

51 Fishing Technology and Engg 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_SEPT22_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_SEPT22_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_SEPT22_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_SEPT22_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_SEPT22_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_SEPT22_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 hyposmotic 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 VCRS 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:- 51 Fishing Technology and Engineering_PHD

1) The amount of heat required to raise the temperature of 1kg of water by 1Kelvin is equal to

[Question ID = 5501][Question Description = 101_176_FET_SEP22_Q01]

1. 1.187 kJ. [Option ID = 22001]
2. 2.187 kJ. [Option ID = 22002]
3. 3.187 kJ. [Option ID = 22003]
4. 4.187 kJ. [Option ID = 22004]

2) To compute the height of the dike, the following formula could be used

$$H = \frac{(H_w - G) + FB}{1 - \% \text{ of shrinkage}}$$

In the above formula, H_w stands for

[Question ID = 5502][Question Description = 102_176_FET_SEP22_Q02]

1. Highest high-water level from a free board height [Option ID = 22005]
2. Highest high-water level over mean sea level [Option ID = 22006]
3. Highest high-water level from past record. [Option ID = 22007]
4. Height of designed dike [Option ID = 22008]

3) The following type of soils should be avoided during the selection of sites for pond construction.[Question ID = 5503][Question Description = 103_176_FET_SEP22_Q03]

1. Peat soils [Option ID = 22009]
2. Alluvial soils [Option ID = 22010]
3. Clay [Option ID = 22011]
4. Sandy clay [Option ID = 22012]

4) Match List I and List II

List I	List II
A. One short blast	I. Class "D" fires

B. Dry powder extinguishers	II. Best in Clay, Sand and Muddy bottom
C. Danforth anchor	III. Class "A" fires.
D. Soda acid type fire extinguisher	IV. I am turning to starboard (my right)

Choose the correct answer from the options given below :

[Question ID = 5504][Question Description = 104_176_FET_SEP22_Q04]

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

[Option ID = 22013]

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

[Option ID = 22014]

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

[Option ID = 22015]

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

[Option ID = 22016]

5) The leakage in the refrigeration system using freon is detected by

[Question ID = 5505][Question Description = 105_176_FET_SEP22_Q05]

1. Acetylene torch [Option ID = 22017]
2. Halide torch [Option ID = 22018]
3. Sulphur sticks [Option ID = 22019]
4. Isolated system [Option ID = 22020]

6) Given below are two statements

Statement I: Urgency messages transmitted via radiotelephony are prefixed by the words 'PAN PAN' sent three times.

Statement II: Safety messages sent via radiotelephony are prefixed by the word 'SECURITE' sent three times.

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

[Question ID = 5506][Question Description = 106_176_FET_SEP22_Q06]

1. Both Statement I and Statement II are correct

[Option ID = 22021]

2. Both Statement I and Statement II are incorrect

[Option ID = 22022]

3. Statement I is correct but Statement II is incorrect

[Option ID = 22023]

4. Statement I is incorrect but Statement II is correct

[Option ID = 22024]

7) The unit of apparent power in a purely inductive circuit is called the [Question ID = 5507][Question Description = 107_176_FET_SEP22_Q07]

1. kva [Option ID = 22025]
2. var [Option ID = 22026]
3. emf [Option ID = 22027]
4. watt [Option ID = 22028]

8) The amount of heat that must be added to change a solid to a liquid is [Question ID = 5508][Question Description = 108_176_FET_SEP22_Q08]

1. Latent heat of condensation [Option ID = 22029]
2. Sublimation [Option ID = 22030]
3. Latent heat of fusion [Option ID = 22031]
4. The saturation point [Option ID = 22032]

9) What is the breaking strength (%) of the branch line of the breaking strength of the main line?

[Question ID = 5509][Question Description = 109_176_FET_SEP22_Q09]

1. 10 percent [Option ID = 22033]
2. 20 percent [Option ID = 22034]
3. 30 percent [Option ID = 22035]

4. 40 percent [Option ID = 22036]

10) The most energy-efficient device for increasing dissolved oxygen in shrimp farms[Question ID = 5510][Question Description = 110_176_FET_SEP22_Q10]

1. Floating paddle wheel aerator [Option ID = 22037]
2. Propeller diffuse aerator [Option ID = 22038]
3. Spray aerator [Option ID = 22039]
4. Turbine aerators [Option ID = 22040]

11) SART Stands for[Question ID = 5511][Question Description = 111_176_FET_SEP22_Q11]

1. Search And Rescue Transponder [Option ID = 22041]
2. Search And Rescue Team [Option ID = 22042]
3. Small Arms Remote Target [Option ID = 22043]
4. Security Alert Response Team [Option ID = 22044]

12) The chemical formula for Freon 12 is[Question ID = 5512][Question Description = 112_176_FET_SEP22_Q12]

1. CCl_2F_2 [Option ID = 22045]
2. CHClF_2 [Option ID = 22046]
3. CH_3Cl [Option ID = 22047]
4. CClF_2 [Option ID = 22048]

13) Match List I with List II

List I	List II
A. Power transmission	I. Retort
B. Cold storage	II. Solid CO_2
C. Dry ice	III. V belt
D. Thermal processing	IV. -16°C

Choose the correct answer from the options given below:

[Question ID = 5513][Question Description = 113_176_FET_SEP22_Q13]

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

[Option ID = 22049]

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

[Option ID = 22050]

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

[Option ID = 22051]

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

[Option ID = 22052]

14) Hooks used in shark long lines are traditionally

[Question ID = 5514][Question Description = 114_176_FET_SEP22_Q14]

1. Circle-shaped hook [Option ID = 22053]
2. Round bent hooks [Option ID = 22054]
3. Swan neck hook [Option ID = 22055]
4. Kirby bent [Option ID = 22056]

15) The formula for calculating latent heat of the product is[Question ID = 5515][Question Description = 115_176_FET_SEP22_Q15]

1. $Q = mLH$ [Option ID = 22057]
2. $Q = mc\Delta t$ [Option ID = 22058]
3. $Q = mct$ [Option ID = 22059]
4. $C = Q / (m \square \Delta T)$ [Option ID = 22060]

16) An indicator used to assess the fishing pressure caused by a fishing fleet[Question ID = 5516][Question Description = 116_176_FET_SEP22_Q16]

1. Fishing capacity [Option ID = 22061]
2. Overfishing [Option ID = 22062]
3. Catch per unit effort [Option ID = 22063]
4. Fishing effort reduction [Option ID = 22064]

17) The knot in B-cut when undone forms a[Question ID = 5517][Question Description = 117_176_FET_SEP22_Q17]

1. Clean mesh [Option ID = 22065]
2. Fly mesh [Option ID = 22066]
3. A seam mesh [Option ID = 22067]
4. Half fly mesh [Option ID = 22068]

18) A petrol engine has compression ratio[Question ID = 5518][Question Description = 118_176_FET_SEP22_Q18]

1. 25 to 40 [Option ID = 22069]
2. 15 to 25 [Option ID = 22070]
3. 10 to 15 [Option ID = 22071]
4. 6 to 10 [Option ID = 22072]

19) In a simple saturated vapour compression cycle, the refrigerant is in superheated condition[Question ID = 5519][Question Description = 119_176_FET_SEP22_Q19]

1. Before entering compressor [Option ID = 22073]
2. Before entering condenser [Option ID = 22074]
3. Before entering throttle valve [Option ID = 22075]
4. Before entering evaporator [Option ID = 22076]

20) Match List I with List II

List I	List II
A. Soda Acid Fire Extinguisher	I. located in the engine room & near electrical equipment.
B. Water Extinguisher	II. located in the accommodation area of the ship.
C. Foam extinguishers	III. Class B fires.
D. Dry powder extinguisher	IV. Class A fires.

Choose the correct answer from the options given below:

[Question ID = 5520][Question Description = 120_176_FET_SEP22_Q20]

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

[Option ID = 22077]

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

[Option ID = 22078]

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

[Option ID = 22079]

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

[Option ID = 22080]

21) The refrigerator's evaporator can also be termed as

[Question ID = 5521][Question Description = 121_176_FET_SEP22_Q21]

1. Cooler creator [Option ID = 22081]
2. Heat transmitter [Option ID = 22082]
3. Cooler [Option ID = 22083]
4. Freezer [Option ID = 22084]

22) International regulations for preventing collision at sea contains altogether 38 rules covered in

[Question ID = 5522][Question Description = 122_176_FET_SEP22_Q22]

1. Two Parts [Option ID = 22085]
2. Four parts [Option ID = 22086]
3. Three parts [Option ID = 22087]
4. Five parts [Option ID = 22088]

23) The Ideal tidal amplitude for extensive and semi-intensive culture is

[Question ID = 5523][Question Description = 123_176_FET_SEP22_Q23]

1. 0.5 meter [Option ID = 22089]
2. 1.0 meter [Option ID = 22090]

3. 1.5 meter [Option ID = 22091]
4. 2.0 meter [Option ID = 22092]

24) Determining the difference in elevation between two points on the surface of the earth is known as[Question ID = 5524][Question Description = 124_176_FET_SEP22_Q24]

1. Levelling [Option ID = 22093]
2. Simple levelling [Option ID = 22094]
3. Differential levelling [Option ID = 22095]
4. Longitudinal levelling. [Option ID = 22096]

25) A method of navigation which employs the use of various electronic devices[Question ID = 5525][Question Description = 125_176_FET_SEP22_Q25]

1. Dead Reckoning (DR) [Option ID = 22097]
2. Electronic Navigation [Option ID = 22098]
3. Piloting [Option ID = 22099]
4. Celestial Navigation [Option ID = 22100]

26) What is the thermal efficiency of a two-stroke cycle engine in comparison to 4 stroke cycle engine

[Question ID = 5526][Question Description = 126_176_FET_SEP22_Q26]

1. Equal to [Option ID = 22101]
2. Less than [Option ID = 22102]
3. More than [Option ID = 22103]
4. Greater than [Option ID = 22104]

27) The horizontal angle between true meridian and magnetic meridian, is known[Question ID = 5527][Question Description = 127_176_FET_SEP22_Q27]

1. Bearing [Option ID = 22105]
2. Magnetic declination [Option ID = 22106]
3. Dip [Option ID = 22107]
4. Convergence [Option ID = 22108]

28) Log rafts are operating from[Question ID = 5528][Question Description = 128_176_FET_SEP22_Q28]

1. Harbour [Option ID = 22109]
2. Ports [Option ID = 22110]
3. Beaches [Option ID = 22111]
4. Jetties [Option ID = 22112]

29) Sea turtle mortality in long-line operations has been reduced by using[Question ID = 5529][Question Description = 129_176_FET_SEP22_Q29]

1. J-hooks [Option ID = 22113]
2. Circle hooks [Option ID = 22114]
3. Weedless hooks [Option ID = 22115]
4. Treble hooks [Option ID = 22116]

30) Type of acoustic equipment developed mainly to find out the precise position of a pelagic trawl[Question ID = 5530][Question Description = 130_176_FET_SEP22_Q30]

1. Net sonde [Option ID = 22117]
2. Sonar [Option ID = 22118]
3. Radar [Option ID = 22119]
4. Echo sounder [Option ID = 22120]

31) The amount of water displaced by a ship expressed in tons weight is known as[Question ID = 5531][Question Description = 131_176_FET_SEP22_Q31]

1. Deadweight tonnage [Option ID = 22121]
2. Displacement tonnage [Option ID = 22122]
3. Gross tonnage [Option ID = 22123]
4. Net tonnage [Option ID = 22124]

32) Which of the following is not an internal combustion engine[Question ID = 5532][Question Description = 132_176_FET_SEP22_Q32]

1. 4 stroke petrol engine [Option ID = 22125]
2. 2 stroke petrol engine [Option ID = 22126]
3. Diesel engine [Option ID = 22127]
4. Steam turbine [Option ID = 22128]

33) The following term denotes the ability of the vessel to perform adequately and safely at sea under all conditions likely to be encountered.[Question ID = 5533][Question Description = 133_176_FET_SEP22_Q33]

1. Sea worthiness [Option ID = 22129]
2. Sea kindliness [Option ID = 22130]
3. Displacement [Option ID = 22131]
4. Efficiency [Option ID = 22132]

34) Match List I with List II

List I	List II
A. Chinnanaram	I. Made of four logs
B. Catamaran	II. Made of five logs
C. Thundilmaram	III. Made of seven logs
D. Kolamaram	IV. Made of three logs

Choose the correct answer from the options given below:

[Question ID = 5534][Question Description = 134_176_FET_SEP22_Q34]

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

[Option ID = 22133]

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

[Option ID = 22134]

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

[Option ID = 22135]

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

[Option ID = 22136]

35) The following coefficient is useful while calculating ship's resistance

[Question ID = 5535][Question Description = 135_176_FET_SEP22_Q35]

1. Block coefficient [Option ID = 22137]
2. Prismatic coefficient [Option ID = 22138]
3. Midship section area coefficient [Option ID = 22139]
4. Water plane coefficient [Option ID = 22140]

36) In Naval Architecture, the design spiral serves the iterative design logic of designing a ship. The spiral comprises of following phases

- A. Concept design stage
- B. Preliminary design stage
- C. Contract design stage
- D. Detailed design stage,

Choose the *correct* sequence of stages to be followed from the options given below

[Question ID = 5536][Question Description = 136_176_FET_SEP22_Q36]

1. A, B, C, and D,

[Option ID = 22141]

2. B, A, C and D

[Option ID = 22142]

3. B, C, D and A

[Option ID = 22143]

4. A, C, B, and D,

[Option ID = 22144]

37) In a four-stroke engine, the working cycle is completed in

[Question ID = 5537][Question Description = 137_176_FET_SEP22_Q37]

1. One revolution of the crankshaft [Option ID = 22145]
2. Two revolutions of the crankshaft [Option ID = 22146]
3. Three revolutions of the crankshaft [Option ID = 22147]

4. Four revolutions of the crankshaft [Option ID = 22148]

38) The power required at the propeller shaft to turn the propeller is[Question ID = 5538][Question Description = 138_176_FET_SEP22_Q38]

1. Indicated horsepower (IHP) [Option ID = 22149]
2. Brake horse power(BHP) [Option ID = 22150]
3. Shaft horse power (SHP) [Option ID = 22151]
4. Effective horse power(EHP) [Option ID = 22152]

39) It is a device-independent of earth magnetism used to find the direction of true north[Question ID = 5539][Question Description = 139_176_FET_SEP22_Q39]

1. Magnetic compass [Option ID = 22153]
2. Gyro compass [Option ID = 22154]
3. Sextant [Option ID = 22155]
4. Chronometer [Option ID = 22156]

40) The size of the fishing vessels generally accommodated in simple landing places is

[Question ID = 5540][Question Description = 140_176_FET_SEP22_Q40]

1. 10 m to 11m [Option ID = 22157]
2. 12 m to 19 m [Option ID = 22158]
3. 25 m to 40 m [Option ID = 22159]
4. 20 m to 24 m [Option ID = 22160]

41) A structure protecting shore area, harbour, anchorage basin from disturbance[Question ID = 5541][Question Description = 141_176_FET_SEP22_Q41]

1. Groynes [Option ID = 22161]
2. Breakwater [Option ID = 22162]
3. Revetments [Option ID = 22163]
4. Fender [Option ID = 22164]

42) The angle between compass needle makes with magnetic meridian is[Question ID = 5542][Question Description = 142_176_FET_SEP22_Q42]

1. Deviation [Option ID = 22165]
2. Variation [Option ID = 22166]
3. Compass error [Option ID = 22167]
4. Gyro error [Option ID = 22168]

43) Type of fishing boat operated in surf beaten open coast is

[Question ID = 5543][Question Description = 143_176_FET_SEP22_Q43]

1. Mechanized boat [Option ID = 22169]
2. Non-rigid mechanised boat [Option ID = 22170]
3. Raft boat [Option ID = 22171]
4. Rigid mechanised boat [Option ID = 22172]

44) All the sea-going vessel should register at the office of[Question ID = 5544][Question Description = 144_176_FET_SEP22_Q44]

1. Mercantile Marine Department [Option ID = 22173]
2. MPEDA [Option ID = 22174]
3. State Fisheries Department [Option ID = 22175]
4. Port Trust [Option ID = 22176]

45) The shape of the trawl codend selectivity curve is

[Question ID = 5545][Question Description = 145_176_FET_SEP22_Q45]

1. Bell shape [Option ID = 22177]
2. Ogive shape [Option ID = 22178]
3. Flat shape [Option ID = 22179]
4. Semi-bell shape [Option ID = 22180]

46) Selection factor (SF) represents the ratio[Question ID = 5546][Question Description = 146_176_FET_SEP22_Q46]

1. Mean selection length and mesh size [Option ID = 22181]
2. Mean selection weight and mesh size [Option ID = 22182]
3. Average selection length and mesh shape [Option ID = 22183]
4. Average selection weight and mesh shape [Option ID = 22184]

47) The initial stability of a fishing vessel is indicated by its[Question ID = 5547][Question Description = 147_176_FET_SEP22_Q47]

1. Metacentric height [Option ID = 22185]
2. Centre of bouyancy [Option ID = 22186]
3. Centre of gravity [Option ID = 22187]
4. Keel [Option ID = 22188]

48) The power developed by the engine cylinder of an I.C. engine is known as[Question ID = 5548][Question Description = 148_176_FET_SEP22_Q48]

1. Indicated power [Option ID = 22189]
2. Actual power [Option ID = 22190]
3. Break power [Option ID = 22191]
4. Frictional power [Option ID = 22192]

49) The major fishing harbour accommodates the vessels[Question ID = 5549][Question Description = 149_176_FET_SEP22_Q49]

1. Upto 10 m and 1.5 m draft [Option ID = 22193]
2. Upto 18 m and 3 m draft [Option ID = 22194]
3. Upto 25 m and 4 m draft [Option ID = 22195]
4. Upto 10 m and 2 m draft [Option ID = 22196]

50) Log rafts are found in[Question ID = 5550][Question Description = 150_176_FET_SEP22_Q50]

1. Maharashtra [Option ID = 22197]
2. West Bengal [Option ID = 22198]
3. Tamil Nadu [Option ID = 22199]
4. Goa [Option ID = 22200]