

49 Fisheries Resource Management ICAR SEPT 2022

Topic:- GEN KNOW COMMON PHD

1) Colour of the tag used on certified seed bags is[Question ID = 16958][Question Description = 101_221_GKD_SEP22_Q01]

1. Blue [Option ID = 37829]
2. Purple [Option ID = 37830]
3. White [Option ID = 37831]
4. Golden Yellow [Option ID = 37832]

2) Following are the statements regarding the Usar soil -

- A. It is reclaimed by adding lime.
- B. This soil has pH more than seven.
- C. Paddy crop can be grown in this soil.

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

[Question ID = 16959][Question Description = 102_221_GKD_SEP22_Q02]

1. A and B only [Option ID = 37833]
2. B and C only [Option ID = 37834]
3. C only [Option ID = 37835]
4. A only [Option ID = 37836]

3) When total utility of a commodity increases, marginal utility will be

[Question ID = 16960][Question Description = 103_221_GKD_SEP22_Q03]

1. Negative but increasing
[Option ID = 37837]
2. Positive but decreasing
[Option ID = 37838]
3. Constant
[Option ID = 37839]
4. Either positive or negative
[Option ID = 37840]

4) Where is the headquarter of International Fund for Agriculture Development located?

[Question ID = 16961][Question Description = 104_221_GKD_SEP22_Q04]

1. Vienna, Austria
[Option ID = 37841]
2. Rome, Italy
[Option ID = 37842]
3. New York, USA
[Option ID = 37843]
4. Berlin, Germany
[Option ID = 37844]

5) Mid-Oceanic Ridges are one of the important divisions of the ocean floor. In this respect, point out the incorrect statement regarding the 'Mid-Oceanic Ridges'. [Question ID = 16962][Question Description = 105_221_GKD_SEP22_Q05]

1. It is the largest mountain chain on the surface of the earth [Option ID = 37845]
2. It is a series of interconnected chain within the ocean. [Option ID = 37846]
3. It is characterised by a central rift system [Option ID = 37847]
4. The rift system at the crest is the zone of very low volcanic activity. [Option ID = 37848]

6) Consider the following facts about the union territory of India and point out the one which is incorrect in relation to union territory. [Question ID = 16963][Question Description = 106_221_GKD_SEP22_Q06]

1. These are the areas under the direct control of central government. [Option ID = 37849]
2. Also known as the 'centrally administered territories'. [Option ID = 37850]

3. These territories constitute a conspicuous departure from the unitary feature of India. [Option ID = 37851]
4. There is no uniformity in their administrative systems. [Option ID = 37852]

7) Variety of flora and fauna are found in the different types of forest in India. In this regard, species of trees like teak, *sal shisham*, *sandalwood*, etc. are found in which of the following type of forests in India?[Question ID = 16964][Question Description = 107_221_GKD_SEP22_Q07]

1. Tropical evergreen forests [Option ID = 37853]
2. Tropical thorn forests [Option ID = 37854]
3. Tropical deciduous forests [Option ID = 37855]
4. Montane forests [Option ID = 37856]

8) The Marginal Preference Theory of consumption behaviour was proposed by

[Question ID = 16965][Question Description = 108_221_GKD_SEP22_Q08]

1. Armstrong
[Option ID = 37857]
2. J.K.Hicks
[Option ID = 37858]
3. Neumann
[Option ID = 37859]
4. Edmund Cannon
[Option ID = 37860]

9) Point out the incorrect statements regarding the service sector in India.[Question ID = 16966][Question Description = 109_221_GKD_SEP22_Q09]

1. It is the highest contributor to GDP [Option ID = 37861]
2. It requires skilled labour [Option ID = 37862]
3. It is the fastest growing sector [Option ID = 37863]
4. It is restricted to very few sectors. [Option ID = 37864]

10) Consider the statements regarding the agriculture sector in India and point out the incorrect statement.[Question ID = 16967][Question Description = 110_221_GKD_SEP22_Q10]

1. Agriculture sector is the largest employer of workforce [Option ID = 37865]
2. It has contributed to the Gross Value Added (GVA) [Option ID = 37866]
3. Growth in allied sectors is the major drivers of overall growth in the sector. [Option ID = 37867]
4. Minimum Support Price (MSP) policy is used as to promote crop uniformity. [Option ID = 37868]

11) In case of related goods, the cross elasticity of demand is[Question ID = 16968][Question Description = 111_221_GKD_SEP22_Q11]

1. Low [Option ID = 37869]
2. High [Option ID = 37870]
3. Zero [Option ID = 37871]
4. Unity [Option ID = 37872]

12) With reference to organic farming in India, consider the following statements :

- A. The National Programme for Organic Production' (NPOP) is operated under the guidelines and directions of the Union Ministry of Rural Development.
- B. The Agricultural and Processed Food Products Export Development Authority' (APEDA) functions as the Secretariat for the implementation of NPOP.
- C. Sikkim has become India's first fully organic state.

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

[Question ID = 16969][Question Description = 112_221_GKD_SEP22_Q12]

1. A and B only
[Option ID = 37873]
2. B and C only
[Option ID = 37874]
3. C only
[Option ID = 37875]
4. A, B and C

[Option ID = 37876]

13) With reference to the circumstances in Indian agriculture, the concept of "Conservation Agriculture" assumes significance. Which of the following falls under the Conservation Agriculture ?

- A. Avoiding the monoculture practices.
- B. Adopting minimum tillage.
- C. Avoiding the cultivation of plantation crops.
- D. Using crop residues to cover soil surface.
- E. Adopting spatial and temporal crop sequencing/ crop rotations.

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

[Question ID = 16970][Question Description = 113_221_GKD_SEP22_Q13]

- 1. A, C and D only [Option ID = 37877]
- 2. B, C, D and E only [Option ID = 37878]
- 3. B, D and E only [Option ID = 37879]
- 4. A, B, C and E only [Option ID = 37880]

14) Consumers are likely to get a variety of goods in which kind of market competition[Question ID = 16971][Question Description = 114_221_GKD_SEP22_Q14]

- 1. Monopoly [Option ID = 37881]
- 2. Duopoly [Option ID = 37882]
- 3. Oligopoly [Option ID = 37883]
- 4. Monopolistic [Option ID = 37884]

15) What is the correct chronological order of the following laws enacted for the conservation and protection of environment ?

- A. Environment (Protection) Act.
- B. Water (Prevention & Control of Pollution) Act.
- C. Air (Prevention & Control of pollution) Act.
- D. National Green Tribunal Act.

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

[Question ID = 16972][Question Description = 115_221_GKD_SEP22_Q15]

- 1. B, C, A, D [Option ID = 37885]
- 2. A, B, C, D [Option ID = 37886]
- 3. C, B, A, D [Option ID = 37887]
- 4. D, C, B, A [Option ID = 37888]

16) The scientific study of soil is[Question ID = 16973][Question Description = 116_221_GKD_SEP22_Q16]

- 1. Earth Study [Option ID = 37889]
- 2. Soil Science [Option ID = 37890]
- 3. Pedology [Option ID = 37891]
- 4. Soil Chemistry [Option ID = 37892]

17) *Triticum aestivum*, the common bread wheat is -

[Question ID = 16974][Question Description = 117_221_GKD_SEP22_Q17]

- 1. Tetraploid

[Option ID = 37893]

- 2. Hexaploid

[Option ID = 37894]

- 3. Haploid

[Option ID = 37895]

- 4. Diploid

[Option ID = 37896]

18) Sectoral inflation refers to[Question ID = 16975][Question Description = 118_221_GKD_SEP22_Q18]

- 1. Running inflation [Option ID = 37897]

2. Comprehensive inflation [Option ID = 37898]
3. Sporadic inflation [Option ID = 37899]
4. Creeping inflation [Option ID = 37900]

19) Keynes Liquidity trap refers to[Question ID = 16976][Question Description = 119_221_GKD_SEP22_Q19]

1. Speculative demand for money [Option ID = 37901]
2. Transactions motive of money is inelastic [Option ID = 37902]
3. Precautionary motive of money is inelastic [Option ID = 37903]
4. Transactions motive of money is constant [Option ID = 37904]

20) A business is solvent if[Question ID = 16977][Question Description = 120_221_GKD_SEP22_Q20]

1. Total receipts exceed total expenditures [Option ID = 37905]
2. Total debt exceeds total equity [Option ID = 37906]
3. Total sales exceed total cash expense [Option ID = 37907]
4. Total assets exceed total liabilities [Option ID = 37908]

Topic:- Fishery Science 1_PHD

1) Which of the following is NOT a crustacean?

[Question ID = 5351][Question Description = 101_174_FSC_SEP22_Q01]

1. Hermit crab [Option ID = 21401]
2. Mole crab [Option ID = 21402]
3. Horseshoe crab [Option ID = 21403]
4. Spider crab [Option ID = 21404]

2) Indian snapper is scientifically known as[Question ID = 5352][Question Description = 102_174_FSC_SEP22_Q02]

1. *Lutjanus argentimaculatus* [Option ID = 21405]
2. *Lutjanus bengalensis* [Option ID = 21406]
3. *Lutjanus johnii* [Option ID = 21407]
4. *Lutjanus madras* [Option ID = 21408]

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

Assertion A : Freshwater teleosts have hypotonic internal environment to their surroundings.

Reason R : Freshwater teleosts limit their water intake and excrete large quantities of dilute urine.

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

[Question ID = 5353][Question Description = 103_174_FSC_SEP22_Q03]

1. Both A and R are true and R is the correct explanation of A [Option ID = 21409]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 21410]
3. A is true but R is false [Option ID = 21411]
4. A is false but R is true [Option ID = 21412]

4) Internal glandular structure, found in the mantle cavity of some molluscs, involved in secretion of egg cases is[Question ID = 5354][Question Description = 104_174_FSC_SEP22_Q04]

1. Nidamental gland [Option ID = 21413]
2. Antennary gland [Option ID = 21414]
3. Rectal gland [Option ID = 21415]
4. Green gland [Option ID = 21416]

5) Gills attached to lateral wall of the segment bearing the limb in prawn are known as[Question ID = 5355][Question Description = 105_174_FSC_SEP22_Q05]

1. Podobranch [Option ID = 21417]
2. Pleurobranch [Option ID = 21418]
3. Elasmobranch [Option ID = 21419]
4. Arthrobranch [Option ID = 21420]

6) Right age composition of the fish catch function for a given level of effort can be achieved by[Question ID = 5356][Question Description = 106_174_FSC_SEP22_Q06]

1. Open access fishing [Option ID = 21421]
2. Eumetric fishing [Option ID = 21422]
3. Artisanal fishing [Option ID = 21423]
4. Underfishing [Option ID = 21424]

7) Which among the following is a measure of how the feeding interactions are distributed between trophic levels?

[Question ID = 5357][Question Description = 107_174_FSC_SEP22_Q07]

1. Fulton's index [Option ID = 21425]
2. Cycling index [Option ID = 21426]
3. Saprobic index [Option ID = 21427]
4. System omnivory index [Option ID = 21428]

8) Teesta River drains through the Indian states of [Question ID = 5358][Question Description = 108_174_FSC_SEP22_Q08]

1. Assam and West Bengal [Option ID = 21429]
2. Sikkim and West Bengal [Option ID = 21430]
3. Assam and Sikkim [Option ID = 21431]
4. Assam, Sikkim and West Bengal [Option ID = 21432]

9) Match List I with List II

List I	List II
A. Vembanad Lake	I. Short neck clam
B. Ashtamudi Lake	II. Black clam
C. Dal Lake	III. Mulletts
D. Chilika Lake	IV. Mirror carp

Choose the correct answer from the options given below:

[Question ID = 5359][Question Description = 109_174_FSC_SEP22_Q09]

1. A - III , B - IV , C - I , D - II [Option ID = 21433]
2. A - II , B - I , C - IV , D - III [Option ID = 21434]
3. A - IV , B - I , C - II , D - III [Option ID = 21435]
4. A - III , B - IV , C - II , D - I [Option ID = 21436]

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

Assertion A : Coralline algae helps build coral reef ecosystem.

Reason R : Coralline algae reinforce the skeletons of corals with calcium carbonate, the hard mineral that forms the algae's skeleton.

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

[Question ID = 5360][Question Description = 110_174_FSC_SEP22_Q10]

1. Both A and R are true and R is the correct explanation of A [Option ID = 21437]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 21438]
3. A is true but R is false [Option ID = 21439]
4. A is false but R is true [Option ID = 21440]

11) Major chank resources in India occur in [Question ID = 5361][Question Description = 111_174_FSC_SEP22_Q11]

1. Malabar coast [Option ID = 21441]
2. Gulf of Mannar [Option ID = 21442]
3. Lakshadweep Islands [Option ID = 21443]
4. West Bengal coast [Option ID = 21444]

12) Annual harvestable potential yield (as per 2018) from the Indian EEZ is revalidated at [Question ID = 5362][Question Description = 112_174_FSC_SEP22_Q12]

1. 3.96 million tonnes [Option ID = 21445]
2. 4.41 million tonnes [Option ID = 21446]
3. 5.31 million tonnes [Option ID = 21447]
4. 6.13 million tonnes [Option ID = 21448]

13) The right of coastal state to both prevent and punish infringement of fiscal, immigration, sanitary, and customs laws within its territory and territorial sea is the basis of [Question ID = 5363][Question Description = 113_174_FSC_SEP22_Q13]

1. Exclusive Economic Zone [Option ID = 21449]
2. Contiguous zone [Option ID = 21450]
3. High sea [Option ID = 21451]
4. Internal water [Option ID = 21452]

14) Which of the following fisheries management measure aimed chiefly at protection of spawners? [Question ID = 5364]

[Question Description = 114_174_FSC_SEP22_Q14]

1. Ranching [Option ID = 21453]
2. Minimum legal size limit [Option ID = 21454]
3. Closed season [Option ID = 21455]
4. Cryopreservation [Option ID = 21456]

15) As per the Biological Diversity Act of India, People's Biodiversity Register is prepared by[Question ID = 5365][Question Description = 115_174_FSC_SEP22_Q15]

1. Biodiversity Management Committee [Option ID = 21457]
2. Department of Biotechnology [Option ID = 21458]
3. State Biodiversity Boards [Option ID = 21459]
4. National Biodiversity Board [Option ID = 21460]

16) Vitamin B₁₂ is

[Question ID = 5366][Question Description = 116_174_FSC_SEP22_Q16]

1. Riboflavin [Option ID = 21461]
2. α-Tocopherol [Option ID = 21462]
3. Pyridoxin [Option ID = 21463]
4. Cyanocobalamin [Option ID = 21464]

17) 15 psi pressure gives a temperature of

[Question ID = 5367][Question Description = 117_174_FSC_SEP22_Q17]

1. 111.1 °C [Option ID = 21465]
2. 115.1 °C [Option ID = 21466]
3. 121.1 °C [Option ID = 21467]
4. 125.1 °C [Option ID = 21468]

18) The high iodine value of Fish oil indicates

[Question ID = 5368][Question Description = 118_174_FSC_SEP22_Q18]

1. High boiling point [Option ID = 21469]
2. Low melting point [Option ID = 21470]
3. High content of iodine [Option ID = 21471]
4. High degree of unsaturation [Option ID = 21472]

19) Among the following the faecal indicator organism is

[Question ID = 5369][Question Description = 119_174_FSC_SEP22_Q19]

1. *Salmonella typhi* [Option ID = 21473]
2. *Shigella sp* [Option ID = 21474]
3. *Escherichia coli* [Option ID = 21475]
4. *Listeria monocytogenes* [Option ID = 21476]

20) During rigor-mortis, the Glycogen in fish is converted to

[Question ID = 5370][Question Description = 120_174_FSC_SEP22_Q20]

1. Lactic acid [Option ID = 21477]
2. Citric acid [Option ID = 21478]
3. Acetic acid [Option ID = 21479]
4. Uric acid [Option ID = 21480]

21) The term "stick-water" is associated with

[Question ID = 5371][Question Description = 121_174_FSC_SEP22_Q21]

1. Fish meal [Option ID = 21481]
2. Salted fish [Option ID = 21482]
3. Fish silage [Option ID = 21483]
4. Iced fish [Option ID = 21484]

22) The dye carbolfuchsin is used in

[Question ID = 5372][Question Description = 122_174_FSC_SEP22_Q22]

1. Simple staining [Option ID = 21485]
2. Gram staining [Option ID = 21486]
3. Spore staining [Option ID = 21487]
4. Acid-fast staining [Option ID = 21488]

23) The causative agent for ciguatera poisoning is

[Question ID = 5373][Question Description = 123_174_FSC_SEP22_Q23]

1. *Gonyaulax catenella* [Option ID = 21489]
2. *Gambierdiscus toxicus* [Option ID = 21490]

3. *Dinophysis fortii* [Option ID = 21491]
4. *Ptychodiscus breve* [Option ID = 21492]

24) The type of botulinum that is more resistant to heat is

[Question ID = 5374][Question Description = 124_174_FSC_SEP22_Q24]

1. Type A [Option ID = 21493]
2. Type B [Option ID = 21494]
3. Type E [Option ID = 21495]
4. Type F [Option ID = 21496]

25) Green colour discoloration in Tuna is due to oxidation of

[Question ID = 5375][Question Description = 125_174_FSC_SEP22_Q25]

1. Myoglobin [Option ID = 21497]
2. Metmyoglobin [Option ID = 21498]
3. Haemochrome [Option ID = 21499]
4. Astaxanthin [Option ID = 21500]

26) Given below are two statements

Statement I: Pathogenic microorganisms can be part of initial microflora.

Statement II: Pathogenic microorganisms may present naturally on fish or due to contamination.

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

[Question ID = 5376][Question Description = 126_174_FSC_SEP22_Q26]

1. Both Statement I and Statement II are true [Option ID = 21501]
2. Both Statement I and Statement II are false [Option ID = 21502]
3. Statement I is true but Statement II is false [Option ID = 21503]
4. Statement I is false but Statement II is true [Option ID = 21504]

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

Assertion A: Depuration is a purification process.

Reason R: Depuration reduces bacterial load and grittiness.

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

[Question ID = 5377][Question Description = 127_174_FSC_SEP22_Q27]

1. Both A and R are true and R is the correct explanation of A [Option ID = 21505]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 21506]
3. A is true but R is false [Option ID = 21507]
4. A is false but R is true [Option ID = 21508]

28) Match List I with List II

List I	List II
A. Fat metabolism	I. PUFA
B. DHA	II. Soxhlet
C. Fat oxidation	III. Beta oxidation
D. Fat estimation	IV. Free radical

Choose the correct answer from the options given below:

[Question ID = 5378][Question Description = 128_174_FSC_SEP22_Q28]

1. A -IV, B -III, C -II, D -I [Option ID = 21509]
2. A -III, B -I, C -IV, D -II [Option ID = 21510]
3. A -II, B -III, C -IV, D -I [Option ID = 21511]
4. A -I, B -II, C -IV, D -III [Option ID = 21512]

29) Match List I with List II

List I	List II
A. Plasmid	I. Bacterial cell wall
B. Transposon	II. Extrachromosomal DNA
C. Bacteriophages	III. Jumping genes
D. Peptidoglycan	IV. Bacterial virus

Choose the correct answer from the options given below:

[Question ID = 5379][Question Description = 129_174_FSC_SEP22_Q29]

1. A - II, B - III, C - IV, D - I [Option ID = 21513]
2. A - IV, B - III, C - II, D - I [Option ID = 21514]
3. A - III, B - IV, C - I, D - II [Option ID = 21515]
4. A - I, B - II, C - IV, D - III [Option ID = 21516]

30) Match List I with List II

List I	List II
A. Acetic acid	I. Nucleotide degradation product
B. Ascorbic acid	II. Fish silage
C. Inosinic acid	III. Antioxidant
D. Formic acid	IV. Pickle

Choose the correct answer from the options given below:

[Question ID = 5380][Question Description = 130_174_FSC_SEP22_Q30]

1. A - IV, B - III, C - II, D - I [Option ID = 21517]
2. A - III, B - IV, C - II, D - I [Option ID = 21518]
3. A - IV, B - III, C - I, D - II [Option ID = 21519]
4. A - II, B - III, C - IV, D - I [Option ID = 21520]

31) Heat rejection factor VCERS will be[Question ID = 5381][Question Description = 131_174_FSC_SEP22_Q31]

1. Equal to one [Option ID = 21521]
2. More than one [Option ID = 21522]
3. Less than one [Option ID = 21523]
4. Depends on the cooling medium of the condenser [Option ID = 21524]

32) Russian type of Otter doors are[Question ID = 5382][Question Description = 132_174_FSC_SEP22_Q32]

1. Suberkrub otter boards [Option ID = 21525]
2. Oval flat slotted otter boards [Option ID = 21526]
3. Rectangular flat otter boards [Option ID = 21527]
4. Rectangular curved otter boards [Option ID = 21528]

33) The upper edges of the boat from stem to stern are called as[Question ID = 5383][Question Description = 133_174_FSC_SEP22_Q33]

1. Sheer line [Option ID = 21529]
2. Rabbit line [Option ID = 21530]
3. Gun Wale [Option ID = 21531]
4. Deck line [Option ID = 21532]

34) Match List I with List II

List I	List II
A. Levee pond	I. Flow-through system
B. Water shed pond	II. Stop-log closures with fish screens
C. Monk sluice	III. Embankment pond
D. Raceways	IV. Crawfish production

Choose the correct answer from the options given below:

[Question ID = 5384][Question Description = 134_174_FSC_SEP22_Q34]

1. A - IV, B - III, C - II, D - I [Option ID = 21533]
2. A - III, B - IV, C - II, D - I [Option ID = 21534]
3. A - IV, B - II, C - I, D - III [Option ID = 21535]
4. A - III, B - II, C - IV, D - I [Option ID = 21536]

35) The region in the purse seine net where the catch is accumulated before brailing[Question ID = 5385][Question Description = 135_174_FSC_SEP22_Q35]

1. Bosom [Option ID = 21537]
2. Bunt [Option ID = 21538]
3. Belly [Option ID = 21539]
4. Throat [Option ID = 21540]

36) A masthead light is[Question ID = 5386][Question Description = 136_174_FSC_SEP22_Q36]

1. White and visible over $112.5 \times 2 = 225$ degrees [Option ID = 21541]

2. Yellow and visible over $112.5 \times 2 = 225$ degrees [Option ID = 21542]
3. Green and visible over $112.5 \times 2 = 225$ degrees [Option ID = 21543]
4. White and visible over $112.5 \times 1 = 112.5$ degrees [Option ID = 21544]

37) The unit of resistivity is[Question ID = 5387][Question Description = 137_174_FSC_SEP22_Q37]

1. Ω . [Option ID = 21545]
2. Ω / metre. [Option ID = 21546]
3. Ω - metre. [Option ID = 21547]
4. Ω / m^2 . [Option ID = 21548]

38) The most common horizontal hanging coefficient on float line in purse seine is[Question ID = 5388][Question Description = 138_174_FSC_SEP22_Q38]

1. 0.4 [Option ID = 21549]
2. 0.5 [Option ID = 21550]
3. 0.6 [Option ID = 21551]
4. 0.7 [Option ID = 21552]

39) The recommended side slope for sandy loam dyke[Question ID = 5389][Question Description = 139_174_FSC_SEP22_Q39]

1. 1:1.5 [Option ID = 21553]
2. 1:2 [Option ID = 21554]
3. 1:2.5 [Option ID = 21555]
4. 1:3 [Option ID = 21556]

40) A floating body is said to be in stable equilibrium when[Question ID = 5390][Question Description = 140_174_FSC_SEP22_Q40]

1. Metacenter coincides with center of gravity of the body [Option ID = 21557]
2. Metacenter lies above center of gravity of the body [Option ID = 21558]
3. Metacenter lies below the centre of gravity of the body [Option ID = 21559]
4. Metacenter has no effect on stability [Option ID = 21560]

41) How does photochemical smog form?[Question ID = 5391][Question Description = 141_174_FSC_SEP22_Q41]

1. The release of primary air pollutants [Option ID = 21561]
2. Interaction occurs between chemicals such as CFCs and ozone [Option ID = 21562]
3. Reactions occur between secondary air pollutants and sunlight [Option ID = 21563]
4. The release of formaldehyde and radon inside buildings [Option ID = 21564]

42) Which organisms derive their energy from oxidation of complex organic compound?

[Question ID = 5392][Question Description = 142_174_FSC_SEP22_Q42]

1. Heterotrophs [Option ID = 21565]
2. Autotrophs [Option ID = 21566]
3. Chemotrophs [Option ID = 21567]
4. Lithotrophs [Option ID = 21568]

43) Ammonification is the formation of[Question ID = 5393][Question Description = 143_174_FSC_SEP22_Q43]

1. Ammonia from nitrates by decomposers [Option ID = 21569]
2. Ammonia from nitrogen [Option ID = 21570]
3. Ammonia from amino acids [Option ID = 21571]
4. Ammonia from nitrates by nitrogen fixers [Option ID = 21572]

44) Gulf current occurs in which of the following ocean?[Question ID = 5394][Question Description = 144_174_FSC_SEP22_Q44]

1. Indian Ocean [Option ID = 21573]
2. Atlantic Ocean [Option ID = 21574]
3. Arctic Ocean [Option ID = 21575]
4. Pacific Ocean [Option ID = 21576]

45) Which of the following is NOT a biofertilizer?

[Question ID = 5395][Question Description = 145_174_FSC_SEP22_Q45]

1. Salmonella [Option ID = 21577]
2. Rhizobium [Option ID = 21578]
3. Nostoc [Option ID = 21579]
4. Azolla [Option ID = 21580]

46) Percentage of Nitrogen content in Urea[Question ID = 5396][Question Description = 146_174_FSC_SEP22_Q46]

1. About 35% [Option ID = 21581]
2. About 45% [Option ID = 21582]
3. About 75% [Option ID = 21583]
4. About 16% [Option ID = 21584]

47) Intertidal zones are[Question ID = 5397][Question Description = 147_174_FSC_SEP22_Q47]

1. Zone between highest high tide and lowest high tide [Option ID = 21585]
2. Zone between lowest high tide and highest low tide [Option ID = 21586]
3. Zone between lowest high tide and lowest low tide [Option ID = 21587]
4. Zone between highest high tide and lowest low tide [Option ID = 21588]

48) A taxon facing an extremely high risk of extinction in the wild in the immediate future is called as[Question ID = 5398]
[Question Description = 148_174_FSC_SEP22_Q48]

1. Critically Endangered (CR) [Option ID = 21589]
2. Endangered (EN) [Option ID = 21590]
3. Vulnerable (VU) [Option ID = 21591]
4. Near Threatened (NR) [Option ID = 21592]

49) Sludge is best defined as[Question ID = 5399][Question Description = 149_174_FSC_SEP22_Q49]

1. Raw sewage [Option ID = 21593]
2. Semi-liquid material that results from sewage treatment [Option ID = 21594]
3. Industrial sewage [Option ID = 21595]
4. Water removed during sewage treatment [Option ID = 21596]

50) Which of the following describes the study of group of the population?

[Question ID = 5400][Question Description = 150_174_FSC_SEP22_Q50]

1. Synecology [Option ID = 21597]
2. Autecology [Option ID = 21598]
3. Biome [Option ID = 21599]
4. Community [Option ID = 21600]

Topic:- 49 Fisheries Resource Management_PHD

1) Which biogeographic realm has the lowest fish diversity?[Question ID = 5401][Question Description = 101_173_FIM_SEP22_Q01]

1. Oriental [Option ID = 21601]
2. Australia [Option ID = 21602]
3. Palearctic [Option ID = 21603]
4. Neotropical [Option ID = 21604]

2) Narrow and long aperture are the characteristics of which of the following families?

- A. Turitellidae
- B. Cypraeidae
- C. Potamididae
- D. Olividae
- E. Conidae

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

[Question ID = 5402][Question Description = 102_173_FIM_SEP22_Q02]

1. A, B and D only [Option ID = 21605]
2. B, D and E only [Option ID = 21606]
3. C, D and E only [Option ID = 21607]
4. A, B and C only [Option ID = 21608]

3) *Ichthyophis* genus belongs to the class[Question ID = 5403][Question Description = 103_173_FIM_SEP22_Q03]

1. Amphibia [Option ID = 21609]
2. Reptilia [Option ID = 21610]
3. Actinopteri [Option ID = 21611]
4. Elasmobranchii [Option ID = 21612]

4) Match List I with List II

List I	List II
A. Physeteridae	I. Oceanic dolphin
B. Delphinidae	II. Beaked whale
C. Platanistidae	III. Sperm whale
D. Ziphiidae	IV. Gangetic and Indus River dolphins

Choose the correct answer from the options given below:

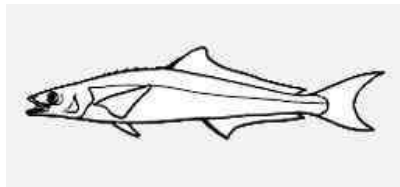
[Question ID = 5404][Question Description = 104_173_FIM_SEP22_Q04]

1. A - III , B - I , C - IV , D - II [Option ID = 21613]
2. A - II, B - III , C - I , D - IV [Option ID = 21614]
3. A - II , B - IV , C - I , D - III [Option ID = 21615]
4. A - IV , B - III , C - II , D - I [Option ID = 21616]

5) Ventral rostral teeth are present in all the three species *EXCEPT*[Question ID = 5405][Question Description = 105_173_FIM_SEP22_Q05]

1. *Penaeus semisulcatus* [Option ID = 21617]
2. *Metapenaeus affinis* [Option ID = 21618]
3. *Macrobrachium rosenbergii* [Option ID = 21619]
4. *Heterocarpus gibbosus* [Option ID = 21620]

6) Identify the family of the fish shown in the picture



[Question ID = 5406][Question Description = 106_173_FIM_SEP22_Q06]

1. Mastacembelidae [Option ID = 21621]
2. Scombridae [Option ID = 21622]
3. Sillaginidae [Option ID = 21623]
4. Rachycentridae [Option ID = 21624]

7) Match List I with List II

List I	List II
A. Last dorsal fin ray long and filamentous	I. <i>Setipinna taty</i>
B. First pectoral fin ray long and filamentous	II. <i>Megalops cyprinoides</i>
C. First pelvic fin ray long and filamentous	III. <i>Osphronemus goramy</i>
D. Upper lobe of Caudal fin ray long and filamentous	IV. <i>Nemipterus japonicus</i>

Choose the correct answer from the options given below:

[Question ID = 5407][Question Description = 107_173_FIM_SEP22_Q07]

1. A - II , B - III , C - IV , D - I [Option ID = 21625]
2. A - III , B - II , C - IV , D - I [Option ID = 21626]
3. A - II , B - I , C - III , D - IV [Option ID = 21627]
4. A - IV , B - III , C - I , D - II [Option ID = 21628]

8) Ampullae of Lorenzini present in sharks are[Question ID = 5408][Question Description = 108_173_FIM_SEP22_Q08]

1. Baroreceptors [Option ID = 21629]
2. Electroreceptors [Option ID = 21630]
3. Photoreceptors [Option ID = 21631]
4. Chemoreceptors [Option ID = 21632]

9) Given below are two statements

Statement I: Fishes belong to the family Balistidae are called Trigger fishes.

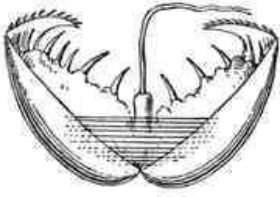
Statement II: First pelvic spine in trigger fishes is with locking mechanism.

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

[Question ID = 5409][Question Description = 109_173_FIM_SEP22_Q09]

1. Both Statement I and Statement II are true [Option ID = 21633]
2. Both Statement I and Statement II are false [Option ID = 21634]
3. Statement I is true but Statement II is false [Option ID = 21635]
4. Statement I is false but Statement II is true [Option ID = 21636]

10) The larva in the picture is associated with



[Question ID = 5410][Question Description = 110_173_FIM_SEP22_Q10]

1. Oyster [Option ID = 21637]
2. Freshwater mussel [Option ID = 21638]
3. Crab [Option ID = 21639]
4. Gastropod [Option ID = 21640]

11) Arrange the following as per the number of larval stages they pass through, starting from the minimum or nil

- A. *Penaeus monodon*
- B. *Macrobrachium rosenbergii*
- C. *Portunus pelagicus*
- D. *Octopus globosus*

Choose the *correct* answer from the options given below

[Question ID = 5411][Question Description = 111_173_FIM_SEP22_Q11]

1. C, A, B, D [Option ID = 21641]
2. C, B, D, A [Option ID = 21642]
3. D, A, B, C [Option ID = 21643]
4. D, C, B, A [Option ID = 21644]

12) Which of the following is *FALSE*? [Question ID = 5412][Question Description = 112_173_FIM_SEP22_Q12]

1. Rods of fish eye are sensitive to lowlight levels [Option ID = 21645]
2. Cones of fish eye require brighter light [Option ID = 21646]
3. Rods of fish eye detect colour [Option ID = 21647]
4. Cones of fish eye detect colour [Option ID = 21648]

13) Chymotrypsinogen is converted into chymotrypsin by [Question ID = 5413][Question Description = 113_173_FIM_SEP22_Q13]

1. Trypsin [Option ID = 21649]
2. Gastric acid [Option ID = 21650]
3. Enterokinase [Option ID = 21651]
4. Exopeptidase [Option ID = 21652]

14) Which among the following occupies highest trophic level in a typical marine ecosystem? [Question ID = 5414][Question Description = 114_173_FIM_SEP22_Q14]

1. Large zooplankton [Option ID = 21653]
2. Hyla [Option ID = 21654]
3. Mackerel [Option ID = 21655]
4. Tiger shark [Option ID = 21656]

15) Other things being equal, tropical marine fishes differ from temperate ones in having

- A. Higher asymptotic length
- B. Shorter life span
- C. Lower natural mortality rate
- D. Higher fecundities
- E. Lower curvature parameter values

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

[Question ID = 5415][Question Description = 115_173_FIM_SEP22_Q15]

1. A, B and E only [Option ID = 21657]

2. B, C and D only [Option ID = 21658]
3. B and D only [Option ID = 21659]
4. C and D only [Option ID = 21660]

16) Growth performance index phi-prime is given by[Question ID = 5416][Question Description = 116_173_FIM_SEP22_Q16]

1. Beverton and Holt [Option ID = 21661]
2. Munro and Pauly [Option ID = 21662]
3. Thompson and Bell [Option ID = 21663]
4. von Bertalanffy [Option ID = 21664]

17) For a given natural mortality, fishing mortality and fishing effort, what happens to fish yield (weight) per recruit with increase in age of exploitation?[Question ID = 5417][Question Description = 117_173_FIM_SEP22_Q17]

1. Remains constant [Option ID = 21665]
2. Decreases [Option ID = 21666]
3. Increases [Option ID = 21667]
4. First decreases then increases [Option ID = 21668]

18) Shyok is a tributary of[Question ID = 5418][Question Description = 118_173_FIM_SEP22_Q18]

1. Brahmaputra [Option ID = 21669]
2. Indus [Option ID = 21670]
3. Chenab [Option ID = 21671]
4. Sutlej [Option ID = 21672]

19) In reservoirs, Morpho-edaphic index can be used to estimate[Question ID = 5419][Question Description = 119_173_FIM_SEP22_Q19]

1. Potential fish yield [Option ID = 21673]
2. Area [Option ID = 21674]
3. Water quality [Option ID = 21675]
4. Stocking rate [Option ID = 21676]

20) The maximum number of endemic fish species in India is found in[Question ID = 5420][Question Description = 120_173_FIM_SEP22_Q20]

1. Ganga riverine system [Option ID = 21677]
2. Western Ghats [Option ID = 21678]
3. Brahmaputra river [Option ID = 21679]
4. Northeastern Himalayas [Option ID = 21680]

21) Given below are two statements

Statement I: Both Ken and Betwa rivers originate in Uttar Pradesh.

Statement II: Both Ken and Betwa rivers meet the river Yamuna in Madhya Pradesh.

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

[Question ID = 5421][Question Description = 121_173_FIM_SEP22_Q21]

1. Both Statement I and Statement II are true [Option ID = 21681]
2. Both Statement I and Statement II are false [Option ID = 21682]
3. Statement I is true but Statement II is false [Option ID = 21683]
4. Statement I is false but Statement II is true [Option ID = 21684]

22) Palkbay is situated in which coast?[Question ID = 5422][Question Description = 122_173_FIM_SEP22_Q22]

1. Northwest coast [Option ID = 21685]
2. Southwest coast [Option ID = 21686]
3. Southeast coast [Option ID = 21687]
4. Northeast coast [Option ID = 21688]

23) Identify the dominant fisheries of northwest coast

A. White baits

B. Golden anchovy

C. Hilsa shad

D. Non-penaeid prawns

E. Unicorn cod

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

[Question ID = 5423][Question Description = 123_173_FIM_SEP22_Q23]

1. A, B and D only [Option ID = 21689]
2. A, C and E only [Option ID = 21690]
3. B, C and D only [Option ID = 21691]
4. B, D and E only [Option ID = 21692]

24) Maximum species diversity of scleractian corals are found in India are distributed in [Question ID = 5424][Question Description = 124_173_FIM_SEP22_Q24]

1. Gulf of Mannar and Palk Bay [Option ID = 21693]
2. Andaman & Nicobar Islands [Option ID = 21694]
3. Lakshadweep [Option ID = 21695]
4. Gulf of Kutch [Option ID = 21696]

25) Which of the following seaweed is an important source of algin?

[Question ID = 5425][Question Description = 125_173_FIM_SEP22_Q25]

1. *Turbinaria* [Option ID = 21697]
2. *Hypnea* [Option ID = 21698]
3. *Gracilaria* [Option ID = 21699]
4. *Gelidiella* [Option ID = 21700]

26) Which of the following is the representation of raster type in GIS? [Question ID = 5426][Question Description = 126_173_FIM_SEP22_Q26]

1. Point [Option ID = 21701]
2. Grid matrix [Option ID = 21702]
3. Line [Option ID = 21703]
4. Polygon [Option ID = 21704]

27) Pomfrets are mainly caught by [Question ID = 5427][Question Description = 127_173_FIM_SEP22_Q27]

1. Purse seine and Ring seine [Option ID = 21705]
2. Trawl net and Gill net [Option ID = 21706]
3. Hook and line and long line [Option ID = 21707]
4. Dol net and Bagnet [Option ID = 21708]

28) Given below are two statements

Statement I: Mud banks are associated with rich fisheries.

Statement II: Mudbanks occur frequently along the northwest coast of India.

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

[Question ID = 5428][Question Description = 128_173_FIM_SEP22_Q28]

1. Both Statement I and Statement II are true [Option ID = 21709]
2. Both Statement I and Statement II are false [Option ID = 21710]
3. Statement I is true but Statement II is false [Option ID = 21711]
4. Statement I is false but Statement II is true [Option ID = 21712]

29) Two dominant species of seerfishes along the Indian coast [Question ID = 5429][Question Description = 129_173_FIM_SEP22_Q29]

1. *Scomberomorus commerson* and *Scomberomorus guttatus* [Option ID = 21713]
2. *Scomberomorus lineolatus* and *Acanthocybium solandri* [Option ID = 21714]
3. *Scomberomorus maculatus* and *Scomberomorus koreanus* [Option ID = 21715]
4. *Scomberomorus regalis* and *Scomberomorus multiradiatus* [Option ID = 21716]

30) What value of Red list Index (RLI) equates to all species qualifying as Extinct? [Question ID = 5430][Question Description = 130_173_FIM_SEP22_Q30]

1. Zero [Option ID = 21717]
2. 0.25 [Option ID = 21718]
3. 0.50 [Option ID = 21719]
4. 1.00 [Option ID = 21720]

31) The highest number of ring seines is operated in which State of India? [Question ID = 5431][Question Description = 131_173_FIM_SEP22_Q31]

1. Tamil Nadu [Option ID = 21721]
2. Karnataka [Option ID = 21722]

3. Gujarat [Option ID = 21723]
4. Kerala [Option ID = 21724]

32) As per FAO (2021), what is the position of India in global capture fisheries production in 2019?[Question ID = 5432]
[Question Description = 132_173_FIM_SEP22_Q32]

1. First [Option ID = 21725]
2. Second [Option ID = 21726]
3. Third [Option ID = 21727]
4. Fourth [Option ID = 21728]

33) Match List I with List II

List I	List II
A. Wandoor Mahatma Gandhi National Marine Park	I. Odisha
B. Bhitarkanika Gahirmatha Sanctuary	II. Rajasthan
C. Harike Ramsar Site	III. South Andaman
D. Sambhar Ramsar Site	IV. Punjab

Choose the correct answer from the options given below:

[Question ID = 5433][Question Description = 133_173_FIM_SEP22_Q33]

1. A - III, B - IV, C - I, D - II [Option ID = 21729]
2. A - III, B - I, C - IV, D - II [Option ID = 21730]
3. A - II, B - I, C - IV, D - III [Option ID = 21731]
4. A - I, B - II, C - III, D - IV [Option ID = 21732]

34) Given below are two statements

Statement I: The territorial sea is a band of water extending up to a limit not exceeding 12 nautical miles measured from baseline.

Statement II: A 12 nautical-mile territorial limit is allowed for Artificial Island as well.

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

[Question ID = 5434][Question Description = 134_173_FIM_SEP22_Q34]

1. Both Statement I and Statement II are true [Option ID = 21733]
2. Both Statement I and Statement II are false [Option ID = 21734]
3. Statement I is true but Statement II is false [Option ID = 21735]
4. Statement I is false but Statement II is true [Option ID = 21736]

35) As per the Coastal Regulation Zone Notification 2019, which of the following activity is regulated or permissible in CRZ-IA as defined under the said notification?[Question ID = 5435][Question Description = 135_173_FIM_SEP22_Q35]

1. Hatchery and natural fish drying [Option ID = 21737]
2. Setting up of new fish processing units [Option ID = 21738]
3. Drawal of groundwater [Option ID = 21739]
4. Mangrove walk as a part of ecotourism [Option ID = 21740]

36) *Tachypleus gigas* is enlisted in which schedule of Wild Life Protection Act (1972)?[Question ID = 5436][Question Description = 136_173_FIM_SEP22_Q36]

1. Schedule I [Option ID = 21741]
2. Schedule II [Option ID = 21742]
3. Schedule III [Option ID = 21743]
4. Schedule IV [Option ID = 21744]

37) Identify the supplementary agreements of Convention on Biological Diversity, 1992

- A. The Uruguay round
- B. The Cartagena protocol
- C. The Marrakesh agreement
- D. The Kyoto protocol
- E. The Nagoya protocol

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

[Question ID = 5437][Question Description = 137_173_FIM_SEP22_Q37]

1. A, B and E only [Option ID = 21745]
2. A and E only [Option ID = 21746]
3. B and E only [Option ID = 21747]

4. B, C and D only [Option ID = 21748]

38) Who is the depositary for CITES convention?[Question ID = 5438][Question Description = 138_173_FIM_SEP22_Q38]

1. Secretary-General of the United Nations [Option ID = 21749]
2. Government of the Federal Republic of Germany [Option ID = 21750]
3. Federal Government of United States [Option ID = 21751]
4. Government of the Swiss Confederation [Option ID = 21752]

39) The Annex IV of MARPOL 73/78 deals with regulations for the prevention of which of the following from ships ?

[Question ID = 5439][Question Description = 139_173_FIM_SEP22_Q39]

1. Oil pollution [Option ID = 21753]
2. Air Pollution from Ships [Option ID = 21754]
3. Sewage [Option ID = 21755]
4. Garbage [Option ID = 21756]

40) In MCS system, 'monitoring' involves the continuous requirement for the measurement of the following items EXCEPT[Question ID = 5440][Question Description = 140_173_FIM_SEP22_Q40]

1. Fish catch [Option ID = 21757]
2. Pollutants [Option ID = 21758]
3. Fishing effort [Option ID = 21759]
4. Bycatch [Option ID = 21760]

41) The primary form of legislative measure used to propose law is a(n)[Question ID = 5441][Question Description = 141_173_FIM_SEP22_Q41]

1. Act [Option ID = 21761]
2. Bill [Option ID = 21762]
3. Policy [Option ID = 21763]
4. Treaty [Option ID = 21764]

42) Measures aimed at reducing risk, impact or effects of a disaster or threatening disaster situation

[Question ID = 5442][Question Description = 142_173_FIM_SEP22_Q42]

1. Rehabilitation [Option ID = 21765]
2. Evacuation [Option ID = 21766]
3. Mitigation [Option ID = 21767]
4. Resilience [Option ID = 21768]

43) Which of the United Nations Sustainable Development Goal (SDG) aimed at climate action?[Question ID = 5443][Question Description = 143_173_FIM_SEP22_Q43]

1. SDG-11 [Option ID = 21769]
2. SDG-12 [Option ID = 21770]
3. SDG-13 [Option ID = 21771]
4. SDG-14 [Option ID = 21772]

44) Which of the following are the components of production equation of Ecopath?

- A. Biomass accumulation
- B. Predation mortality
- C. Respiration
- D. Net migration
- E. Unassimilated energy

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

[Question ID = 5444][Question Description = 144_173_FIM_SEP22_Q44]

1. A, D and E only [Option ID = 21773]
2. A, C and D only [Option ID = 21774]
3. B, C and E only [Option ID = 21775]
4. A, B and D only [Option ID = 21776]

45) Which port exported highest quantity of seafood from India during 2020-21?[Question ID = 5445][Question Description = 145_173_FIM_SEP22_Q45]

1. Vishakhapatnam [Option ID = 21777]
2. Kolkata [Option ID = 21778]

3. Pipavav [Option ID = 21779]
4. Kochi [Option ID = 21780]

46) The United Nations General Assembly has declared 2022 as the International Year of

[Question ID = 5446][Question Description = 146_173_FIM_SEP22_Q46]

1. Artisanal fisheries and Aquaculture [Option ID = 21781]
2. Sustainable marine fisheries [Option ID = 21782]
3. Mariculture [Option ID = 21783]
4. Seafood safety [Option ID = 21784]

47) Pradhan Mantri Matsya Sampada Yojana (PMMSY) was launched in the year[Question ID = 5447][Question Description = 147_173_FIM_SEP22_Q47]

1. 2017 [Option ID = 21785]
2. 2018 [Option ID = 21786]
3. 2019 [Option ID = 21787]
4. 2020 [Option ID = 21788]

48) Which of the following measures that are applied to protect human or animal life from are covered under which agreement of WTO?[Question ID = 5448][Question Description = 148_173_FIM_SEP22_Q48]

1. TRIMS [Option ID = 21789]
2. SPS [Option ID = 21790]
3. TRIPS [Option ID = 21791]
4. GATT [Option ID = 21792]

49) Which of the following initiated for technology assessment and reinforcement of agriculture and allied sectors?[Question ID = 5449][Question Description = 149_173_FIM_SEP22_Q49]

1. Trickle Down System [Option ID = 21793]
2. Training and Visit System [Option ID = 21794]
3. Institution Village Linkage Programme [Option ID = 21795]
4. KRISHI Portal [Option ID = 21796]

50) Which is the Nodal Implementing Agency for Fisheries and Aquaculture Infrastructure Development Fund (FIDF)? [Question ID = 5450][Question Description = 150_173_FIM_SEP22_Q50]

1. Coastal Aquaculture Authority [Option ID = 21797]
2. National Bank for Agriculture and Rural Development [Option ID = 21798]
3. Indian Council of Agricultural Research [Option ID = 21799]
4. National Fisheries Development Board [Option ID = 21800]

