
  - D. Noon
26. The 'Bheri system' is primarily practiced in:
- A. West Bengal
  - B. Tripura
  - C. Uttar Pradesh
  - D. Karnataka
27. In Pokkali farming, fish culture is practiced during:
- A. Monsoon season
  - B. Dry season
  - C. Winter only
  - D. Summer only

28. Which of the following bacteria is commonly associated with fish diseases?
- A. *Aeromonas hydrophila*                      B. *Escherichia coli*  
C. *Salmonella typhi*                              D. *Lactobacillus acidophilus*
29. Canning of fish involves:
- A. Drying under sunlight  
B. Sealing in airtight containers and sterilisation  
C. Freezing at low temperature  
D. Adding salt only
30. Which Indian agency is responsible for food safety regulations within the country?
- A. MPEDA    B. EIA  
C. FSSAI    D. BIS
31. The headquarters of Central Inland Fisheries Research Institute is located at:
- A. Barrackpore                                        B. Bhopal  
C. Vijayawada                                        D. Bhubaneswar
32. Which scheme supports fisheries cooperatives in India?
- A. PMMSY    B. NRLM  
C. MRLN    D. MGNRGEA

33. Which water body is the largest Ramsar wetland in Kerala supporting fisheries?
- A. Ashtamudi Lake                      B. Sasthamkotta Lake  
C. Vembanad – Kole                    D. Kuttanad Wetlands
34. Which feeding organ is present in molluscs such as snails?
- A. Radula                                  B. Setae  
C. Tube feet                                D. Parapodia
35. Which of the following is an example of mouth brooding fish?
- A. Tilapia                                  B. Goldfish  
C. Walking catfish                        D. Garfish
36. Which structure is prominent in male prawns for reproduction?
- A. Thelycum                                B. Gonopodium  
C. Petasma                                 D. Spermatheca
37. Elasmobranchs typically have how many gill slits?
- A. 4    B. 9  
C. 5–7                                        D. 10
38. Which molecule is produced at each cycle of  $\beta$ -oxidation?
- A. Glucose                                 B. Acetyl – CoA  
C. Lactate                                 D. Pyruvate

39. Which hormone controls moulting in arthropods?
- A. Estrogen
  - B. Ecdysone
  - C. Thyroxine
  - D. Androgen
40. Stem cells are characterized by their ability to:
- A. Only divide
  - B. Only differentiate
  - C. Self-renew and differentiate
  - D. Produce energy
41. Which of the following is a typical antigen?
- A. Protein
  - B. Polysaccharide
  - C. Lipid
  - D. All of the above
42. Which cells produce antibodies naturally?
- A. B lymphocytes
  - B. RBCs
  - C. Neurons
  - D. Platelets
43. Which is the most productive marine fishing zone in the world?
- A. Indian Ocean
  - B. Northwest Pacific Ocean
  - C. South Atlantic Ocean
  - D. Arctic Ocean
44. Which Indian marine zone is highly productive due to upwelling?
- A. Bay of Bengal
  - B. Andaman Sea
  - C. Arabian Sea
  - D. Lakshadweep Sea
45. Which FAO fishing area includes India?
- A. Area 27
  - B. Area 51
  - C. Area 54
  - D. Area 21



52. In aquaponics, fish waste is primarily used by plants as:
- A. Fertiliser
  - B. Carbon
  - C. Oxygen source
  - D. Energy
53. Which traditional extract is widely used in induced breeding?
- A. Pituitary extract
  - B. Liver extract
  - C. Kidney extract
  - D. Spleen extract
54. GnRH analogues stimulate the release of:
- A. Insulin
  - B. Gonadotropins
  - C. Thyroxine
  - D. Adrenaline
55. Which injection site is commonly used in fish breeding?
- A. Eye muscle
  - B. Gill muscle
  - C. Dorsal muscle
  - D. Tail muscle
56. The main advantage of IQF is:
- A. Increased spoilage
  - B. Formation of large ice crystals
  - C. Reduced shelf life
  - D. Preservation of quality and texture
57. The main objective of HACCP is to:
- A. Increase production
  - B. Ensure food safety
  - C. Improve taste
  - D. Reduce packing loss

58. India's fisheries policy emphasizes:
- A. Overfishing
  - B. Export promotion and sustainability
  - C. Industrialisation
  - D. Mining
59. Which organization supports marine exports in India?
- A. MPEDA
  - B. CMFRI
  - C. CMLRE
  - D. RGCA
60. The main aim of MSC certification is to:
- A. Increase fishing effort
  - B. Promote sustainable fisheries
  - C. Increase fish production
  - D. Increase manpower
61. The locomotory structures in echinoderms are called:
- A. Tube feet
  - B. Parapodia
  - C. Setae
  - D. Pseudopodia
62. The madreporite in echinoderms is associated with:
- A. Digestive system
  - B. Reproductive system
  - C. Water vascular system
  - D. Nervous system
63. Which muscle type is found in the walls of internal organs like the intestine?
- A. Skeletal muscle
  - B. Cardiac muscle
  - C. Smooth muscle
  - D. Visceral muscle

64. Innate immunity is characterized by being:
- A. Highly specific
  - B. Slow acting
  - C. Antigen-dependent
  - D. Non-specific
65. The international treaty for wetland conservation is:
- A. Kyoto protocol
  - B. Ramsar convention
  - C. Paris agreement
  - D. Montreal Protocol
66. Chilika Lake is located in:
- A. Odisha
  - B. Rajasthan
  - C. Andhra Pradesh
  - D. West Bengal
67. Which country is the largest exporter of ornamental fish?
- A. India
  - B. USA
  - C. Australia
  - D. Singapore
68. The total fish production of India has crossed approximately:
- A. 5 million tonnes
  - B. 17 million tonnes
  - C. 10 million tonnes
  - D. 25 million tonnes
69. One of the most significant ecological impacts of trawling is:
- A. Increase in coral growth
  - B. Destruction of seabed habitats
  - C. increase in pelagic resources
  - D. Increase in dissolved Oxygen

70. Bycatch in fisheries refers to:
- A. Only undersized target fish
  - B. Non-target organism caught unintentionally
  - C. Fish caught illegally
  - D. Fish caught onboard
71. Which of the following is commonly used for eradicating weed fishes in ponds?
- A. Urea
  - B. Rotenone
  - C. Potash
  - D. Lime
72. Which of the following plant products is traditionally used as a piscicide in India?
- A. Mahua oil cake
  - B. Neem leaves
  - C. Coconut husk
  - D. Tea leaves
73. The formation of histamine in fish is mainly associated with:
- A. Puffer fish
  - B. Scombroid fishes
  - C. Penaeid shrimps
  - D. Barracuda
74. The principle behind salting is based on:
- A. Oxidation of fats
  - B. Osmotic pressure dehydrating microbes
  - C. Increasing pH
  - D. Protein synthesis

75. The Schaefer model is primarily used to estimate:
- A. Growth rate of larvae
  - B. Age at maturity
  - C. Yield as a function of fishing effort
  - D. Population divergence
76. In reservoir fisheries, catch per unit effort (CPUE) is used as an indicator of:
- A. Biodiversity
  - B. Fish abundance
  - C. Gear efficiency
  - D. Competition
77. The trophic cascade effect in inland fisheries is mainly due to:
- A. Physical habitat changes
  - B. Removal/ addition of species to food web
  - C. Water temperature changes
  - D. Fishing gear type
78. Under the KMFR Act, the territorial waters under regulation extend up to:
- A. 3 nautical miles
  - B. 6 nautical miles
  - C. 24 nautical miles
  - D. 12 nautical miles
79. In CRZ classification, ecologically sensitive areas such as mangroves, and coral reefs, fall under:
- A. CRZ-1
  - B. CRZ-IV
  - C. CRZ-II
  - D. CRZ-III

80. In carp hatcheries following hormone induced breeding, the "latency period" refers to the time between:
- A. Injection and ovulation
  - B. Fertilisation and hatching
  - C. Yolk resorption and larval feeding
  - D. Egg hardening
81. Which of the following is a shared feature between Arthropoda and Annelida?
- A. Open circulatory system
  - B. Jointed appendages
  - C. Metameric segmentation
  - D. Chitinous exoskeleton
82. Which of the following taxa exhibits torsion during development?
- A. Bivalvia
  - B. Gastropoda
  - C. Cephalopoda
  - D. Polyplacophora
83. Which larval form is characteristic of cnidarians?
- A. Trochophore
  - B. Veliger
  - C. Planula
  - D. Nauplius
84. Which species is an anadromous fish commonly associated with Indian estuaries?
- A. Hilsa shad
  - B. freshwater eels
  - C. Asian seabass
  - D. Mangrove red snapper
85. Which major barrage significantly affected hilsa migration in the Ganga system?
- A. Tehri dam
  - B. Bhakra dam
  - C. Farakka barrage
  - D. Hirakud dam



94. Ovaprim is a combination of:
- A. Estrogen + progesterone
  - B. GnRH analogue + dopamine antagonist
  - C. Thyroxine
  - D. Cortisol
95. Which microorganism group is primarily responsible for fish spoilage?
- A. Viruses
  - B. Bacteria
  - C. Protozoa
  - D. Algae
96. The institute ICAR–CIFT primarily deals with:
- A. Fish breeding
  - B. Fish genetics
  - C. Fish harvesting and post-harvest technology
  - D. Selective breeding
97. World Oceans Day is celebrated on:
- A. June 5
  - B. June 8
  - C. July 11
  - D. December 20
98. Floodplain wetlands in Assam are locally known as:
- A. Beels
  - B. Berries
  - C. Chours
  - D. Mauns
99. Which aquatic ecosystem is known for the highest biodiversity per unit area?
- A. Estuaries
  - B. Coral reefs
  - C. Deep sea
  - D. Salt marsh
100. The headquarters of Matsyafed is located in:
- A. Kollam
  - B. Calicut
  - C. Thrissur
  - D. Thiruvananthapuram
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## **ROUGH WORK**

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