

50 Fish Processing Technology 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:- 50 Fish Processing Technology_PHD

1) The charged Acidic Amino acid is

[Question ID = 5451][Question Description = 101_175_FPH_SEP22_Q01]

1. Alanine [Option ID = 21801]
2. Glutamine [Option ID = 21802]
3. Glutamic acid [Option ID = 21803]
4. Histidine [Option ID = 21804]

2) In Xanthoproteic reaction, the colour obtained after addition of alkali is

[Question ID = 5452][Question Description = 102_175_FPH_SEP22_Q02]

1. Yellow [Option ID = 21805]
2. Red [Option ID = 21806]
3. Blue [Option ID = 21807]
4. Orange [Option ID = 21808]

3) α -Tocopherol is available in the market as

[Question ID = 5453][Question Description = 103_175_FPH_SEP22_Q03]

1. Acetate ester [Option ID = 21809]
2. Propionate ester [Option ID = 21810]
3. Acetic acid [Option ID = 21811]
4. Propionic acid [Option ID = 21812]

4) The amount of interfacial that can be created by protein is called

[Question ID = 5454][Question Description = 104_175_FPH_SEP22_Q04]

1. Foam stability [Option ID = 21813]
2. Foamability [Option ID = 21814]
3. Viscosity [Option ID = 21815]
4. Permeability [Option ID = 21816]

5) The protein hydrolysate that can form heat induced gel is

[Question ID = 5455][Question Description = 105_175_FPH_SEP22_Q05]

1. Collagen [Option ID = 21817]
2. Gelatin [Option ID = 21818]
3. Peptide [Option ID = 21819]
4. Proteases [Option ID = 21820]

6) The enzymes that are void of cofactors are called

[Question ID = 5456][Question Description = 106_175_FPH_SEP22_Q06]

1. Coenzyme [Option ID = 21821]
2. Prosthetic group [Option ID = 21822]
3. Apoenzyme [Option ID = 21823]
4. Holoenzyme [Option ID = 21824]

7) The vitamin required for absorption and metabolism of calcium is

[Question ID = 5457][Question Description = 107_175_FPH_SEP22_Q07]

1. Vitamin A [Option ID = 21825]
2. Vitamin D [Option ID = 21826]
3. Vitamin E [Option ID = 21827]
4. Vitamin K [Option ID = 21828]

8) The vitamin required for blood clotting is [Question ID = 5458][Question Description = 108_175_FPH_SEP22_Q08]

1. Vitamin A [Option ID = 21829]
2. Vitamin D [Option ID = 21830]
3. Vitamin E [Option ID = 21831]
4. Vitamin K [Option ID = 21832]

9) Pernicious anaemia is due to the deficiency of

[Question ID = 5459][Question Description = 109_175_FPH_SEP22_Q09]

1. Niacin [Option ID = 21833]
2. Cobalamine [Option ID = 21834]
3. Riboflavin [Option ID = 21835]
4. Pyridoxine [Option ID = 21836]

10) The typical spoilage compound of *Pseudomonas spp* is

[Question ID = 5460][Question Description = 110_175_FPH_SEP22_Q10]

1. H₂S [Option ID = 21837]
2. CH₃SH [Option ID = 21838]
3. Ketone [Option ID = 21839]
4. Acetic acid [Option ID = 21840]

11) Which of the following thawing method depends on conduction?

[Question ID = 5461][Question Description = 111_175_FPH_SEP22_Q11]

1. Dielectric thawing [Option ID = 21841]
2. Microwave thawing [Option ID = 21842]
3. Electric resistance thawing [Option ID = 21843]
4. Vacuum thawing [Option ID = 21844]

12) Time in minutes required to kill an organism in a specific medium at its thermal death time is

[Question ID = 5462][Question Description = 112_175_FPH_SEP22_Q12]

1. Z value [Option ID = 21845]
2. D value [Option ID = 21846]
3. F value [Option ID = 21847]
4. 12 D [Option ID = 21848]

13) Precipitation of proteins in canned mackerel and Salmon is

[Question ID = 5463][Question Description = 113_175_FPH_SEP22_Q13]

1. Honey combing [Option ID = 21849]
2. Curd [Option ID = 21850]
3. Mush [Option ID = 21851]
4. Retort burn [Option ID = 21852]

14) The layer that takes print in retort pouch is

[Question ID = 5464][Question Description = 114_175_FPH_SEP22_Q14]

1. Polypropylene [Option ID = 21853]
2. Aluminium [Option ID = 21854]
3. Polyester [Option ID = 21855]
4. Polyamide [Option ID = 21856]

15) The essential amino acid lost during canning is

[Question ID = 5465][Question Description = 115_175_FPH_SEP22_Q15]

1. Tryptophan [Option ID = 21857]
2. Valine [Option ID = 21858]
3. Alanine [Option ID = 21859]
4. Isoleucine [Option ID = 21860]

16) Reducing agent that helps to preserve reactive sulphhydryl group in mince is

[Question ID = 5466][Question Description = 116_175_FPH_SEP22_Q16]

1. Sorbitol [Option ID = 21861]
2. Monosodium glutamate [Option ID = 21862]
3. Ascorbic acid [Option ID = 21863]
4. Sucrose [Option ID = 21864]

17) The phenolic constituent that delays autoxidation

[Question ID = 5467][Question Description = 117_175_FPH_SEP22_Q17]

1. Phenolase [Option ID = 21865]
2. Nitrite [Option ID = 21866]
3. Guaiacol [Option ID = 21867]
4. Formaldehyde [Option ID = 21868]

18) The amino acid that is lost during hydrogen peroxide bleaching is

[Question ID = 5468][Question Description = 118_175_FPH_SEP22_Q18]

1. Tryptophan [Option ID = 21869]
2. Methionine [Option ID = 21870]
3. Cysteine [Option ID = 21871]
4. Alanine [Option ID = 21872]

19) The additive that is described as allergen is

[Question ID = 5469][Question Description = 119_175_FPH_SEP22_Q19]

1. Benzoic acid [Option ID = 21873]
2. Citric acid [Option ID = 21874]
3. Acetic acid [Option ID = 21875]
4. Ascorbic acid [Option ID = 21876]

20) The compound that is added to food to inactivate prooxidants is

[Question ID = 5470][Question Description = 120_175_FPH_SEP22_Q20]

1. Anticaking agent [Option ID = 21877]
2. Sequestrant [Option ID = 21878]
3. Emulsifier [Option ID = 21879]
4. Humectant [Option ID = 21880]

21) The packaging material used for packing smoked fish is

[Question ID = 5471][Question Description = 121_175_FPH_SEP22_Q21]

1. LDPE [Option ID = 21881]
2. LLDPE [Option ID = 21882]
3. OPP/PE [Option ID = 21883]
4. Polyamide [Option ID = 21884]

22) The microorganism responsible for pink slime during wet stacking to produce heavily salted fish is

[Question ID = 5472][Question Description = 122_175_FPH_SEP22_Q22]

1. *Flavobacterium* [Option ID = 21885]

2. *Pseudomonas salinaria* [Option ID = 21886]
3. *Bacillus salinaria* [Option ID = 21887]
4. *Achromobacter* [Option ID = 21888]

23) Thermostable direct hemolysin is produced by

[Question ID = 5473][Question Description = 123_175_FPH_SEP22_Q23]

1. *Vibrio cholerae* [Option ID = 21889]
2. *Vibrio parahaemolyticus* [Option ID = 21890]
3. *Vibrio vulnificus* [Option ID = 21891]
4. *Clostridium botulinum* [Option ID = 21892]

24) The shellfish poisoning caused by diatom is

[Question ID = 5474][Question Description = 124_175_FPH_SEP22_Q24]

1. Paralytic shellfish Poisoning [Option ID = 21893]
2. Amnesic shellfish Poisoning [Option ID = 21894]
3. Diarrhetic shellfish Poisoning [Option ID = 21895]
4. Neurotoxic shellfish Poisoning [Option ID = 21896]

25) The maximum allowable limit of Histamine in Fish and Fishery Products is

[Question ID = 5475][Question Description = 125_175_FPH_SEP22_Q25]

1. 10mg/100g [Option ID = 21897]
2. 20mg/100g [Option ID = 21898]
3. 30mg/100g [Option ID = 21899]
4. 40mg/100g [Option ID = 21900]

26) In which of the following product parasites may be absent

[Question ID = 5476][Question Description = 126_175_FPH_SEP22_Q26]

1. Cold smoked fish [Option ID = 21901]
2. Lightly salted caviar [Option ID = 21902]
3. Ceviche [Option ID = 21903]
4. Frozen Fish [Option ID = 21904]

27) The maximum level of dehydration allowed in frozen shrimp for export from India is

[Question ID = 5477][Question Description = 127_175_FPH_SEP22_Q27]

1. 30% [Option ID = 21905]
2. 25% [Option ID = 21906]
3. 20% [Option ID = 21907]
4. 40% [Option ID = 21908]

28) According to USFDA maximum permissible limit of Dieldrin in seafood is

[Question ID = 5478][Question Description = 128_175_FPH_SEP22_Q28]

1. 0.3 ppm [Option ID = 21909]
2. 0.4 ppm [Option ID = 21910]
3. 0.5 ppm [Option ID = 21911]
4. 0.6 ppm [Option ID = 21912]

29) Chemically carrageenan is

[Question ID = 5479][Question Description = 129_175_FPH_SEP22_Q29]

1. Linear polysaccharide [Option ID = 21913]
2. Branched polysaccharide [Option ID = 21914]
3. Poly peptide [Option ID = 21915]
4. Poly hydroxyl alcohol [Option ID = 21916]

30) Torry-meter is used to find

[Question ID = 5480][Question Description = 130_175_FPH_SEP22_Q30]

1. Salinity [Option ID = 21917]
2. pH [Option ID = 21918]
3. Temperature [Option ID = 21919]
4. Freshness of fresh fish [Option ID = 21920]

31) In the thawed Frozen fish, when it is in rigor-mortis, the quality defect that may arise is

[Question ID = 5481][Question Description = 131_175_FPH_SEP22_Q31]

1. Denaturation [Option ID = 21921]
2. Rancidity [Option ID = 21922]
3. Dehydration [Option ID = 21923]
4. Gapping [Option ID = 21924]

32) In drying of fish, the moisture from inside the muscle comes to the surface by

[Question ID = 5482][Question Description = 132_175_FPH_SEP22_Q32]

1. Diffusion [Option ID = 21925]
2. Vapour transmission [Option ID = 21926]
3. Capillary distillation [Option ID = 21927]
4. Evaporation [Option ID = 21928]

33) In bacteria spore coat, the following chemical provides heat resistance

[Question ID = 5483][Question Description = 133_175_FPH_SEP22_Q33]

1. Chitin [Option ID = 21929]
2. Dipicolinic acid [Option ID = 21930]
3. Iron [Option ID = 21931]
4. Pteridine [Option ID = 21932]

34) Removing the head and attached long gut of small fish by partially severing the head and pulling but without slit opening the belly

[Question ID = 5484][Question Description = 134_175_FPH_SEP22_Q34]

1. Filleting [Option ID = 21933]
2. Gibbing [Option ID = 21934]
3. Nobbing [Option ID = 21935]
4. Steaking [Option ID = 21936]

35) The technology in which more than one preservation method is used to produce acceptable microbiologically stable food is called

[Question ID = 5485][Question Description = 135_175_FPH_SEP22_Q35]

1. Chilling [Option ID = 21937]
2. MAP technology [Option ID = 21938]
3. CAP technology [Option ID = 21939]
4. Hurdle technology [Option ID = 21940]

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

Assertion A : Myofibrillar protein undergoes maximum deterioration during freezing.

Reason R: Myofibrillar proteins reduce textural properties of frozen fish.

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

[Question ID = 5486][Question Description = 136_175_FPH_SEP22_Q36]

1. Both A and R are true and R is the correct explanation of A [Option ID = 21941]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 21942]
3. A is true but R is false [Option ID = 21943]
4. A is false but R is true [Option ID = 21944]

37) Which of the following is true with regard to Refrigerated seawater?

- A. Gives rapid chilling
- B. Crushing of ice is eliminated
- C. Lower chilling Temperatures are attained
- D. More labour are required
- E. Ease of unloading

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

[Question ID = 5487][Question Description = 137_175_FPH_SEP22_Q37]

1. A, B, D, E only [Option ID = 21945]
2. A, B, C, D only [Option ID = 21946]

3. B, C, D, E only [Option ID = 21947]
4. A, B, C, E only [Option ID = 21948]

38) Blanching /precooking causes the following changes

- A. Causes sufficient shrinkage
- B. Reduces bacterial load
- C. Reduces natural colour
- D. Expels respiratory gases
- E. Inhibits enzymatic reactions

Choose the correct answer from the options given below

[Question ID = 5488][Question Description = 138_175_FPH_SEP22_Q38]

1. A, C, D, E only [Option ID = 21949]
2. A, B, C, D only [Option ID = 21950]
3. B, C, D, E only [Option ID = 21951]
4. A, B, D, E only [Option ID = 21952]

39) Which of the following are properties of an ideal container?

- A. It should be strong enough
- B. Light in weight
- C. Impervious to moisture, air, dust
- D. Should be inexpensive
- E. Should withstand pressure

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

[Question ID = 5489][Question Description = 139_175_FPH_SEP22_Q39]

1. A, B, C, D, E [Option ID = 21953]
2. A, B, C, D only [Option ID = 21954]
3. B, C, D, E only [Option ID = 21955]
4. A, B, C, E only [Option ID = 21956]

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

Assertion A : *Sous-vide* products are not shelf stable.

Reason R: In *Sous-vide* products preservatives are not added and minimal thermal processing is involved.

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

[Question ID = 5490][Question Description = 140_175_FPH_SEP22_Q40]

1. Both A and R are true and R is the correct explanation of A
[Option ID = 21957]
2. Both A and R are true but R is NOT the correct explanation of A
[Option ID = 21958]
3. A is true but R is false
[Option ID = 21959]
4. A is false but R is true
[Option ID = 21960]

41) Match List I with List II

List I	List II
A. Albumins	I. Soluble in dilute salt solution
B. Globulins	II. Soluble in acid and alkali
C. Glutelins	III. Soluble in 70% alcohol
D. Prolamins	IV. Soluble in water pH 6.6

Choose the correct answer from the options given below:

[Question ID = 5491][Question Description = 141_175_FPH_SEP22_Q41]

1. A-II, B-III, C-I, D-IV [Option ID = 21961]
2. A-III, B-I, C-II, D-IV [Option ID = 21962]
3. A-IV, B-I, C-II, D-III [Option ID = 21963]
4. A-II, B-III, C-IV, D-I [Option ID = 21964]

42) Match List I with List II

List I	List II
A. Histamine	I. Encephalopathy
B. Scaritoxin	II. Scombroid poisoning
C. Saxitoxin	III. Ciguatera poisoning
D. Domoic acid	IV. Paralytic shellfish poisoning

Choose the correct answer from the options given below:

[Question ID = 5492][Question Description = 142_175_FPH_SEP22_Q42]

1. A-II, B-III, C-IV, D-I [Option ID = 21965]
2. A-III, B-I, C-II, D-IV [Option ID = 21966]
3. A-II, B-I, C-IV, D-III [Option ID = 21967]
4. A-IV, B-III, C-II, D-I [Option ID = 21968]

43) Match List I with List II

List I	List II
A. Flake ice	I. 1.7 m ³ /t
B. Tube ice	II. 1.08 m ³ /t
C. Block ice	III. 1.6 m ³ /t
D. Plate ice	IV. 2.2 m ³ /t

Choose the correct answer from the options given below:

[Question ID = 5493][Question Description = 143_175_FPH_SEP22_Q43]

1. A-II, B-III, C-I, D-IV [Option ID = 21969]
2. A-III, B-I, C-II, D-IV [Option ID = 21970]
3. A-II, B-I, C-IV, D-III [Option ID = 21971]
4. A-IV, B-III, C-II, D-I [Option ID = 21972]

44) Match List I with List II

List I	List II
A. Under processing	I. Chemical spoilage
B. Internal corrosion	II. Physical spoilage
C. Faulty retort	III. Miscellaneous
D. Rust	IV. Microbial spoilage

Choose the correct answer from the options given below:

[Question ID = 5494][Question Description = 144_175_FPH_SEP22_Q44]

1. A-II, B-III, C-I, D-IV [Option ID = 21973]
2. A-III, B-I, C-II, D-IV [Option ID = 21974]
3. A-II, B-I, C-IV, D-III [Option ID = 21975]
4. A-IV, B-I, C-II, D-III [Option ID = 21976]

45) Match List I with List II

List I	List II
A. Blue discoloration of crab	I. High TMA
B. Greening of Tuna	II. Iron sulphide
C. Black discoloration	III. Reaction of sugar and amino acid
D. Browning	IV. High copper

Choose the correct answer from the options given below:

[Question ID = 5495][Question Description = 145_175_FPH_SEP22_Q45]

1. A-II, B-III, C-I, D-IV [Option ID = 21977]
2. A-III, B-I, C-II, D-IV [Option ID = 21978]
3. A-IV, B-I, C-II, D-III [Option ID = 21979]
4. A-II, B-I, C-IV, D-III [Option ID = 21980]

46) Match List I with List II

List I	List II
A. Protein	I. Release Carbon dioxide
B. Sugar	II. Improve taste and texture
C. Salt	III. Increases water absorption capacity
D. Tartaric acid	IV. Plasticising effect

Choose the correct answer from the options given below:

[Question ID = 5496][Question Description = 146_175_FPH_SEP22_Q46]

1. A-IV, B-III, C-I, D-II [Option ID = 21981]
2. A-III, B-IV, C-II, D-I [Option ID = 21982]
3. A-II, B-I, C-IV, D-III [Option ID = 21983]
4. A-IV, B-III, C-II, D-I [Option ID = 21984]

47) Match List I with List II

List I	List II
A. Gelatin	I. Medicine
B. Glue	II. Chemical etching
C. Squalene	III. Clarifying agent
D. Isinglass	IV. Furniture

Choose the correct answer from the options given below:

[Question ID = 5497][Question Description = 147_175_FPH_SEP22_Q47]

1. A-IV, B-III, C-I, D-II [Option ID = 21985]
2. A-II, B-I, C-IV, D-III [Option ID = 21986]
3. A-II, B-IV, C-I, D-III [Option ID = 21987]
4. A-IV, B-III, C-II, D-I [Option ID = 21988]

48) Match List I with List II

List I	List II
A. Nisin	I. Fungistat
B. Propionic acid	II. Bacteriocide
C. Benzoic acid	III. Antioxidant
D. Tocopherol extract	IV. Bacteriocin

Choose the correct answer from the options given below:

[Question ID = 5498][Question Description = 148_175_FPH_SEP22_Q48]

1. A-IV, B-I, C-II, D-III [Option ID = 21989]
2. A-II, B-I, C-III, D-IV [Option ID = 21990]
3. A-II, B-I, C-IV, D-III [Option ID = 21991]
4. A-III, B-IV, C-II, D-I [Option ID = 21992]

49) Match List I with List II

List I	List II
A. Drip absorption sheets	I. Vitamin E
B. Antioxidant	II. Colour indicator
C. Freshness indicator	III. Ferrous carbonate

D. Oxygen absorbers

IV. Polyacrylate salts

Choose the correct answer from the options given below:

[Question ID = 5499][Question Description = 149_175_FPH_SEP22_Q49]

1. A-IV, B-I, C-II, D-III

[Option ID = 21993]

2. A-I, B-II, C-IV, D-III

[Option ID = 21994]

3. A-II, B-I, C-IV, D-III

[Option ID = 21995]

4. A-III, B-IV, C-II, D-I

[Option ID = 21996]

50) Match List I with List II

List I	List II
A. Ginger	I. Allyl sulfide
B. Garlic	II. Eugenol
C. Cloves	III. Piperine
D. Pepper	IV. Borneol

Choose the correct answer from the options given below:

[Question ID = 5500][Question Description = 150_175_FPH_SEP22_Q50]

1. A-IV, B-I, C-II, D-III [Option ID = 21997]

2. A-II, B-I, C-IV, D-III [Option ID = 21998]

3. A-II, B-VI, C-I, D-III [Option ID = 21999]

4. A-IV, B-III, C-II, D-I [Option ID = 22000]