

# National Testing Agency

<b>Question Paper Name :</b>	Aquaculture 23rd Sep 2020 Shift 2
<b>Subject Name :</b>	Aquaculture
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<b>Share Answer Key With Delivery Engine :</b>	Yes
<b>Actual Answer Key :</b>	Yes

## Aquaculture

<b>Group Number :</b>	1
<b>Group Id :</b>	71087056
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	120
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	480
<b>Is this Group for Examiner? :</b>	No

## Part A General Knowledge

<b>Section Id :</b>	710870166
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	20

<b>Number of Questions to be attempted :</b>	20
<b>Section Marks :</b>	80
<b>Display Number Panel :</b>	Yes
<b>Group All Questions :</b>	Yes
<b>Mark As Answered Required? :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	710870166
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 1 Question Id : 7108706661 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Which one of the following crops is a commercial crop in Punjab and Haryana but is a subsistence crop in Orissa?

1. Tea
2. Cotton
3. Rubber
4. Rice

**Options :**

- 71087026641. 1
- 71087026642. 2
- 71087026643. 3
- 71087026644. 4

**Question Number : 2 Question Id : 7108706662 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Which of the following are the two most important wheat-growing zones of the country?

- A. Ganga-Satluj plains in the north-west
- B. Deltaic regions
- C. Black soil region of the Deccan
- D. Plains of north-east

Choose the **correct** answer from the options below:

- 1. Only A and B
- 2. Only B and C
- 3. Only C and D
- 4. Only A and C

**Options :**

- 71087026645. 1
- 71087026646. 2
- 71087026647. 3
- 71087026648. 4

**Question Number : 3 Question Id : 7108706663 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Indian agriculture is typically characterized as

- 1. Land surplus, labour scarce economy
- 2. Land surplus, labour surplus economy
- 3. Land scarce, labour surplus economy
- 4. Land scarce, labour scarce economy

**Options :**

- 71087026649. 1

71087026650. 2

71087026651. 3

71087026652. 4

**Question Number : 4 Question Id : 7108706664 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Which one of the following countries is the main rival of India in tea export?

1. China
2. Japan
3. Germany
4. Sri Lanka

**Options :**

71087026653. 1

71087026654. 2

71087026655. 3

71087026656. 4

**Question Number : 5 Question Id : 7108706665 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Given below are two statements

**Statement A:** MSP is declared by the government every year to provide incentives to the farmers for raising the production of crops.

**Statement B:** Buffer stock is created to distribute food grains in the deficit areas and among the poorer strata of the society at the lower price than the market price.

In light of the above statements, choose the **most appropriate** answer from the options given below

1. Both Statement A and Statement B are correct
2. Both Statement A and Statement B are incorrect
3. Statement A is correct but Statement B is incorrect
4. Statement A is incorrect but Statement B is correct

**Options :**

- 71087026657. 1
- 71087026658. 2
- 71087026659. 3
- 71087026660. 4

**Question Number : 6 Question Id : 7108706666 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Which one of the following is a global association of nations of the world to help cooperation in international law, security, economic development and social equity?

1. United Nations Organization
2. International Monetary Fund
3. World Bank
4. World Health Organization

**Options :**

- 71087026661. 1
- 71087026662. 2
- 71087026663. 3
- 71087026664. 4

**Question Number : 7 Question Id : 7108706667 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Under the Ganga Action Plan Phase II, pollution abatement works are being taken up in how many towns?

- 1. 57
- 2. 65
- 3. 52
- 4. 69

**Options :**

- 71087026665. 1
- 71087026666. 2
- 71087026667. 3
- 71087026668. 4

**Question Number : 8 Question Id : 7108706668 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following statements is **incorrect**?

- 1. The highest number of pigs in the world are found in India
- 2. Utter Pradesh provides largest amount of pork
- 3. Assam has the largest number of pork producing pigs
- 4. Pork constitutes about 7.6% of the total meat produced in India

**Options :**

71087026669. 1

71087026670. 2

71087026671. 3

71087026672. 4

**Question Number : 9 Question Id : 7108706669 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which type of N-fertilizer is suitable for water-logged soils?

1. Zinc Phosphate
2. Ammonium Sulphate
3. Calcium
4. Potassium Nitrate

**Options :**

71087026673. 1

71087026674. 2

71087026675. 3

71087026676. 4

**Question Number : 10 Question Id : 7108706670 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The famous Bailadila range of hills in the Bastar district of Chhattisgarh is famous for its

1. Bauxite deposits
2. Manganese deposits
3. Copper deposits
4. High-grade haematite deposits

**Options :**

71087026677. 1

71087026678. 2

71087026679. 3

71087026680. 4

**Question Number : 11 Question Id : 7108706671 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

A farmer wishes to start a 100 sq. m rectangular vegetable garden. Since he has only 30m barbed wire, he fences three sides of the garden letting his house compound wall act as the fourth side fencing. What is the dimension of the garden?

1. 15 m x 6.67m
2. 20 m x 5 m
3. 30 m x 3.33 m
4. 40 m x 2.5 m

**Options :**

71087026681. 1

71087026682. 2

71087026683. 3

71087026684. 4

**Question Number : 12 Question Id : 7108706672 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

In which one of the following industries, the consumption of natural rubber is the largest?

1. Auto tyres and tubes
2. Footwear
3. Dipped goods
4. Latex foam

**Options :**



- 71087026685. 1
- 71087026686. 2
- 71087026687. 3
- 71087026688. 4

**Question Number : 13 Question Id : 7108706673 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Which one of the following countries was the partner country of 34<sup>th</sup> Surajkund International Crafts Fair held in Haryana?

- 1. China
- 2. Nepal
- 3. Bhutan
- 4. Uzbekistan

**Options :**

- 71087026689. 1
- 71087026690. 2
- 71087026691. 3
- 71087026692. 4

**Question Number : 14 Question Id : 7108706674 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Nobel laureate Abhijit Vinayak Banerjee was conferred the honorary Doctor of Letters (D. Litt.) by which University?

- 1. University of Delhi
- 2. University of Kolkata
- 3. University of Mumbai
- 4. University of Hyderabad

**Options :**

- 71087026693. 1
- 71087026694. 2
- 71087026695. 3
- 71087026696. 4

**Question Number : 15 Question Id : 7108706675 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Where is the headquarters of European Union?

- 1. Geneva, Switzerland
- 2. Washington D.C., USA
- 3. New York, US
- 4. Brussels, Belgium

**Options :**

- 71087026697. 1
- 71087026698. 2
- 71087026699. 3
- 71087026700. 4

**Question Number : 16 Question Id : 7108706676 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Which of the following would be deficient if one finds high somatic cell count in the cow's milk?

- 1. Butterfat
- 2. Whey protein
- 3. Casein
- 4. Trace minerals

**Options :**

- 71087026701. 1
- 71087026702. 2
- 71087026703. 3
- 71087026704. 4

**Question Number : 17 Question Id : 7108706677 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Who was the first administrator-statesman to attempt planning as a means for economic development?

- 1. C. Rajagopalachari
- 2. V. T. Krishnamachari
- 3. M. Viswesvarayya
- 4. Sir C. P. Ramaswami Aiyar

**Options :**

- 71087026705. 1
- 71087026706. 2
- 71087026707. 3
- 71087026708. 4

**Question Number : 18 Question Id : 7108706678 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Amazon rainforest span over nine countries. In August 2019, in which country did a deadly fire broke out in the Amazon forest?

- 1. Brazil
- 2. Venezuela
- 3. Colombia
- 4. Argentina

**Options :**

- 71087026709. 1
- 71087026710. 2
- 71087026711. 3
- 71087026712. 4

**Question Number : 19 Question Id : 7108706679 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Economic liberalization in India started with

- 1. Sustainable changes in industrial licensing policy
- 2. The convertibility of the Indian Rupee
- 3. Significant reduction of tax rates
- 4. Changes in procedural formalities for FDI

**Options :**

- 71087026713. 1
- 71087026714. 2
- 71087026715. 3
- 71087026716. 4

**Question Number : 20 Question Id : 7108706680 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

The term 'Delimitation' which was in news recently is associated with which process?

- 1. Fixing the limit of Income tax
- 2. Fixing limits of Affordable housing
- 3. Fixing limits of Territorial constituencies
- 4. Fixing limits of Chairpersons salary

**Options :**

- 71087026717. 1

71087026718. 2

71087026719. 3

71087026720. 4

## Part B Core Fishery Science-II

<b>Section Id :</b>	710870167
<b>Section Number :</b>	2
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	50
<b>Number of Questions to be attempted :</b>	50
<b>Section Marks :</b>	200
<b>Display Number Panel :</b>	Yes
<b>Group All Questions :</b>	Yes
<b>Mark As Answered Required? :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	710870167
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 21 Question Id : 7108706681 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

In recent years, the most popular hatchery used in the production of carp seed is

1. Jar hatchery
2. Circular hatchery
3. Bundhs
4. Earthen pit

**Options :**

71087026721. 1

71087026722. 2

71087026723. 3

71087026724. 4

**Question Number : 22 Question Id : 7108706682 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Identify the correct statement(s) among the following

- A. Carrying capacity of the pond can be enhanced by fertilization.
- B. Carrying capacity of the pond can be increased by supplementary feeding.
- C. Carrying capacity of the pond is not related to fertilization.
- D. Carrying capacity of the pond can be increased by using different species.

Choose the **correct** answer from the options given below:

- 1. B only
- 2. A and D only
- 3. C only
- 4. A, B and D only

**Options :**

71087026725. 1

71087026726. 2

71087026727. 3

71087026728. 4

**Question Number : 23 Question Id : 7108706683 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Rope culture is more popularly used in the farming of

1. Oysters
2. Mussels
3. Clams
4. Holothurians

**Options :**

71087026729. 1  
71087026730. 2  
71087026731. 3  
71087026732. 4

**Question Number : 24 Question Id : 7108706684 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Among the following species, which one grows relatively to a bigger size

1. *Scylla serrata*
2. *Scylla sanguinolentus*
3. *Portunus pelagicus*
4. *Scylla tranquebarica*

**Options :**

71087026733. 1  
71087026734. 2  
71087026735. 3  
71087026736. 4

**Question Number : 25 Question Id : 7108706685 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Identify the correct statements from the following

- A. In the manufacture of extruded aquafeeds, high moisture is required.
- B. In the manufacture of extruded aquafeeds, high temperature is required.
- C. High pressure is required in the manufacture of extruded aquafeeds.
- D. Low moisture and low pressure is used in the manufacture of aquafeeds.

Choose the **correct** answer from the options given below:

- 1. A only
- 2. B and C only
- 3. D only
- 4. A, B and C only

**Options :**

- 71087026737. 1
- 71087026738. 2
- 71087026739. 3
- 71087026740. 4

**Question Number : 26 Question Id : 7108706686 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The following combination of species has given the highest fish production in polyculture

- 1. Catla, Rohu, Mrigal, Bighead, Common Carp
- 2. Catla, Rohu, Mrigal, Common Carp, Grass Carp, Silver Carp
- 3. Rohu, Catla, Common Carp, Silver Carp, Tilapia
- 4. Catla, Rohu, Mrigal, Grass Carp, Mud Carp

**Options :**

- 71087026741. 1



71087026742. 2

71087026743. 3

71087026744. 4

**Question Number : 27 Question Id : 7108706687 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

For semi-intensive farming of Indian major carps, an ideal protein level in the supplementary feeding is

1. 30-35%
2. 15-20%
3. 35-40%
4. 25-28%

**Options :**

71087026745. 1

71087026746. 2

71087026747. 3

71087026748. 4

**Question Number : 28 Question Id : 7108706688 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Highest production of fish can be obtained per unit area in which one of the following?

1. Pens
2. Cages
3. Ponds
4. Tanks

**Options :**

71087026749. 1

71087026750. 2

71087026751. 3

71087026752. 4

**Question Number : 29 Question Id : 7108706689 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following species is successfully cultured in cages and demonstrated along the coasts of India?

1. Tilapia
2. Salmon
3. Seabass
4. Sea bream

**Options :**

71087026753. 1

71087026754. 2

71087026755. 3

71087026756. 4

**Question Number : 30 Question Id : 7108706690 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following fishes reproduces through parthenogenesis?

1. *Gambusia affinis*
2. *Carassius auratus*
3. *Glossogobius giuris*
4. *Poecilia formosa*

**Options :**

71087026757. 1

71087026758. 2

71087026759. 3

71087026760. 4

**Question Number : 31 Question Id : 7108706691 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Which one of the following fish varieties is a product of selective breeding programme?

1. Jayanthi magur
2. Jayanthi mrigal
3. Jayanthi rohu
4. Jayanthi pangasius

**Options :**

- 71087026761. 1
- 71087026762. 2
- 71087026763. 3
- 71087026764. 4

**Question Number : 32 Question Id : 7108706692 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

GIFT Tilapia is a product of the erstwhile ICLARM (present World Fish Center) through which one of the following programs?

1. Hybridization
2. Hormonal manipulation
3. Selective Breeding
4. Triploid production

**Options :**

- 71087026765. 1
- 71087026766. 2
- 71087026767. 3
- 71087026768. 4

**Question Number : 33 Question Id : 7108706693 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following fishes is known for long migrations?

1. Indian major carps and Chinese carps
2. Eels and Salmons
3. Cobia and Snappers
4. Turbots and Seabreams

**Options :**

71087026769. 1

71087026770. 2

71087026771. 3

71087026772. 4

**Question Number : 34 Question Id : 7108706694 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The common larval stage seen in the marine bivalve molluscs is

1. Glochidium
2. Zoea
3. Megalopa
4. Trochophore

**Options :**

71087026773. 1

71087026774. 2

71087026775. 3

71087026776. 4

**Question Number : 35 Question Id : 7108706695 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The common name 'Climbing Perch' is used for the species

1. *Clarias batrachus*
2. *Heteropneustes fossilis*
3. *Channa punctatus*
4. *Anabas testudineus*

**Options :**

- 71087026777. 1
- 71087026778. 2
- 71087026779. 3
- 71087026780. 4

**Question Number : 36 Question Id : 7108706696 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Mahua oil cake used for eradication of unwanted fishes. What is the toxic ingredient present in the mahua oil cake?

1. Rotenone
2. Saponin
3. Toluene
4. Aflatoxin

**Options :**

- 71087026781. 1
- 71087026782. 2
- 71087026783. 3
- 71087026784. 4

**Question Number : 37 Question Id : 7108706697 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Marine pearls are produced in captivity by using which one of the following species?

1. *Crassostrea madrasensis*
2. *Pinctada fucata*
3. *Crassostrea cucullata*
4. *Villorita cyprinoides*

**Options :**

- 71087026785. 1
- 71087026786. 2
- 71087026787. 3
- 71087026788. 4

**Question Number : 38 Question Id : 7108706698 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Gold fish eggs are

1. Adhesive
2. Sinking
3. Free floating
4. Opaque

**Options :**

- 71087026789. 1
- 71087026790. 2
- 71087026791. 3
- 71087026792. 4

**Question Number : 39 Question Id : 7108706699 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The veliger larval stage is seen in the group

1. Crabs
2. Lobsters
3. Oysters
4. Holothurians

**Options :**

- 71087026793. 1
- 71087026794. 2
- 71087026795. 3
- 71087026796. 4

**Question Number : 40 Question Id : 7108706700 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Culture-based fisheries are more applicable to

1. Ponds
2. Small tanks
3. Reservoirs
4. RAS

**Options :**

- 71087026797. 1
- 71087026798. 2
- 71087026799. 3
- 71087026800. 4

**Question Number : 41 Question Id : 7108706701 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The study of dietary signatures through the patterns of gene expression, protein expression and metabolites production is known as

1. Metabolismics
2. Nutrigenomics
3. Proteomics
4. Epigenomics

**Options :**

- 71087026801. 1
- 71087026802. 2
- 71087026803. 3
- 71087026804. 4

**Question Number : 42 Question Id : 7108706702 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

As per latest FAO data, how many people are engaged in Aquaculture activity in the world?

1. 20.5 million
2. 10.5 million
3. 39.0 million
4. 59.5 million

**Options :**

- 71087026805. 1
- 71087026806. 2
- 71087026807. 3
- 71087026808. 4

**Question Number : 43 Question Id : 7108706703 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**



Which one of the following feeding strategies is less economical in the intensified fish production system?

1. Feed restriction followed by realimentation
2. Alternate feeding of low and high protein diet
3. Continuous feeding of high protein diet
4. Continuous feeding of low protein diet

**Options :**

- 71087026809. 1
- 71087026810. 2
- 71087026811. 3
- 71087026812. 4

**Question Number : 44 Question Id : 7108706704 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Function of hepatopancreas of shrimp is

1. Bile secretion
2. Digestive enzyme secretion
3. Digestion of protein
4. Secretion of digestive enzymes, digestion and absorption of nutrients

**Options :**

- 71087026813. 1
- 71087026814. 2
- 71087026815. 3
- 71087026816. 4

**Question Number : 45 Question Id : 7108706705 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Pyloric caeca of fish is a part of which digestive organ?

1. Pancreas
2. Liver
3. Stomach
4. Intestine

**Options :**

- 71087026817. 1
- 71087026818. 2
- 71087026819. 3
- 71087026820. 4

**Question Number : 46 Question Id : 7108706706 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Given below are two statements, one is labelled as **Assertion A** and the other is labelled as **Reason R**

**Assertion A:** Graphic solution is one of the important least-cost feed formulation method

**Reason R:** Feed formulation using least cost formulation method reduces the feed cost

In light of the above statements, choose the **correct** answer from the options given below

1. Both **A** and **R** are true and **R** is the correct explanation of **A**
2. Both **A** and **R** are true but **R** is **NOT** the correct explanation of **A**
3. **A** is true but **R** is false
4. **A** is false but **R** is true

**Options :**

- 71087026821. 1
- 71087026822. 2
- 71087026823. 3

71087026824. 4

**Question Number : 47 Question Id : 7108706707 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Given below are two statements, one is labelled as **Assertion A** and the other is labelled as **Reason R**

**Assertion A:** Shrimp feeds are manufactured by an extrusion process

**Reason R:** Extruded pellets have more water stability

In light of the above statements, choose the **correct** answer from the options given below

1. Both **A** and **R** are true and **R** is the correct explanation of **A**
2. Both **A** and **R** are true but **R** is **NOT** the correct explanation of **A**
3. **A** is true but **R** is false
4. **A** is false but **R** is true

**Options :**

71087026825. 1

71087026826. 2

71087026827. 3

71087026828. 4

**Question Number : 48 Question Id : 7108706708 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Given below are two statements, one is labelled as **Assertion A** and the other is labelled as **Reason R**

**Assertion A:** High moisture content in stored feed influences the growth of fungus

**Reason R:** Aflatoxin B-1 in aquafeed reduces the fish growth and production

In light of the above statements, choose the **correct** answer from the options given below

1. Both **A** and **R** are true and **R** is the correct explanation of **A**
2. Both **A** and **R** are true but **R** is **NOT** the correct explanation of **A**
3. **A** is true but **R** is false
4. **A** is false but **R** is true

**Options :**

71087026829. 1

71087026830. 2

71087026831. 3

71087026832. 4

**Question Number : 49 Question Id : 7108706709 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Given below are two statements, one is labelled as **Assertion A** and the other one labelled as **Reason R**

**Assertion A:** Less than 25°C and 65% Relative Humidity are the optimum storage conditions for ingredients of aquafeed

**Reason R:** In Indian conditions, aquafeed should not be stored for more than 2 months

In light of the above statements, choose the **correct** answer from the options given below

1. Both **A** and **R** are true and **R** is the correct explanation of **A**
2. Both **A** and **R** are true but **R** is **NOT** the correct explanation of **A**
3. **A** is true but **R** is false
4. **A** is false but **R** is true

**Options :**

71087026833. 1

71087026834. 2

71087026835. 3

71087026836. 4

**Question Number : 50 Question Id : 7108706710 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Given below are two statements, one is labelled as **Assertion A** and the other is labelled as **Reason R**

**Assertion A:** Linoleic and linolenic acids are the dietary essential fatty acids for freshwater fishes

**Reason R:** All marine fishes can efficiently synthesize arachidonic acid from linoleic acid and eicosapentaenoic acid, and docosahexaenoic acid from linolenic acid

In light of the above statements, choose the **correct** answer from the options given below

1. Both **A** and **R** are true and **R** is the correct explanation of **A**
2. Both **A** and **R** are true but **R** is **NOT** the correct explanation of **A**
3. **A** is true but **R** is false
4. **A** is false but **R** is true

**Options :**

- 71087026837. 1
- 71087026838. 2
- 71087026839. 3
- 71087026840. 4

**Question Number : 51 Question Id : 7108706711 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

In fish, oxygenation of blood is done by the process of

1. Osmoregulation
2. Diffusion
3. Redox potential
4. Osmosis

**Options :**

- 71087026841. 1
- 71087026842. 2

71087026843. 3

71087026844. 4

**Question Number : 52 Question Id : 7108706712 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Saturation of both oxygen and nitrogen in water may cause

1. Gas embolism
2. Hypoxia
3. MetHb formation
4. Anoxia

**Options :**

71087026845. 1

71087026846. 2

71087026847. 3

71087026848. 4

**Question Number : 53 Question Id : 7108706713 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following species is NOT used in aquatic toxicology tests?

1. *Microcystis*
2. *Chlorella*
3. *Skeletonema*
4. *Navicula*

**Options :**

71087026849. 1

71087026850. 2

71087026851. 3

71087026852. 4

**Question Number : 54 Question Id : 7108706714 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

The unionized ammonia will decrease by how many times with 1 unit decrease in water pH?

1. 2
2. 5
3. 7
4. 10

**Options :**

- 71087026853. 1
- 71087026854. 2
- 71087026855. 3
- 71087026856. 4

**Question Number : 55 Question Id : 7108706715 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

The causal relationship between a microbe and a specific disease was established by

1. Louis Pasteur
2. Edward Jenner
3. Robert Koch
4. Alexander Fleming

**Options :**

- 71087026857. 1
- 71087026858. 2
- 71087026859. 3
- 71087026860. 4

**Question Number : 56 Question Id : 7108706716 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**



**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Increase in concentration of a chemical substance along the trophic level of the food chain is known as

1. Biostimulation
2. Bioconcentration
3. Bioaccumulation
4. Biomagnification

**Options :**

71087026861. 1

71087026862. 2

71087026863. 3

71087026864. 4

**Question Number : 57 Question Id : 7108706717 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

In fish, toxicity of oxidized fish oil leads to

1. Fatty liver
2. Atrophied liver
3. Inflamed pancreas
4. Glycogen-type vacuolation

**Options :**

71087026865. 1

71087026866. 2

71087026867. 3

71087026868. 4

**Question Number : 58 Question Id : 7108706718 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The environmental factor(s) involved in the onset of Columnaris disease in tropical fish

1. Crowding
2. Handling
3. Low temperature
4. All of these

**Options :**

- 71087026869. 1
- 71087026870. 2
- 71087026871. 3
- 71087026872. 4

**Question Number : 59 Question Id : 7108706719 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

While transporting fish for disease diagnosis, a good thumb rule is to have about 1 litre water for how many cms of fish?

1. 1
2. 2
3. 3
4. 5

**Options :**

- 71087026873. 1
- 71087026874. 2
- 71087026875. 3
- 71087026876. 4

**Question Number : 60 Question Id : 7108706720 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The melting point of paraffin wax used in histology is

1. 50-54 °C
2. 54-58 °C
3. 60-64 °C
4. 65-70 °C

**Options :**

71087026877. 1  
71087026878. 2  
71087026879. 3  
71087026880. 4

**Question Number : 61 Question Id : 7108706721 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following is a major component of Bouin's fluid?

1. Acetic acid
2. Formalin
3. Picric acid
4. Ethyl alcohol

**Options :**

71087026881. 1  
71087026882. 2  
71087026883. 3  
71087026884. 4

**Question Number : 62 Question Id : 7108706722 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The pore size of the membrane filter used in bacteriology is

1. 0.22  $\mu$
2. 0.022  $\mu$
3. 0.0022  $\mu$
4. 2.20  $\mu$

**Options :**

- 71087026885. 1
- 71087026886. 2
- 71087026887. 3
- 71087026888. 4

**Question Number : 63 Question Id : 7108706723 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following is NOT a blood-forming organ of fish?

1. Anterior kidney
2. Liver
3. Spleen
4. Gill

**Options :**

- 71087026889. 1
- 71087026890. 2
- 71087026891. 3
- 71087026892. 4

**Question Number : 64 Question Id : 7108706724 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

When cells are injured, which one of the following occurs at the site of injury, as an immediate protective response?

1. Inclusion body
2. Tumours
3. Inflammation
4. Ascites

**Options :**

- 71087026893. 1
- 71087026894. 2
- 71087026895. 3
- 71087026896. 4

**Question Number : 65 Question Id : 7108706725 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

In fish, the antigen presenting cells are

1. Macrophages
2. Monocytes
3. Leucocytes
4. Neutrophils

**Options :**

- 71087026897. 1
- 71087026898. 2
- 71087026899. 3
- 71087026900. 4

**Question Number : 66 Question Id : 7108706726 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The IgM has a molecular weight of

1. 1 lakh kDa
2. 3 lakh kDa
3. 6 lakh kDa
4. 9 lakh kDa

**Options :**

71087026901. 1  
71087026902. 2  
71087026903. 3  
71087026904. 4

**Question Number : 67 Question Id : 7108706727 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of these genetic traits of an animal confers tolerance against a specific pathogen?

1. SPF stocks
2. SPT stocks
3. SPR stocks
4. SPP stocks

**Options :**

71087026905. 1  
71087026906. 2  
71087026907. 3  
71087026908. 4

**Question Number : 68 Question Id : 7108706728 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following is NOT involved in the nitrogen cycle in an aquatic environment?

1. *Nitrobacter*
2. *Nitrosomonas*
3. *Nitrosococcus*
4. *Rhodococcus*

**Options :**

71087026909. 1  
71087026910. 2  
71087026911. 3  
71087026912. 4

**Question Number : 69 Question Id : 7108706729 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

In order to inactivate chlorine, the amount of thiosulphate should be how many times the amount of chlorine (in grams)?

1. 2.85
2. 0.285
3. 28.5
4. 0.78

**Options :**

71087026913. 1  
71087026914. 2  
71087026915. 3  
71087026916. 4

**Question Number : 70 Question Id : 7108706730 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Under optimal condition, how many grams of zeolite can remove 9 mg of ammonia?

1. 100
2. 10
3. 1
4. 0.1

**Options :**

71087026917. 1  
71087026918. 2  
71087026919. 3  
71087026920. 4

## Part C Aquaculture

<b>Section Id :</b>	710870168
<b>Section Number :</b>	3
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	50
<b>Number of Questions to be attempted :</b>	50
<b>Section Marks :</b>	200
<b>Display Number Panel :</b>	Yes
<b>Group All Questions :</b>	Yes
<b>Mark As Answered Required? :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	710870168
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 71 Question Id : 7108706731 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**



"Rearing of aquatic organisms under controlled conditions or semi-controlled conditions in the coastal and offshore waters in which salinity is maximal and not subjected to significant daily or seasonal variations" is referred as

1. Pen cultured in closed ares
2. Brackish water aquaculture
3. Coastal pond culture
4. Mariculture

**Options :**

- 71087026921. 1
- 71087026922. 2
- 71087026923. 3
- 71087026924. 4

**Question Number : 72 Question Id : 7108706732 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

For carp nursery ponds, which one of the following is preferred in pond based aquaculture in India?

1. Perennial earth ponds of 0.05 to 0.5 ha with depth of 0.5 to 1.0 m
2. Perennial earth ponds of 0.05 to 0.1 ha with depth of 0.5 to 1.5 m
3. Smaller seasonal earth ponds of 0.02 to 0.1 ha size with average depth of 1.0 to 1.5 m
4. Small ponds of 0.5 to 0.75 ha size with a depth of 1.5 to 2.0 m

**Options :**

- 71087026925. 1
- 71087026926. 2
- 71087026927. 3
- 71087026928. 4

**Question Number : 73 Question Id : 7108706733 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following statements is **correct** with respect to the maturation of Indian major carps?

1. Secondary sexual characters appear June onwards and are retained up to August
2. Secondary sexual characters appear March onwards and are retained up to June
3. Secondary sexual characters appear February onwards and are retained up to July
4. Secondary sexual characters appear July onwards and are retained up to October

**Options :**

- 71087026929. 1
- 71087026930. 2
- 71087026931. 3
- 71087026932. 4

**Question Number : 74 Question Id : 7108706734 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following is **correct** with respect to pond aeration in aquaculture?

1. Improves oxygen, mineralization, mixing of water column
2. Water circulation, sediment accumulation, low oxygen
3. Mineralization, water mixing, CO<sub>2</sub> production
4. Mixing of water, turbidity, H<sub>2</sub>S production

**Options :**

- 71087026933. 1
- 71087026934. 2
- 71087026935. 3
- 71087026936. 4

**Question Number : 75 Question Id : 7108706735 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Identify the **correct** statement with respect to aquaponics

1. Plants will not get sufficient nutrients
2. Fish will not get sufficient feeds
3. Plants get excess of nutrients than the required amounts
4. Plants get nutrients and fish get feeds

**Options :**

- 71087026937. 1
- 71087026938. 2
- 71087026939. 3
- 71087026940. 4

**Question Number : 76 Question Id : 7108706736 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Gonadotropin (GtH) in the pituitary gland is found abundant during the breeding phase, carp pituitary glands collected during the following season are more potent during

1. Winter
2. Late monsoon
3. Summer
4. Spring

**Options :**

- 71087026941. 1
- 71087026942. 2
- 71087026943. 3
- 71087026944. 4

**Question Number : 77 Question Id : 7108706737 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

The ovarian maturity status and prime condition of the brood of Indian major carps is ascertained by using

1. Syringe
2. Catheter
3. Osmoregulator
4. Refractometer

**Options :**

- 71087026945. 1
- 71087026946. 2
- 71087026947. 3
- 71087026948. 4

**Question Number : 78 Question Id : 7108706738 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

For a brackish water aquaculture tide fed farm, the ideal conditions are

1. Ground elevation should be above mean spring tide high water level and above low water level
2. Ground elevation should be below the mean spring tide high water level and below low water level
3. Ground elevation should be equal to spring tide high water level and below low water level
4. Ground elevation should be below mean spring tide high water level and above low water level

**Options :**

- 71087026949. 1
- 71087026950. 2
- 71087026951. 3
- 71087026952. 4

**Question Number : 79 Question Id : 7108706739 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

In the world aquaculture production, the maximum production of aquatic plants comes from

1. China
2. Indonesia
3. Japan
4. Vietnam

**Options :**

71087026953. 1

71087026954. 2

71087026955. 3

71087026956. 4

**Question Number : 80 Question Id : 7108706740 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

While selecting the combinations of species for polyculture, which of the following statements are **correct**?

- A. The species should be carnivorous and feed at top of trophic level
- B. The species should command a good market price and feed at a higher trophic level
- C. The species should feed at a lower trophic level and should be herbivorous
- D. The species should be compatible and feed at lower lower trophic level

Choose the correct answer from the options given below

- 1. A and D only
- 2. B and C only
- 3. C and D only
- 4. A and B only

**Options :**

- 71087026957. 1
- 71087026958. 2
- 71087026959. 3
- 71087026960. 4

**Question Number : 81 Question Id : 7108706741 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

In recent years, the production of freshwater prawn, *M. rosenbergii* is

- 1. Increasing
- 2. Decreasing
- 3. Stagnant
- 4. Drastically increased

**Options :**

71087026961. 1  
71087026962. 2  
71087026963. 3  
71087026964. 4

**Question Number : 82 Question Id : 7108706742 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Which of the following fishes are selectively bred as a means of genetic improvement?

- A. Tilapia
- B. Cobia
- C. Sea bass
- D. Rohu
- E. Mrigal

Choose the **correct** answer from the options given below:

- 1. A and B only
- 2. A and E only
- 3. D and C only
- 4. A and D only

**Options :**

71087026965. 1  
71087026966. 2  
71087026967. 3  
71087026968. 4

**Question Number : 83 Question Id : 7108706743 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**  
**Correct Marks : 4 Wrong Marks : 1**

Which one of the following species of crab grows faster than the others to reach maximum size?

1. *Scylla serrata*
2. *Scylla tranquebarica*
3. *Portunus pelagicus*
4. *Portunus sanguinolentus*

**Options :**

- 71087026969. 1
- 71087026970. 2
- 71087026971. 3
- 71087026972. 4

**Question Number : 84 Question Id : 7108706744 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**  
**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**  
**Correct Marks : 4 Wrong Marks : 1**

The normal size of Tiger Shrimp's egg is

1. 3.0 mm
2. 0.3 mm
3. 1.3 mm
4. 3.3 mm

**Options :**

- 71087026973. 1
- 71087026974. 2
- 71087026975. 3
- 71087026976. 4

**Question Number : 85 Question Id : 7108706745 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**  
**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**



**Correct Marks : 4 Wrong Marks : 1**

The ideal combination of species used in the polyculture of fish

- A. Catla, Magur, Rohu
- B. Rohu, Grass carp, Mrigal
- C. Mrigal, Common carp, Murrels
- D. Catla, Sea bass, Silver carp
- E. Rohu, Silver carp, Common carp

Choose the **correct** answer from the options given below:

- 1. A and B only
- 2. B and C only
- 3. B and E only
- 4. E and D only

**Options :**

- 71087026977. 1
- 71087026978. 2
- 71087026979. 3
- 71087026980. 4

**Question Number : 86 Question Id : 7108706746 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

In the organic aquaculture, the most important aspect to be looked into

- 1. Types of fish or shellfish farmed
- 2. Feeds and fertilizers used
- 3. Physical evaluation of the product farmed
- 4. Authenticated certification

**Options :**

- 71087026981. 1
- 71087026982. 2
- 71087026983. 3
- 71087026984. 4

**Question Number : 87 Question Id : 7108706747 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

In brackish water aquaculture, which of the following are sustainable farming?

- A. Shrimps and cobia
- B. Shrimps and freshwater prawn
- C. Shrimps and mussels
- D. Shrimps and seaweeds
- E. Shrimps and sea bass

Choose the **correct** answer from the options given below:

- 1. A only
- 2. B and E only
- 3. C and D only
- 4. A and E only

**Options :**

- 71087026985. 1
- 71087026986. 2
- 71087026987. 3
- 71087026988. 4

**Question Number : 88 Question Id : 7108706748 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Which detector is normally used in the Gas Chromatography for fatty acid analysis of aqua feeds?

1. Carbon detector
2. Hydrogen detector
3. Flame ionization detector
4. Nitrogen detector

**Options :**

- 71087026989. 1
- 71087026990. 2
- 71087026991. 3
- 71087026992. 4

**Question Number : 89 Question Id : 7108706749 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is  
Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Which morphotype is fast growing one in males of *Macrobrachium rosenbergi* ?

1. Small males
2. Orange claws
3. Blue males
4. Runts

**Options :**

- 71087026993. 1
- 71087026994. 2
- 71087026995. 3
- 71087026996. 4

**Question Number : 90 Question Id : 7108706750 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is**

**Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

What is the long axis length of the fertilized eggs of *Macrobrachium rosenbergii*?

1. 1.0 - 1.2 mm
2. 0.6 - 0.7 mm
3. 0.8 - 0.9 mm
4. 0.1 - 0.5 mm

**Options :**

71087026997. 1  
71087026998. 2  
71087026999. 3  
71087027000. 4

**Question Number : 91 Question Id : 7108706751 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is  
Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Captive breeding of cobia (*Rachycentron* sp.) was successfully achieved by

1. CIFA
2. RGCA
3. CMFRI
4. CIBA

**Options :**

71087027001. 1  
71087027002. 2  
71087027003. 3  
71087027004. 4

**Question Number : 92 Question Id : 7108706752 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is  
Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical  
Correct Marks : 4 Wrong Marks : 1**

Which one of the following is a sequential linkage between two or more agriculture-related farming activities, where fish farming is a major component?

1. Hightech aquaculture
2. Composite fish culture
3. Integrated aquaculture
4. Rural fish farming

**Options :**

- 71087027005. 1
- 71087027006. 2
- 71087027007. 3
- 71087027008. 4

**Question Number : 93 Question Id : 7108706753 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

While constructing a fish farm, primary consideration is given to

1. Selection of site
2. Construction of dyke
3. Construction of berm
4. Availability of raw materials

**Options :**

- 71087027009. 1
- 71087027010. 2
- 71087027011. 3
- 71087027012. 4

**Question Number : 94 Question Id : 7108706754 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Area of nearly 52% of the shrimp farms in India is less than

1. 10 ha
2. 5 ha
3. 2 ha
4. 7 ha

**Options :**

71087027013. 1  
71087027014. 2  
71087027015. 3  
71087027016. 4

**Question Number : 95 Question Id : 7108706755 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

The best live food to enrich the HUFAs in the rearing of prawn larvae is

1. Cladocerans
2. Copepods
3. Ostracods
4. Artemia

**Options :**

71087027017. 1  
71087027018. 2  
71087027019. 3  
71087027020. 4

**Question Number : 96 Question Id : 7108706756 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Fertilized eggs are more sturdy and can be transported to far off places in case of

1. Indian major carps
2. Cat fishes
3. Murrels
4. Trouts

**Options :**

- 71087027021. 1
- 71087027022. 2
- 71087027023. 3
- 71087027024. 4

**Question Number : 97 Question Id : 7108706757 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which of the following are the larval stage/stages in tiger shrimp?

- A. Nauplius and Zoea only
- B. Zoea and Mysis only
- C. Nauplius and Mysis only
- D. Nauplius, Zoea and Mysis

Choose the **correct** answer from the options given below:

1. A and B only
2. B and C only
3. D only
4. A and C only

**Options :**

- 71087027025. 1

71087027026. 2

71087027027. 3

71087027028. 4

**Question Number : 98 Question Id : 7108706758 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

For cost-effective fish production under semi intensive carp culture keeping view on the required nutrient level in feed, which one of the following is the best option?

1. Feed ingredients namely fish meal, rice flour, groundnut oil, vitamin and mineral mix are preferred
2. Feed ingredients namely soybean meal, tapioca flour, sardine oil, rice bran, vitamin and mineral mix are preferred
3. Feed ingredients such as fish meal, rice bran, wheat bran, vitamin and mineral mix are preferred
4. Feed ingredients such as fish meal, groundnut cake, wheat flour, cod liver oil, vitamin and mineral mix are preferred

**Options :**

71087027029. 1

71087027030. 2

71087027031. 3

71087027032. 4

**Question Number : 99 Question Id : 7108706759 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**



With respect to 'Aquaponics', identify the **correct** statements

- A. Fishes are cultured
- B. Plants are grown
- C. Nutrients and water are recirculated
- D. Fishes and plants cannot be cultured together
- E. There is wastage of water in this system

Choose the **correct** answer from the options given below:

- 1. A and B only
- 2. A, B and C only
- 3. D and E only
- 4. C, D and E only

**Options :**

- 71087027033. 1
- 71087027034. 2
- 71087027035. 3
- 71087027036. 4

**Question Number : 100 Question Id : 7108706760 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

The best suitable species of fish for culture in the 'Aquaponics' system are

- 1. Indian major carps
- 2. Cat fishes
- 3. Tilapia
- 4. Murrels

**Options :**

71087027037. 1  
71087027038. 2  
71087027039. 3  
71087027040. 4

**Question Number : 101 Question Id : 7108706761 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Loamy soil has sand and clay/silt in the proportion

1. 50% Sand, 50% Clay
2. 75% Sand, 25% Clay
3. 25% Sand, 75% Clay
4. 90% Sand, 10% Clay

**Options :**

71087027041. 1  
71087027042. 2  
71087027043. 3  
71087027044. 4

**Question Number : 102 Question Id : 7108706762 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Binomial nomenclature of Cobia is

1. *Lates calcarifer*
2. *Etroplus suratensis*
3. *Rachycentron canadum*
4. *Trachinotus blochii*

**Options :**

71087027045. 1  
71087027046. 2

71087027047. 3

71087027048. 4

**Question Number : 103 Question Id : 7108706763 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

*Trachinotus blochii*, which is farmed in coastal waters, is commonly known as

1. Sea bream
2. Silver pompano
3. Grouper
4. Turbot

**Options :**

71087027049. 1

71087027050. 2

71087027051. 3

71087027052. 4

**Question Number : 104 Question Id : 7108706764 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

The best live food organism for the larvae/post-larvae of prawns and shrimps in hatcheries is

1. Cladocerans
2. Infusoria
3. Rotifers
4. Artemia nauplii

**Options :**

71087027053. 1

71087027054. 2

71087027055. 3

71087027056. 4

**Question Number : 105 Question Id : 7108706765 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Relatively high production is obtained per unit area in the coastal farming of

1. Mussels
2. Edible oysters
3. Clams
4. Shrimps

**Options :**

- 71087027057. 1
- 71087027058. 2
- 71087027059. 3
- 71087027060. 4

**Question Number : 106 Question Id : 7108706766 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Which one of the following statements with respect to the use of aerators in aquafarming is **correct?**

1. They help in water circulation
2. They help in enriching oxygen
3. They avoid water stratification
4. They help in water circulation, enriching oxygen, and avoiding water stratification

**Options :**

- 71087027061. 1
- 71087027062. 2
- 71087027063. 3
- 71087027064. 4

**Question Number : 107 Question Id : 7108706767 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

As per the FAO's latest data, what is the percentage of rise in Global Aquaculture production from 1990 to 2018?

1. 14%
2. 122%
3. 527%
4. 260%

**Options :**

- 71087027065. 1
- 71087027066. 2
- 71087027067. 3
- 71087027068. 4

**Question Number : 108 Question Id : 7108706768 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

As per FAO's latest fish production data, total world aquaculture production is

1. 114.5 mmt
2. 131.5 mmt
3. 161 mmt
4. 89.5 mmt

**Options :**

- 71087027069. 1
- 71087027070. 2
- 71087027071. 3
- 71087027072. 4

**Question Number : 109 Question Id : 7108706769 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

In recent years, the common problem with respect to food safety in Indian freshwater aquaculture is

1. High production per unit area
2. Non-availability of sufficient water
3. Serious viral diseases
4. Indiscriminate use of antibiotics and drugs

**Options :**

71087027073. 1

71087027074. 2

71087027075. 3

71087027076. 4

**Question Number : 110 Question Id : 7108706770 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

With respect to Indian aquaculture, identify the most appropriate statements from the following

- A. Sustainable aquaculture practices need to be implemented
- B. Diversification of species is required
- C. Polyculture practices need to be adopted
- D. Monoculture of commercially important species
- E. To aim for higher production

- 1. A and D only
- 2. B and E only
- 3. C and E only
- 4. A, B and C only

**Options :**

- 71087027077. 1
- 71087027078. 2
- 71087027079. 3
- 71087027080. 4

**Question Number : 111 Question Id : 7108706771 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Trouts and salmons normally require water having

- 1. Low oxygen
- 2. High temperature
- 3. High temperature and low oxygen
- 4. High oxygen and low temperature

**Options :**

71087027081. 1

71087027082. 2

71087027083. 3

71087027084. 4

**Question Number : 112 Question Id : 7108706772 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Which one of the following groups of fishes can be cultured in shallow marshy areas and swamps?

1. Major carps
2. Minor carps
3. Fresh water prawns
4. Cat fish and murrels

**Options :**

71087027085. 1

71087027086. 2

71087027087. 3

71087027088. 4

**Question Number : 113 Question Id : 7108706773 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Saponin is the toxic ingredient present in Mahua (*Basia latipolia*) oil cake, which is present at a level of

1. 10 - 12 %
2. 1 - 2 %
3. 4 - 6 %
4. 6 - 10 %

**Options :**



71087027089. 1  
71087027090. 2  
71087027091. 3  
71087027092. 4

**Question Number : 114 Question Id : 7108706774 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

Contribution from fisheries to overall GDP of India for the last 5 years is

1. 2.5 %
2. 5.3 %
3. 0.15 %
4. 1.1 %

**Options :**

71087027093. 1  
71087027094. 2  
71087027095. 3  
71087027096. 4

**Question Number : 115 Question Id : 7108706775 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

For the first time in India, induced breeding of Indian major carps was achieved by

1. Sundarraaj and Khan
2. Jhingran U. G.
3. Hora S. L.
4. H. Chaudhuri and K. H. Alikunhi

**Options :**

71087027097. 1  
71087027098. 2

71087027099. 3

71087027100. 4

**Question Number : 116 Question Id : 7108706776 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

In decapod crustaceans, gonad stimulating hormone is secreted by

1. X organ
2. Pancreas
3. Y organ
4. Liver

**Options :**

71087027101. 1

71087027102. 2

71087027103. 3

71087027104. 4

**Question Number : 117 Question Id : 7108706777 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Raceway system of culture is more commonly employed for which one of the following groups of fishes?

1. Cat fishes
2. Trouts
3. Indian major carps
4. Mulletts

**Options :**

71087027105. 1

71087027106. 2

71087027107. 3

71087027108. 4

**Question Number : 118 Question Id : 7108706778 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

In the breeding of common carp, the stickiness of eggs is removed by

1. Formalin solution
2. Salt-carbamide solution
3. Acetelene solution
4. Calcium hypochlorite solution

**Options :**

- 71087027109. 1
- 71087027110. 2
- 71087027111. 3
- 71087027112. 4

**Question Number : 119 Question Id : 7108706779 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical Correct Marks : 4 Wrong Marks : 1**

In inland aquaculture, cage culture is more applicable in which one of the following water bodies?

1. Small tanks
2. Ponds
3. Reservoirs
4. Rivers

**Options :**

- 71087027113. 1
- 71087027114. 2
- 71087027115. 3
- 71087027116. 4

**Question Number : 120 Question Id : 7108706780 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical**

**Correct Marks : 4 Wrong Marks : 1**

Raft culture method is more popularly used in the farming of

1. Clams
2. Mussels
3. Crabs
4. Lobsters

**Options :**

71087027117. 1

71087027118. 2

71087027119. 3

71087027120. 4