FINAL ANSWER KEY

Ouestion Paper Code: 35/2023/OL Category Code: 249/2021 Exam: Fisheries Assistant Medium of Question: English Date of Test 21-02-2023 **Fisheries** Department Alphacode Question1:-The only carp that breeds naturally in confined waters is the A:-Grass Carp **B:-Common Carp** C:-Catla D:-Silver Carp Correct Answer:- Option-B Question2:-Name an anaesthetic used in a fish hatchery. A:-Ethyl-m-aminobenzoate B:-Overprin C:-Wowa-FH D:-Malachite green Correct Answer:- Option-A Question3:-Live Feeds; daphnia and moina are A:-Protozoan B:-Cladoceran C:-Copipod D:-Rotifer Correct Answer:- Option-B Question4:-Stocking of the nursery pond is for rearing A:-Fingerling to adult B:-Fattering fish C:-Larvae to fry D:-Fry to fingerlings Correct Answer:- Option-C Question5:-Toxic compound of mahua oil cake is A:-Chlorine B:-Biotin C:-Aldrin D:-Saponin Correct Answer:- Option-D Question6:-Identify the catfish from the farming methods: It is an omnivorous fish, cultured in a stone pitched pond with 75 degree slope for embankment. Fencing the sides with the Pole and net up to a height of 60 cm. A:-Heteropneustes fossilis B:-Ompok malabaricus C:-Horabagrus brachysoma D:-Anabas testudineus Correct Answer:- Option-D is declared as the State fish of Kerala in the year 2010. A:-Etroplus Suratensis B:-Rastrelliger Kanagurta C:-Gangetic Shark

B:-Ovaprim injection

Question8:-Shrimp maturation is induced using

C:-Eyestalk ablation

A:-Artificial raining

D:-Sardinella Longiceps Correct Answer:- Option-A

D:-Injection of saline on caudal peduncle

Correct Answer:- Option-C Question9:-Male copulatory organ for shrimp is A:-Thelycum B:-Petasma C:-Periocarp D:-Pleopods Correct Answer:- Option-B Question10:-Preferred food for tiger shrimp larvae, zoea is A:-Diatom B:-Pellet food C:-Blue green algae D:-Artemia Correct Answer:- Option-A Question11:-Name the holistic method of shrimp farming without using any antibiotics or chemicals in the hatchery and farm. A:-Mixed farming B:-Integrated farming C:-IMTA D:-Organic farming Correct Answer:- Option-D Question12:-Female mud crabs can be identified by their A:-Broad abdominal flap B:-Thick carapace C:-Slender abdominal flap D:-Broad carapace Correct Answer:- Option-A Question13:-Mussel culture method that are adopted for sea farming are A:-Raft culture and long line culture B:-Pen culture and rack culture C:-Raft culture and pen culture D:-Rack culture and long line culture Correct Answer:- Option-A Question14:-Which agency of the Kerala Government under the fisheries department has drawn up a total integrated plan to improve the basic infrastructural facilities of the coastal belt? A:-Matsyafed B:-ADAK C:-CMFRI D:-KSCADC Correct Answer:- Option-D Question15:-The fish body form adapted to manoeuvring in crevices is A:-Fusiform B:-Depressed form C:-Compressed form D:-Anguilliform Correct Answer:- Option-D Question16:-The Shrimp has a _____ number of segments in the body having _____ pair of appendages. A:-13 segments and 6 appendages B:-19 segments and 19 appendages C:-13 segments and 5 appendages D:-2 segments and 6 appendages Correct Answer:- Option-B Question17:-Find out the false statement: A:-Biofloc is a water recycling approach. B:-The bio-flock technique leads to the generation of a nitrogen cycle that maintains a low C:N ratio. C:-Bio-flock system stimulates heterotrophic microbial growth. D:-Molasses and sugar are added as carbon sources in the bio-flock system. Correct Answer:-Question Cancelled Question18:-Female scampi carrying eggs in brood is called

A:-Virgin female

B:-Berried female
C:-IMTA
D:-Spermatozoa
Correct Answer:- Option-B
Question19:-Low pH in pond can be controlled by using
A:-Lime
B:-Zeolite
C:-Fertiliser
D:-Hydrochloric acid
Correct Answer:- Option-A
Question20:-Observe the statements:
1. Over fertilisation in ponds produce algal bloom.
2. Excess phytoplankton growth will choke the fish gills.
3. Excessively rich plankton reduce pond pH at daybreak.
4. Excessively rich plankton produces a very high pH in the late afternoon.
A:-Only the first statement is correct.
B:-First and second statements are correct.
C:-Third and Fourth statements are correct.
D:-All are correct
Correct Answer:- Option-D
Question21:-Utilisation of the aquatic and coastal land in a sustainable manner by ensuring enough resources for our future
generation is the one of the objective of
A:-MPEDA
B:-CMFRI
C:-CAA
D:-CIFA
Correct Answer:- Option-C
Question22:-The main bottleneck for seabass culture is
A:-Euryhaline nature
B:-Cannibalism
C:-Availability of quality water
D:-Low demand
Correct Answer:- Option-B
Question23:-Find out the false statements about RAS.
A:-Uses limited space
B:-Uses less feed
C:-Uses limited water
D:-High power requirement
Correct Answer:- Option-B
Question24: is an endoparasite disease.
A:-Icthyophtheriasis
B:-Costiasis
C:-Whirling disease D:-Learniasis
Correct Answer:- Option-C
Question25:-A coir mat is placed below the water, nearly 30 cm above the bottom of the pond, in order to accelerate the growth of, the favourite food of Chanos.
A:-Green algae
B:-Mysids
C:-Lab-Lab
D:-Rotifer
Correct Answer:- Option-C
Question26:-The aquatic area from the low tide line up to territorial limits is classified as
A:-CRZ-1
B:-CRZ-2
C:-CRZ-3
D:-CRZ-4
Correct Answer:- Option-D
Question27: is a stenohaline fish.
A:-Milk fish

B:-Eel C:-Seabass D:-Mullet Correct Answer:- Option-B Question28:-Select the fish suitable for Biological weed control. A:-Grass Carp **B:-Seabass** C:-Murrel D:-Silver fish Correct Answer:- Option-A Question29:-In the Jar hatchery system, the water flow rate of jar is A:-0.5 to 0.7 litre/minute for carps. B:-0.7 to 1 litre/minute for carps. C:-0.3 to 0.5 litre/minute for carps. D:-None of these Correct Answer:- Option-B Question30:-Egg of which fish show adhesive nature and weeds like Hydrilla or Najas are provided as egg collectors in breeding pools. A:-Grass carp B:-Silver carp C:-Catla D:-Common carp Correct Answer:- Option-D Question31:-Expand GIFT. A:-Growth Improved Farmed Tilapia B:-Genetically Improved Famed Tilapia C:-Globally Important Farmed Tilapia D:-None of these Correct Answer:- Option-B Question32:-In seed production of Tilapia for all male production, the sex reversal of female population is achieved by mixing which hormone through feed. A:-Estra diol B:-17`alpha`methyl - testosterone C:-Ovaprim D:-OvaFX Correct Answer:- Option-B Question33:-Identify the fish with following features. Shows parental care (ii) Attach eggs to hard substratum (iii) State fish of Kerala A:-Mackeral B:-Oil Sardine C:-Miss Kerala D:-Pearl spot

Correct Answer:- Option-D

Question34:-Name the fish shows Protandrous hermophroditism.

A:-Asian sea bass

B:-Common carp

C:-Pearl spot

D:-Catla

Correct Answer: - Option-A

Question35:-Grading should be done in 7-10 days during the rearing of young ones in

A:-Grass carp

B:-Silver carp

C:-Asian Seabass

D:-Tilapia

Correct Answer:- Option-C

Question36:-Which of the following statement is true about the sexual dimorphism of Penacid Shrimp? In male, appendages of first abdominal segment is modified to Petasma In female thelycum is place between fourth and fifth pair of walking lea (iii) In male Gonophore is present at the base of fifth pair of walking leg A:-Only (ii and iii) B:-Only (i and ii) C:-All of the above (i, ii, iii) D:-Only (i and iii) Correct Answer:- Option-C Question37:-Name of the live diatom feed for the early larval stages of Shrimp. A:-Chaetoceros sp or Skeletonema sp B:-Artemia or Brine shrimp C:-Daphnia and Moina D:-None of these Correct Answer:- Option-A Question38:-In induced maturation of Shrimp eye stalk ablation done with the help of A:-Electrocautery apparatus B:-Cut off with Scissors or Sharp knife C:-Tied with string D:-All of these Correct Answer:- Option-D Question39:-Suitable salinity for larval rearing of fresh water prawn A:-25 ppt B:-12 ppt C:-5 ppt D:-None of these Correct Answer:- Option-B Question40:-Scientific name of Green mussel A:-Perna Indica B:-Perna Viridis C:-Crassostrea Madrasensis D:-Crassostrea rivularis Correct Answer:- Option-B Question41:-Young ones of mussel are called A:-Instar B:-Megalopa C:-Spat D:-Mysis Correct Answer:- Option-C Question42:-In giant fresh water prawn adult male prawn can be identify by A:-The presence of Petasma is first abdominal segment B:-Males possess appendix musculina in between endopods of second pleopod C:-Presence of Thelycum between fourth and fifth pair of walking leg D:-None of the above Correct Answer:- Option-B Question43:-Which of the following statement is true about the Miss Kerala aquarium fish? This is a species endemic to the fast flowing hill streams and rivers of the Western Ghats in India. (ii) A red line running from their snout, through the eye back towards the middle of the body. (iii) His scientific name is Sahyadria Denisonii A:-Only (ii and iii) B:-Only (i and ii) C:-All of the above (i, ii and iii) D:-Only (i and iii) Correct Answer:- Option-C Question44:-Scientific name of Angel fish. A:-Xiphophorus Hilleri **B:-Astronotus Ocellatus** C:-Trichogaster Trichopterus

D:-Pterophyllum scalare Correct Answer:- Option-D Question45:-It is a member of the family Poecilidae A:-Gold fish B:-Guppy C:-Angel fish D:-Oscar Correct Answer:- Option-B Question46:-Egg laying ornamental fishes with diverse patterns of parental care shown in family A:-Poecilidae B:-Characidae C:-Cichlidae D:-Cyprinidae Correct Answer:- Option-C Question47:-Which phenomenon leads to the production of individual fish with undesirable trait? A:-Selective breeding B:-In breeding C:-Cross fertilization D:-All of these Correct Answer:- Option-B Question48:-In Poecilid Fishes a long modified reproductive organ used for transfer of Sperm is called A:-Anal fin B:-Gonopodium C:-Tubercles D:-None of these Correct Answer:- Option-B Question49:-Which of the following statement is true about aquarium plants? Vallisneria is a grass like freshwater aquatic plant, commonly called Eelgrass (ii) Echinodorus is commonly known as Amazon Sword Plant (iii) Myriophyllum sp. is a flowering plant commonly called water milfoil A:-Only (i and iii) B:-Only (ii and iii) C:-Only (i and ii) D:-All of the above (i, ii and iii) Correct Answer:- Option-D Question 50:- In Biofilter Ammonia oxidised to nitrite and nitrate by A:-Nitrospira B:-Nitrosomonas C:-Nitrobacter D:-All of these Correct Answer:- Option-D Question51:-Which among the following fish is an egg depositor? A:-Gold fish B:-Angel fish C:-Zebra fish D:-Killi fish Correct Answer:- Option-B Question52:-From the information given below identify the disease. Symptom - Pin head sized white spots on the body and fins. A:-Dropsy **B:-Saprolegniasis** C:-Ichthyophthyriasis D:-Fin rot and Tail rot Correct Answer:- Option-C Question53:-The breeding set or female to male ratio for gold fish is A:-1:2 B:-2:1 C:-1:1 D:-1:4 Correct Answer:- Option-A Question54:-Fish disease, like fin rot and tail rot are caused by the causative organism.

A:-Ichthyophthirius Multifilis

B:-Pseudomonas, Aeromonas C:-Saprolegnia D:-None of these Correct Answer:- Option-B Question55:-Name a substance used for fixing glass panels of aquarium tank. A:-Silicon Sealant B:-Fevicol C:-Acrylicgum D:-None of these Correct Answer:- Option-A Question56:-Which among the following male fish possess tubercles on pectoral fin base and operculum during the breeding time? A:-Angel fish B:-Guppy C:-Sword tail D:-Gold fish Correct Answer:- Option-D Question57:-The functional unit of Myofibril is A:-Sarcomere B:-Myotome C:-Actin D:-Mvosin Correct Answer:- Option-A Question58:-Myofibril is formed by myofibrillar protein, which consist of A:-Actin and Myosin B:-Tropomyosin, Troponin and Actinin C:-Both 1 and 2 D:-None of the above Correct Answer:- Option-C Question59:-The "Dun" spoilage is caused by A:-Halophilic bacteria B:-Halophilic mould C:-Both 1 and 2 D:-Oxidation of fat Correct Answer:- Option-B Question60:-For irradiation of food, we can use controlled exposure of food to the radiation sources such as A:-X rays B:-Electron beams C:-Isotopes of Cobalt D:-All of the above Correct Answer:- Option-D Question61:-The stage at which three guarters of water in the fish freezes and temperature remain fairly constant at about -1°C is known as A:-Freezing zone B:-Thermal arrest C:-Initial falling rate period D:-None of the above Correct Answer:- Option-B Question62:-Which one of the following statement is/are correct? Sarcoplamic proteins are soluble in water Fibrillar proteins soluble in high ionic strength solutions (iii) Stroma proteins are soluble in salt solution A:-Only (i and ii) B:-Only (i and iii) C:-Only (ii and iii) D:-All of the above (i, ii and iii) Correct Answer:- Option-A Question63:-The final breakdown product of ATP is A:-ADP B:-AMP

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C:-IMP
     D:-Hypoxanthine
     Correct Answer:- Option-D
Question64:-Which one of the following statement is/are correct?
    Dehydration is a quality problem in frozen fish
(ii) Dun spoilage found in frozen products
(iii) Green/Yellow discolouration is quality problem found in some frozen fish
     A:-Only (i and ii)
     B:-Only (i)
     C:-Only (ii and iii)
     D:-Only (i and iii)
     Correct Answer:- Option-D
Question65:-Direct faecal indicator organism is
     A:-Salmonella
     B:-Eschericia coli
     C:-Staphylococcus
     D:-Vibrio Cholera
     Correct Answer:- Option-B
Question66:-Which one of the following statement is/are correct?
     Faculative psychrophiles are psychrophiles with temperature range that extend above 20°C
(ii)
     Obligate psychrophiles are psychrophiles with temperature range that extend above 20°C
      Thermophiles grow at elevated temperature above 45°C
(iii)
     A:-Only (i and ii)
     B:-Only (i)
     C:-Only (i and iii)
     D:-Only (iii)
     Correct Answer:- Option-C
Question67:-International standards for quality control in seafood is
    USFDA
(ii) BIS
(iii) Codex Alimentarius
(iv) ISO 9000
     A:-Both (i, iii and iv)
     B:-Only (iii)
     C:-Only (iv)
     D:-Both (iii and iv)
     Correct Answer:- Option-D
Question68:-HACCP is a system which provide
     A:-Quality of food
     B:-Food Safety
     C:-Prevent fraudulent
     D:-All of the above
     Correct Answer:- Option-B
Ouestion69:-Serratia Salinaria are
     A:-Halophobic bacteria
     B:-Halotolerant bacteria
     C:-Halophilic bacteria
     D:-Halotolerant mould
     Correct Answer:- Option-C
Question70:-Which one of the following statement is/are correct about a "Decision Tree" in a HACCP system?
(i) It is used to identify hazards
(ii) It is used to identify critical control points
(iii) It is used to establish critical limit
(iv) It is used to establish monitoring system
     A:-Only (i, ii and iii)
     B:-Only (iii and iv)
     C:-Only (iv)
     D:-Only (ii)
     Correct Answer:- Option-D
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Question71:-Which one of the following statement is/are correct?
(i)
     Trepang is made from seacucumber
     Beche-de-mer is made from Holothuria
(ii)
(iii) Beche-de-mer is a frozen product
     A:-Only (i and ii)
     B:-All of the above (i, ii and iii)
     C:-Only (ii and iii)
     D:-Only (i and iii)
     Correct Answer:- Option-A
Question72:-Which one of the following statement is/are correct?
    Icing glass is made from scales of fish
(ii) Dried fish maws are also called icing glass
(iii) Icing glass is used for clarification of beverages like cidar, wine, bee etc.
     A:-Only (i and iii)
     B:-Only (i and ii)
     C:-Only (ii and iii)
     D:-All of the above (i, ii and iii)
     Correct Answer:- Option-C
Question73:-Wet rendering is a process employed for the production of
     A:-Chitin
     B:-Chitosan
     C:-Fish meal
     D:-Fish protein concentrate
     Correct Answer:- Option-C
Question74:-Which of the following statement is/are correct?
    Algin consist of D-Mannuronic acid and 2-guluranic acid
    Algin is generally obtained from red algae
(iii) Algin based jels are heat stable
     A:-Only (i and ii)
     B:-Only (i and iii)
     C:-All of the above (i, ii and iii)
     D:-Only (ii)
     Correct Answer:- Option-B
Question75:-Ambergris is obtained from
     A:-Shark liver
     B:-Intestine of sperm whale
     C:-Scales of fish
     D:-Swim bladder of fish
     Correct Answer:- Option-B
Question 76:- The method used to prepare Fish Protein Concentrate
     A:-Viobin Process
     B:-The Canadian Process
     C:-Azeotropic Extraction Method
     D:-All of the above
     Correct Answer:- Option-D
Question77:-The gases used in Modified Atmospheric Packing (MAP) are
(i)
    Carbon dioxide
(ii) Nitrogen
(iii) Oxygen
(iv) Hydrogen
     A:-Only (i and iv)
     B:-Only (i, ii and iii)
     C:-Only (iii and iv)
     D:-Only (ii and iii)
     Correct Answer:- Option-B
Question78:-Which one of the following statement is/are correct?
     Chitosan is made from shrimp shell
    Chitosan is soluble in dilute organic acid
(iii) Chitosan is insouble in water
     A:-Only (i)
     B:-Only (ii and iii)
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C:-Only (i and iii) D:-All of the above (i, ii and iii) Correct Answer:- Option-D Question79:-Which of the following statement is/are correct about traditional crafts used in Coromandal coast? 'Periyamaram' is made up of 4 logs. (ii) 'Irukumaram' consists of 6 logs. (iii) 'Kolamaram' is made up of 7 logs. A:-Only (i) B:-Only (i and ii) C:-Only (i and iii) D:-All of the above (i, ii and iii) Correct Answer:- Option-C Question80:-"Odams" and "Thonies", the popular traditional crafts of South West Coast of India are examples of A:-Coracle **B:-Dugout Canoe** C:-Plank Built Canoe D:-Raft Catamaran Correct Answer: - Option-B Question81:-Select the pair of fishing gears that contain only "Passive Gears". A:-Seine net and hooks and lines B:-Entangling nets and cast net C:-Traps and gill nets D:-Dredges and trolling lines Correct Answer:- Option-C Question82:-Which of the following statement about fishing gears is/are correct? 'Snoods' are parts of Long lines. (ii) 'Purse Seine' is a falling gear. (iii) 'Bottom Trawl net' is effective for catching shrimps. A:-Only (i and ii) B:-All of the above (i, ii and iii) C:-Only (ii and iii) D:-Only (i and iii) Correct Answer:- Option-D Question83:-Towed trawls are kept opened horizontally by using A:-Kelley's eye B:-Jibs C:-Otter boards D:-Stopper link Correct Answer:- Option-C Question84:-Which of the following statement about 'Steel', a major fishing craft material is/are correct? Mild steel has a carbon content of 0.3 to 0.8% (ii) Steel is lighter per cubic m than aluminium or FRP. (iii) Steel offers high uniform strength and minimum wastage of material. A:-Only (i) B:-Only (i and ii) C:-Only (i and iii) D:-Only (iii) Correct Answer:- Option-D Question85:-The fishing method in which several lines with baited hooks or lures are towed through the water from a vessel A:-Trolling B:-Seining C:-Trawling D:-Entangling Correct Answer:- Option-A Question86:-Select the main purpose of 'Flapper' in trawls, from the given options. A:-to restrict the escape of fish from the aft part B:-to protect the net from damage, especially on stony ground C:-to accumulate the catch of the trawl net

D:-to provide smooth curvature at the mouth of the trawl

Correct Answer:- Option-A

Question87:-Which of the given statement about the 'bunt' portion of a purse seine is/are correct? It is made up of thicker twine. It is shorter in depth than other panels. (iii) This part of the net is shot last A:-Only (ii and iii) B:-Only (i and ii) C:-All of the above (i, ii and iii) D:-Only (i and iii) Correct Answer:- Option-B Question88:-Select the correct statement/statements about fishing craft made of Aluminium, from the following. increased engine size (ii) increased cargo carrying capacity (iii) reduced displacement A:-Only (ii) B:-Only (i and iii) C:-Only (i and ii) D:-Only (ii and iii) Correct Answer:- Option-D Question89:-From the given options, select the 'deep - sea shrimp' species. A:-Parapennaeopsis Hardwickii B:-Puerulus Sewelli C:-Aristeus Alcocki D:-Leander Stylifera Correct Answer:- Option-C Question90:-Which of the following statement about 'N-cut' used to shape the netting is/are correct? A cut through both the twines at top or bottom of the knot in the horizontal direction. When the knot in N-cut is undone, the mesh is opened. (iii) It is also called P-cut or point -cut. A:-Only (ii and iii) B:-All of the above (i, ii and iii) C:-Only (i and ii) D:-Only (i and iii) Correct Answer:- Option-A Question91:-Select the natural bast fibre from the given options. A:-Cotton B:-Hemp C:-Manila D:-Sisal Correct Answer:- Option-B Question92:-Which of the following statements about different 'knots' is/are correct? Overhand knot is made by passing the end of the line over the standing part and through the eye. Sheet bend knot is formed of two overhand knots with the ends always falling in line with outer parts. (iii) Fisherman's knot is formed of two overhand knots that slide together when the ropes and pulled forming a firm knot. A:-Only (i and iii) B:-All of the above (i, ii and iii) C:-Only (i and ii) D:-Only (ii and iii) Correct Answer: - Option-A Question93:-Choose from the given options, function of 'Transducer' in an echo sounder. A:-amplifies the week electrical oscillations produced. B:-converts the electrical energy to sound. C:-generates high voltage electric pulses vertically. D:-displays the echoes in the proper way. Correct Answer:- Option-B Question94:-Identify the material that is good for making floats useful in deep sea fishing. A:-Steel B:-Sponge plastic C:-HDPE D:-Aluminium Correct Answer:- Option-C

Question95:-Select the material for making 'ropes' that has maximum breaking strength, from the given options.

A:-PES B:-PVAA

C:-PP

D:-PA

Correct Answer:-Question Cancelled

Question96:-Which of the given statement about the services of INCOIS is/are correct?

- (i) Formulate deep-sea fishing regulations.
- (ii) Identify PFZ in the seas.
- (iii) Provide coral bleaching alerts

A:-All of the above (i, ii and iii)

B:-Only (i and ii)

C:-Only (ii and iii)

D:-Only (i and iii)

Correct Answer:- Option-C

Question 97:-Select the maritime State that first enacted the Marine Fisheries Act in India, in 1980.

A:-Gujarat

B:-Kerala

C:-Maharashtra

D:-West Bengal

Correct Answer:- Option-B

Question98:-From the given statements about the specifications for Lifebuoys, select the one that is NOT correct.

A:-The outer diameter of a lifebuoy shall not be more than 700 mm.

B:-The lifebuoys shall be of a highly visible colour.

C:-Lifebuoys shall be constructed of inherently buoyant material.

D:-A lifebuoy shall have a mass of not less than 2.5 kg.

Correct Answer:- Option-A

Question99:-What is meant by 'ghost fishing'?

A:-The use of poison, electricity or explosives to kill or stun fish.

B:-Harmful bottom and industrial trawling that destroys the sea bed and various marine life

C:-Discarded or lost fishing gear in the marine environment continues to catch fish and trap animals.

D:-Unintentional catching of different marine organisms along with the target fishes

Correct Answer:- Option-C

Question100:-Select the correct statement/statements about EEZ, from the following.

- (i) Area of Indian EEZ is 3.32 million sq.km
- (ii) Indian EEZ has an estimated marine fishery potential of 2.02 million tonnes.
- (iii) Exclusive Economic Zone stretches out to 200 nautical miles from the coast.

A:-Only (i and ii)

B:-Only (ii)

C:-Only (ii and iii)

D:-Only (iii)

Correct Answer:- Option-D