

## PROVISIONAL ANSWER KEY

Question Paper Code: 38/2022/OL  
Category Code: 220/2020  
Exam: Project Officer  
Date of Test: 06-07-2022  
Department: Apex Societies of Co operative Sector in Kerala  
Alphacode: A

Question1:-Which gear is mostly used in upper-stretch of Ganga ?

- A:-Gill Net
- B:-Hook and Line
- C:-Drag Net
- D:-Purse Seine

Correct Answer:- Option-B

Question2:-Find out the odd one reservoir.

- A:-Osman Sagar
- B:-Krishnaraj Sagar
- C:-Himayat Sagar
- D:-Hussain Sagar

Correct Answer:- Option-B

Question3:-Which of the following fishing technique is most popular in sport fishing ?

- A:-Bait casting
- B:-Spin-casting
- C:-Fly-casting
- D:-Spinning

Correct Answer:- Option-B

Question4:-Which of the following reservoir is also known as Catla reservoir ?

- A:-Sathanur
- B:-Pong
- C:-Tawa
- D:-Gobind Ballav Pant Sagar

Correct Answer:- Option-A

Question5:-In which zone oxygen is consumed for purification of organic matter in lake ecosystem ?

- A:-Littoral
- B:-Upper
- C:-Tropholytic
- D:-Euphotic

Correct Answer:- Option-C

Question6:-Family of toad fish is

- A:-Lophidae
- B:-Batrachoididae
- C:-Cyprinidae
- D:-None of these

Correct Answer:- Option-B

Question7:-Which of the following ornamental fish is nest builder type ?

- A:-Zebra
- B:-Rasbora
- C:-Fighter
- D:-None of these

Correct Answer:- Option-C

Question8:-First reservoir developed scientifically in India is

- A:-Gandhi Sagar
- B:-Tungabhadra
- C:-Stanley
- D:-Gobind Sagar

Correct Answer:- Option-C

Question9:-Cultured based captured fishery is best suitable based on stock management

- A:-Large reservoir
- B:-Medium reservoir
- C:-Small reservoir
- D:-Lotic water bodies

Correct Answer:- Option-C

Question10:-Which of the following family showed synchronous hermaphroditism ?

- A:-Centropomidae
- B:-Serranidae
- C:-Labridae
- D:-Sapridae

Correct Answer:- Option-B

Question11:-Sting rays belong to the family

- A:-Dasyatidae
- B:-Gymnuridae
- C:-Urolophidae
- D:-Rajidae

Correct Answer:- Option-A

Question12:-Statocyst is an organ for

- A:-Sense of smell
- B:-Sense of taste
- C:-Sense of hearing
- D:-Sense of balance

Correct Answer:- Option-D

Question13:-Find out the odd fish based on their feeding habits.

- A:-Puntius sarana
- B:-Cyprinus carpio
- C:-Mystus vittatus
- D:-Tor tor

Correct Answer:- Option-C

Question14:-Which one is not the structure fisheries management system ?

- A:-System analysis
- B:-System therapy
- C:-System description
- D:-System optimization-implementation

Correct Answer:- Option-B

Question15:-Red tide phenomenon is found due to the abundance of

- A:-Diatoms
- B:-Dinoflagellates
- C:-Protozoans
- D:-Coccolithophores

Correct Answer:- Option-B

Question16:-Freshwater Dolphin is found in which river systems in India ?

- A:-Brahmaputra

- B:-Godavari
- C:-Ganga
- D:-Mahanadi

Correct Answer:- Option-C

Question17:-Which is the indigenous ornamental fish ?

- A:-Gold fish
- B:-Platy
- C:-Glass fish
- D:-Morala

Correct Answer:- Option-C

Question18:-Setting of aquarium is also known as \_\_\_\_\_

- A:-Aquasetting
- B:-Aquascaping
- C:-Aquarium culture
- D:-Aquaculture

Correct Answer:- Option-B

Question19:-Which one is the primitive larvae of Crustacea ?

- A:-Zoea
- B:-Trochophore
- C:-Nauplius
- D:-Mysis

Correct Answer:- Option-C

Question20:-Adipose fin as second dorsal fin is found in

- A:-Catfish
- B:-Stingray
- C:-Salmon
- D:-Mackerel

Correct Answer:- Option-C

Question21:-Coracle fishing is performed by

- A:-One man
- B:-Two men
- C:-Three men
- D:-Four men

Correct Answer:- Option-B

Question22:-Find out odd gear.

- A:-Traps
- B:-Lines
- C:-Spearing
- D:-Road and Line

Correct Answer:- Option-C

Question23:-The propulsion of mechanised boats would be done with the help of

- A:-Sails
- B:-Oars
- C:-Engine
- D:-Wind

Correct Answer:- Option-C

Question24:-The reduction in the length of a material is known as

- A:-Tensile Strength
- B:-Shrinkage
- C:-Tenacity

D:-Breaking Strength

Correct Answer:- Option-B

Question25:-Gill net is the example of

A:-Passive gear

B:-Falling gear

C:-Surrounding gear

D:-Active gear

Correct Answer:- Option-A

Question26:-There is a constant search for identification of alternative dietary ingredients to replace fish meal and fish oil in aquaculture feeds because

A:-Fish meal and fish oil are costly

B:-They have been found to contain anti-nutritional factors

C:-Heavy pressure on fisheries meant for human consumption and depletion of natural stocks

D:-This practice favors cultivation of carnivores

Correct Answer:- Option-C

Question27:-Mahua oil cake contains

A:-10 to 15% Saponin

B:-4 to 6% Saponin

C:-5% Rotenone

D:-2 to 4% Rotenone

Correct Answer:- Option-B

Question28:-Feed management strategies renders least consideration to

A:-Optimization of feed inputs

B:-Reduction of feed conversion ratios

C:-Potential impact on the culture and effluent water

D:-Taxes on feed ingredients

Correct Answer:- Option-D

Question29:-The earliest fish to be cultured

A:-Common carp

B:-Cat fish

C:-Tilapia

D:-Salmon

Correct Answer:- Option-A

Question30:-Tilapia lake virus TiLV belongs to the family

A:-Orthomyxoviridae

B:-Rhabdoviruses

C:-Iridoviruses

D:-Retroviruses

Correct Answer:- Option-A

Question31:-Stocking density in aquaculture depends on

A:-Soil type

B:-Harvesting method

C:-Management method

D:-Feeding method

Correct Answer:- Option-C

Question32:-Ideal aquaculture Pond depth should be

A:-0.5 to 4.0 m at shallow end to drainage end

B:-0.5 to 2.0 m at shallow end to drainage end

C:-0.5 to 5.0 m at shallow end to drainage end

D:-0.5 to 6.0 m at shallow end to drainage end

Correct Answer:- Option-B

Question33:-The single factor influencing pond productivity to a greater extent is

- A:-TDS
- B:-Hardness
- C:-pH
- D:-Silicate

Correct Answer:- Option-C

Question34:-Stocking density in aquaculture should not be dependent on

- A:-Water quality
- B:-Natural feed availability
- C:-Farmers management experience
- D:-Seed availability

Correct Answer:- Option-D

Question35:-In aquaculture ponds high level of  $CO_2$  is expected during

- A:-6.00 AM
- B:-11.00 AM
- C:-7.00 PM
- D:-3.00 PM

Correct Answer:- Option-C

Question36:-Least important criteria for selection of suitable fish species for RAS

- A:-Faster growth rate
- B:-Hardy and least susceptible to disease
- C:-Compatibility with other cultivable species of fish
- D:-High market demand and high price

Correct Answer:- Option-C

Question37:-Gypsum application in aquaculture pond

- A:-Increases pH
- B:-Reduces pH
- C:-Stabilizes the pH
- D:-None

Correct Answer:- Option-B

Question38:-Common predatory fish in pond

- A:-*Aplocheilichthys lineatus*
- B:-*Ctenopharyngodon idella*
- C:-*Glossogobius aureus*
- D:-*Sardinella longiceps*

Correct Answer:- Option-C

Question39:-Most preferred method for complete eradication of weed fishes before stocking

- A:-Dewatering and desilting
- B:-Netting
- C:-Hook and lines
- D:-Poisoning using mahua oil cake

Correct Answer:- Option-D

Question40:-Removal of refractory organics and unpleasant toxic substances in sewage is done during

- A:-Primary treatment
- B:-Secondary treatment
- C:-Tertiary treatment
- D:-Quaternary treatment

Correct Answer:- Option-D

Question41:-Following is least agreeable to integrated aquaculture ecosystem

- A:-Process of trapping solar energy
- B:-Allochthonous injection of nutrients to fish pond
- C:-Production of organic material by primary autotrophs
- D:-Decomposition of autotrophs and phagotrophs by saprotrophs

Correct Answer:- Option-B

Question42:-The common variety of duck integrated in Duck-cum-fish culture in India is

- A:-Khaki Campbell
- B:-Japanece Criollo
- C:-King Eider
- D:-Mandarin duck

Correct Answer:- Option-A

Question43:-In biofloc fish culture floc is necessarily not supported to be together

- A:-By surface tension variations in entrapped air
- B:-Bound by filamentous microorganisms
- C:-Held by electrostatic attraction
- D:-In a loose matrix of mucus that is secreted by bacteria

Correct Answer:- Option-A

Question44:-The desirable CN ratio in biofloc system is (Carbon : Nitrogen)

- A:-15 : 01
- B:-08 : 01
- C:-25 : 01
- D:-01 : 01

Correct Answer:- Option-A

Question45:-The amount of living material present in water column at any given time is called

- A:-Biomass
- B:-Productivity
- C:-Biotic potential
- D:-Trophic status

Correct Answer:- Option-A

Question46:-In freshwater the limiting nutrient is

- A:-Nitrogen
- B:-Phosphorus
- C:-Iron
- D:-Calcium

Correct Answer:- Option-B

Question47:-Freshwater prawn *Macrobrachium rosenbergii* is

- A:-Herbivore
- B:-Carnivore
- C:-Omnivore
- D:-Predator

Correct Answer:- Option-C

Question48:-The aquaponics is least considerate of

- A:-pH
- B:-Conductivity
- C:-Suspended solids
- D:-Silicate

Correct Answer:- Option-D

Question49:-The feed additive tocopherol is an

- A:-Antioxidant
- B:-Binder

C:-Anticaking agent

D:-Attractant

Correct Answer:- Option-A

Question50:-Brown blood disease of fish is linked to

A:-Ammonia

B:-Nitrate

C:-Nitrite

D:-Iron salts

Correct Answer:- Option-C

Question51:-Species ratio in polyculture is decided factoring in

A:-Artificial feed availability

B:-Seed availability

C:-Feeding niches and interspecific competition

D:-Water availability

Correct Answer:- Option-C

Question52:-The largest catfish in freshwater is

A:-Wallago attu

B:-Heteropneustus fossilis

C:-Clarius batrachus

D:-Mystus sheengala

Correct Answer:- Option-A

Question53:-The following factor merits least consideration in selecting a species for aquaculture

A:-Growth rate

B:-Disease resistance

C:-Market demand

D:-Auto breeding potential in ponds

Correct Answer:- Option-D

Question54:-The best option for eradication of insects in aquaculture nurseries is

A:-Soap oil emulsion

B:-Repeated fine mesh drag netting

C:-Gammaxan spray

D:-Dipterex crystal application

Correct Answer:- Option-A

Question55:-Bacterial haemorrhagic septicaemia in fish is caused by

A:-Aeromonas liquifaciens

B:-Aeromonas hydrophila

C:-Flavobacterium

D:-Flexibacter

Correct Answer:- Option-B

Question56:-For fry production of tilapia in ponds, the brood fish are stocked in male to female ratio of

A:-1 : 2

B:-1 : 3

C:-1 : 5

D:-1 : 6

Correct Answer:- Option-B

Question57:-Which one of the following is widely used in crustacean hatchery as initial food for rearing larvae ?

A:-Brachionus

B:-Moina

C:-Daphnia

D:-Artemia

Correct Answer:- Option-D

Question58:-The first parthenogenetic cleavage of the fertilized egg of Indian major carp starts within

A:-15-20 min. of spawning

B:-10-12 min. of spawning

C:-6-8 min. of spawning

D:-< 1 min. of spawning

Correct Answer:- Option-A

Question59:-Which one of the following is popularly known as 'Thai magur' ?

A:-Wallago attu

B:-Ictalurus punctatus

C:-Clarius batrachus

D:-Clarius gariepinus

Correct Answer:- Option-D

Question60:-A prospective male fish of Indian major carp employed in induced breeding of fish on hormonal induction can yield milt of about

A:-1-2 ml/kg body mass

B:-2-4 ml/kg body mass

C:-4-6 ml/kg body mass

D:-6-10 ml/kg body mass

Correct Answer:- Option-D

Question61:-The Indian backwater oyster is scientifically referred to as

A:-Crassostrea gasar

B:-Crassostrea gigas

C:-Crassostrea madrasensis

D:-Crassostrea virginica

Correct Answer:- Option-C

Question62:-The late pre-moult and early inter-moult stage of mud crabs are known as

A:-Baby crabs

B:-Water crabs

C:-Hard crabs

D:-Adult crabs

Correct Answer:- Option-B

Question63:-For cryopreservation of fish spermatozoa the motility should be

A:-30%

B:-50%

C:-60%

D:-> 70%

Correct Answer:- Option-D

Question64:-Which one of the following combination rightly characterizes nucleotide base of DNA ?

A:-Adenine-Guanine-Tyrosine-Cytosine

B:-Adenine-Guanine-Thymine-Cytokines

C:-Adenine-Guanine-Thymine-Cytosine

D:-Adenine-Glutamine-Tyrosine-Cytosine

Correct Answer:- Option-C

Question65:-Maximum reproduction under mass culture of *Brachionus plicatilis* occurs under saline waters with a range of

A:-20 to 25 ppt

B:-15 to 20 ppt

C:-10 to 15 ppt

D:-05 to 10 ppt

Correct Answer:- Option-B

Question66:-Black spot formation or melanosis in shrimp occurs due to the reaction of the following components



- A:-Free amino acid + phenolase enzyme + oxygen
  - B:-Phenolase enzyme + oxygen
  - C:-Phenolase enzyme + oxygen + bound water
  - D:-Free amino acid + phenolase enzyme + bound water
- Correct Answer:- Option-A

Question67:-The bioactive compound which is extracted from sea cucumber exhibits anticancer properties is known as

- A:-Moiramides
  - B:-Neuritogenic active ganglioside
  - C:-Amines
  - D:-Triterpene glycoside
- Correct Answer:- Option-D

Question68:-The pigment responsible for the pink colour in normal cooked meat of tuna

- A:-Astaxanthin
  - B:-Hemochrome
  - C:-Melanin
  - D:-Carotenoid
- Correct Answer:- Option-B

Question69:-Sulphur rich amino acid which lacks in vegetables but present in fishes is

- A:-Methionine
  - B:-Lysine
  - C:-Tryptophane
  - D:-Leucine
- Correct Answer:- Option-A

Question70:-Fermented Herring and Anchovy, which is popular in Indonesia is called ?

- A:-Buro
  - B:-Makassar
  - C:-Pekasam
  - D:-Sushimi
- Correct Answer:- Option-B

Question71:-Raw surimi without freezing is called

- A:-Muen-surimi
  - B:-Kaen-surimi
  - C:-Nama-surimi
  - D:-Nigiri
- Correct Answer:- Option-C

Question72:-A modified hatchery pit with muslin cloth below the mosquito net

- A:-Earthen pot hatchery
  - B:-Double cloth hatching hapa
  - C:-Chittagong type hatching pit
  - D:-Shirgur's bin hatchery
- Correct Answer:- Option-C

Question73:-The typical length : width : depth ratio in linear raceway

- A:-30 : 3 : 1
  - B:-30 : 5 : 1
  - C:-30 : 5 : 3
  - D:-30 : 3 : 5
- Correct Answer:- Option-A

Question74:-An insulated vessel that ensures no liquid enters the compressor is known as

- A:-Accumulator
- B:-Evaporator

C:-Expansion valve

D:-Flash Chamber

Correct Answer:- Option-A

Question75:-Which of the following omega-3 fatty acids have been associated with fetal development, cardiovascular function, and Alzheimer's disease

A:-Docosaheaxaenoic acid

B:-Alpha-linolenic acid

C:-Gamma linolenic acid

D:-Triglyceride

Correct Answer:- Option-A

Question76:-Which one is the permitted diameter of stake net or dip net for fishing from public water bodies ?

A:-More than 5 meter

B:-More than 4 meter

C:-More than 3 meter

D:-None of the above

Correct Answer:- Option-B

Question77:-Which of the following statement is/are correct regarding the adjudicating officer as per KMFRA ?

- i) Fisheries Officer
- ii) Assistant Director
- iii) Deputy Director
- iv) Field Level Officer

A:-Only i and ii

B:-Only iii

C:-Only ii and iii

D:-All of the above

Correct Answer:- Option-C

Question78:-Which state has the highest per capita fish consumption per year in India ?

A:-Manipur

B:-Kerala

C:-Andhra Pradesh

D:-Tripura

Correct Answer:- Option-D

Question79:-When the trawling was introduced in Kerala ?

A:-1960

B:-1950

C:-1955

D:-1961

Correct Answer:- Option-B

Question80:-Which committee is responsible for the first implementation of Trawl Ban during monsoon time in Kerala ?

A:-Balakrishnan Nair Committee

B:-D. K. Singh Committee

C:-Sailas Committee

D:-P. S. B. R. James Committee

Correct Answer:- Option-A

Question81:-Where is the head office of KFWFB ?

A:-Kochi

B:-Thiruvananthapuram

C:-Alappuzha

D:-Thrissur

Correct Answer:- Option-D

Question82:-What does IUU fishing stands for ?

A:-Illegal, unreported and undersized

B:-Illegal, unreported and unregulated

C:-Illegal, unauthorized and underutilized

D:-None of the above

Correct Answer:- Option-B

Question83:-The first Community Reserve of Kerala is located at

A:-Thiruvananthapuram

B:-Alappuzha

C:-Ernakulam

D:-Malapuram

Correct Answer:- Option-D

Question84:-Who is the director general of FAO ?

A:-Tedros Adhanom Ghebreyesus

B:-Abdulaziz

C:-QU Dongyu

D:-Robert M. Califf M. D.

Correct Answer:- Option-C

Question85:-Which one is considered as the coral island in India ?

A:-Lakshadweep

B:-Gulf of Kutch

C:-Andaman and Nicobar Islands

D:-Gulf of Mannar

Correct Answer:- Option-A

Question86:-Which state is the largest fish producer in India ?

A:-West Bengal

B:-Andhra Pradesh

C:-Gujarat

D:-Kerala

Correct Answer:- Option-B

Question87:-How much is the continental shelf of Kerala ?

A:-41 Sq. Km

B:-45 Sq. Km

C:-48 Sq. Km

D:-49 Sq. Km

Correct Answer:- Option-A

Question88:-How much is the total outlay of the PMMSY Scheme ?

A:-20000

B:-20050

C:-20200

D:-20150

Correct Answer:- Option-B

Question89:-Quinquennial Review Team (QRT) assesses the policy framework of ICAR every \_\_\_\_\_ year.

A:-3

B:-5

C:-10

D:-12

Correct Answer:- Option-B

Question90:-Which out of the following is the nodal agency for FISHnet ?

A:-MPEDA

B:-CAA

C:-MATSYAFED

D:-FISHCOPFED

Correct Answer:- Option-D

Question91:-Integrated Fishery Development Projects implemented by Matsyafed was with the assistance of which of the following ?

- A:-NCDC
- B:-NFDB
- C:-NIC
- D:-State Fisheries Department

Correct Answer:- Option-A

Question92:-Cluster Approach in shrimp farming was being trained to farmer societies by which of the following ?

- A:-CAA
- B:-RGCA
- C:-NaCSA
- D:-NETFISH

Correct Answer:- Option-C

Question93:-Who assumes the office as the chairman of NFDB ?

- A:-Secretary-Dept. of Fisheries
- B:-Joint Secretary-Dept. of Fisheries
- C:-Additional Secretary-Dept. of Fisheries
- D:-Minister of State Fisheries, Animal Husbandry and Dairying

Correct Answer:- Option-A

Question94:-Which act holds provisions to prevent construction of shrimp farms in mangrove area, other sensitive areas and in agricultural land ?

- A:-Environmental Protection Act, 1986
- B:-Coastal Aquaculture Authority Act, 2005
- C:-Biological Diversity Act, 2002
- D:-None of the above

Correct Answer:- Option-B

Question95:-Rural Infrastructure Development Fund meant for State Government is funded by which of the following organization ?

- A:-NCDC
- B:-NABARD
- C:-SCARDB
- D:-NAFED

Correct Answer:- Option-B

Question96:-Which among the following is the apex federation of primary level welfare societies of the coastal fishery sector of Kerala ?

- A:-Matsyafed
- B:-KSCADC
- C:-ADAK
- D:-FFDA

Correct Answer:- Option-A

Question97:-Which among the following is a democratically managed society of fish workers ?

- A:-TAFCOFED
- B:-Matsyabavan
- C:-KSCFF
- D:-SIFFS

Correct Answer:- Option-D

Question98:-Who among the following developed the pearl® brand of artemia ?

- A:-RGCA
- B:-CIFA
- C:-CIBA
- D:-NaCSA

Correct Answer:- Option-A

Question99:-Agricultural Credit Department and Rural Planning Credit Cell (RPCC) of Reserve Bank of India was replaced by which among the following ?

A:-NABARD

B:-NCDC

C:-RRB

D:-SCARDB

Correct Answer:- Option-A

Question100:-Which of the following is supported by TUSMP Scheme ?

A:-Craft and Gear

B:-Aquaculture

C:-Seafood Value Addition

D:-Fish Seed Production

Correct Answer:- Option-C