

PREVIEW QUESTION BANK

Module Name : Fish Nutrition and Feed Technology - 55-ENG
Exam Date : 29-Jun-2024 Batch : 14:30-16:30

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	201	Movement of DNA from one bacterium to another through a tubular bridge or pilus: 1. Conjugation 2. Transposition 3. Transfection 4. Transduction A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
2	202	Which of the following is responsible for eliminating toxic oxygen by-products from cells? 1. Mitochondria 2. Golgi complex 3. Peroxisomes 4. Chloroplasts A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
3	203	A form of multiple parasitism in which a parasite preferentially attacks a host that is already parasitized by another species is known as 1. Cleptoparasitism 2. Ectoparasitoid 3. Obligate parasitism 4. Superparasitism A1 : 1	4.0	1.00

		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
4	204	For mass multiplication of DD-136 nematode, the common host used is 1. Silk moth 2. Fruit sucking moth 3. Codling moth 4. Lesser wax moth A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
5	205	Chlorpyrifos methyl is effective against stored product insects except 1. <i>Rhizopertha dominica</i> 2. <i>Tribolium castaneum</i> 3. <i>Caryedon serratus</i> 4. <i>Oryzaephilus surinamensis</i> A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
6	206	Which of the following insects often cause inhalational allergies in human following large emergence of adult insects 1. Stick insects 2. May flies 3. Ear wigs 4. Preying mantis A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

7	207	Given below are two statements: Statement (I): Climate is a weather condition related to smaller areas at a given place and at a given time, Statement (II): Weather is a condition of atmosphere at a given place and at a given time In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are correct. - Both Statement (I) and Statement (II) are incorrect. - Statement (I) is correct but Statement (II) is incorrect. - Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

8	208	The local name of cyclone in Phillippines is - Hurricane - Cyclone - Baquo - Typhoon A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

9	209		4.0	1.00
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Which one of the following are secondary tillage implements?

- (A). Subsoiler
- (B). Cultivator
- (C). Disc harrow
- (D). Wetland plough

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

- 1. (A), (B) and (D) only.
- 2. (B) and (C) only.
- 3. (B), (C) and (D).
- 4. (B) and (D) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

10 210

_____ is the most suitable, drought resistant and persistent grass?

- 1. *Alylosia sp.*
- 2. *Cenchrus ciliaris*
- 3. *Stylosanthes hamata*
- 4. *Sorghum bicolor*

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

1.00

Objective Question

11 211

The rainfed area in India is approximately

- 1. 30 mha
- 2. 40 mha
- 3. 57 mha
- 4. 70 mha

A1 : 1

A2 : 2

4.0

1.00

A3 : 3

A4 : 4

Objective Question

12	212	Which nutrient is often a limiting factor in agricultural production? 1. Nitrogen 2. Carbon 3. Oxygen 4. Hydrogen A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

13	213	What is a potential disadvantage of agroforestry systems? 1. Increased soil erosion 2. Decreased carbon sequestration 3. Reduced biodiversity 4. Enhanced susceptibility to pests A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

14	214	Pungency in mustard oil is due to 1. Amino acid 2. Allyl isothiocyanate 3. Erusic acid 4. Oxalic acid A1 : 1 A2 : 2	4.0	1.00
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		A3 : 3		
		A4 : 4		
Objective Question				
15	215	Sesamum belongs to the family 1. Chenopodiaceae 2. Papilionaceae 3. Leguminosae 4. Pedaliaceae A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
16	216	Dark period is critical in which type of plant? 1. Short day plant 2. Long day plant 3. Day neutral plant 4. All the options A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
17	217	Which of the following is NOT a significant contributor to greenhouse gas emissions from livestock farming? 1. Carbon dioxide 2. Methane 3. Nitrous oxide 4. Ammonia A1 : 1 A2 : 2 A3 : 3	4.0	1.00

A4 : 4

Objective Question

18	218	Fe deficiency is mostly seen in crops growing on 1. Calcareous or alkaline soils 2. Salt affected soils 3. Acidic soils 4. Neutral soils A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

19	219	EDV (Essentially Derived Varieties) are those which are derived from: 1. crossing two commercially known varieties 2. hybrid introduced from other countries 3. existing variety through genetic engineering or mutation 4. crossing commercially known variety with its wild relative A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

20	220	What is the role of "companion planting" in agriculture? 1. Enhancing soil fertility through crop rotation 2. Growing different crop species together to deter pests 3. Cultivating plants in hydroponic system 4. Increasing soil compaction through cover cropping A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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		A4 : 4		
Objective Question				
21	2301	Channel catfish is a popular fish species for culture in the country of 1. South Africa 2. USA 3. China 4. India A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
22	2302	Human chorionic gonadotropin, used for induced breeding of fish, is a..... 1. Bilirubin 2. Glycoprotein 3. Hemocyanin 4. Cytokinin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
23	2303	Brachionus belongs to the phylum 1. Rotifera 2. Protozoa 3. Arthropoda 4. Copepoda A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

24	2304	Pokkali rice can tolerate salinity up toppt 1. 6-8 2. 10 3. 12 4. 15 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

25	2305	The controlling factor of pond productivity is..... 1. Alkaline bottom of the pond 2. Colloidal content of the soil 3. Calcium content of the bottom of the pond 4. Cellulose mud of the pond A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

26	2306	Which chemical is used to control obnoxious gas in culture water? 1. Bleaching powder 2. Alum 3. Zeolite 4. Calcium carbonate A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

27	2307	Application of Gypsum in a pond corrects the.....of pond water 1. Acidity 2. Alkalinity 3. Salinity 4. Hardness A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
28	2308	The water stability of shrimp feed should be minimum of..... 1. 30 minutes 2. 1 hour 3. 2 hours 4. 3 hours A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
29	2309	_____ fish are sterile 1. Triploid 2. Tetraploid 3. Haploid 4. Diploid A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
30	2310		4.0	1.00

The number of fish seed for transportation in containers can be calculated using the following formula

$$N = (D-2)X_v/RxH$$

Where : D is

1. Dissolved oxygen in ambient water in ppm.
2. Density of fish seed stocked
3. Diameter of container
4. Period of transportation in Days

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

31	2311	Shrimp Broodstock Multiplication Centre (BMC) facility is for developing broodstock 1. From the post-larvae to adult 2. Egg to Larvae 3. Matured male and female 4. Nauplius to post larve A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

32	2312	Broodstock Multiplication Centre for shrimp shall be located in an area where: 1. No fish farmers 2. Shrimp Hatchery/ Aquaculture Activities or Fish Landing Centers (FLCs) do not already exist within a radius of 1000 meters. 3. Salt water easily available 4. Shrimp farmers are in large number A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question				
33	2313	One of the highly indispensable live foods used in the shrimp aquaculture industry 1. Brine shrimp 2. Cyclops 3. Earthworm 4. Silkworm larvae A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
34	2314	Freshly caught broodstock lobster should be given a dip treatment into remove polychaete worms, sponges, and ciliates 1. KMnO₄ 2. Methylene blue malachite green 3. Formalin 4. Common salt A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
35	2315	The inconsistent survival from the later zoea to megalopa stage is the major problem in mud crab hatchery due to 1. WSSV 2. BMC 3. WSD 4. MDS A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question				
36	2316	In mud crab hatching occurs indays after spawning at temperatures of 26.5-31°C 24 hours 72 hours 7-14 days 12 hours A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
37	2317	Which one of the following is used to make the acidic soil suitable for carp culture? - Urea - Superphosphate - Quick lime - Cow dung A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
38	2318	Which one of the following is harmful for the carp spawns? - Anisops - Brachionus - Keratela - Ceriodaphnia A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
39	2319		4.0	1.00

Which one of the following fish culture systems produces zero waste?

1. Cage culture
2. Pen culture
3. Race ways
4. Recirculating Aquaculture System

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

40 2320

Which one of the following is the most harmful water quality parameter for fish culture?

1. Ionized ammonia
2. Unionized ammonia
3. Conductivity
4. Turbidity

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

1.00

Objective Question

41 2321

eDNA is _____

1. Environmental DNA
2. Ribosomal DNA
3. Mitochondrial DNA
4. Lysosomal DNA

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

1.00

Objective Question

42 2322

4.0

1.00

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

Assertion (A) : Quarantine protocols are essential in the prevention of spread and introduction of pathogens in aquaculture systems

Reason (R) : Regular monitoring of water quality parameters is crucial for maintaining the health of cultured animals

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

1. Both (A) and (R) are true and (R) is the correct explanation of (A).
2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
3. (A) is true but (R) is false.
4. (A) is false but (R) is true.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

43	2323	Malignant tumor observed in liver tissue is called as 1. Neuroblastoma 2. Chondrosarcoma 3. Meninginoma 4. Hepatocarcinoma A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

44	2324	The total hardness level (CaCO_3 equivalent) considered to be a dividing line between soft and hard water 1. 100 ppm 2. 50 ppm 3. 75 ppm 4. 150 ppm A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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		A4 : 4		
Objective Question				
45	2325	The improved variety of rohu (Jayanti rohu) is a result of 1. Intraspecific hybridisation 2. Interspecific hybridisation 3. Transgenesis 4. Selective breeding A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
46	2326	The protein requirements for fish are higher by about ----- times compared to mammal 1. 1-2 2. 2-3 3. 3-4 4. 4-5 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
47	2327	Ammonia-N is toxic to commercially cultured fish at concentrations 1. ≥ 1.5 mg N / lit 2. 0.1 mg N / lit 3. 15 μg N / lit 4. 1.5 μg N/ lit A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

48	2328	The diagnostic technique that employs labelled nucleic acid probes for detection of target sequence on fixed tissue specimen is: 1. Immunohistochemistry 2. <i>In situ</i> hybridization 3. PCR 4. RT-PCR A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

49	2329	Preliminary identification of the disease based on gross observations and circumstantial evidences is referred to as: 1. Confirmatory diagnosis 2. Definitive diagnosis 3. Presumptive diagnosis 4. Clinical diagnosis A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

50	2330	Noncytochrome oxidase - containing Gram - negative bacteria pathogenic for fish 1. <i>Edwardsiella tarda</i> 2. <i>Yersinia ruckeri</i> 3. <i>Flavobacterium columnaris</i> 4. 1 & 2 A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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		A4 : 4		
Objective Question				
51	2331	In microbiology, liquid media is generally called as: 1. Broth 2. Agar 3. Slant 4. 2 & 3 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
52	2332	Which of the following act as phagocytes? (A). Macrophages (B). Dendritic cells (C). Neutrophils (D). Thrombocytes 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D). 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
53	2333	Which of the following has a role in iron metabolism in fish? 1. Tranferrin 2. Interferon 3. Lysozyme 4. Agglutinin A1 : 1	4.0	1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

54	2334	The non-viable beneficial microorganisms termed as ghost probiotics are synonymous to 1. Postbiotic 2. Synbiotic 3. Prebiotic 4. Paraprobiotic A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

55	2335	Nodavac-R is a recent recombinant vaccine developed by 1. ICAR-CIBA 2. ICAR-CIFE 3. ICAR-CIFA 4. ICAR-CMFRI A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

56	2336	Proteins are 1. Bundles of fatty acids 2. Bundles of amino acids 3. Micro nutrients 4. All statements are true A1 : 1 A2 : 2	4.0	1.00
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		A3 : 3		
		A4 : 4		
Objective Question				
57	2337	One calorie is equivalent to 1. 4184 Joules 2. 41.84 Joules 3. 4.184 Joules 4. 418.4 Joules A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
58	2338	Synthetic form of Vitamin K is 1. Menadione 2. Tocopherol 3. Folic acid 4. Cynocobalamin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
59	2339	is Essential Amino Acid 1. Proline 2. Alanine 3. Tryptophan 4. Cystein A1 : 1 A2 : 2 A3 : 3	4.0	1.00

A4 : 4

Objective Question

60	2340	In which of the carp culture systems fishes are cultured mostly under natural feed? 1. Intensive 2. Semi- intensive 3. Extensive 4. Super-intensive A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

61	2341	Which kind of fish have a high carbohydrate requirement? 1. Herbivorous fishes 2. Omnivorous fishes 3. Carnivorous fishes 4. Detritivorous fishes A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

62	2342	In general, fish and crustaceans are incapable of biosynthesis of which of the following vitamin? 1. Vitamin A 2. Vitamin B 3. Vitamin C 4. Vitamin D A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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		A4 : 4		
Objective Question				
63	2343	The poor utilization of carbohydrates in carnivorous fishes is mainly due to which of the following reasons? 1. Low amylase 2. High amylase 3. Low lipase 4. Low pepsin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
64	2344	Which is the most common type of feed fed to aquarium fish? 1. Crumble feed 2. Pellet feed 3. Dough feed 4. Flake feed A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
65	2345	Gizzard is a part of 1. Cardiac stomach 2. Pyloric stomach 3. Hindgut 4. Midgut A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

66	2346	High PER in fish fed with higher carbohydrate is due to 1. High protein retention 2. High carbohydrate retention 3. High fat deposition 4. Retention of water A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

67	2347	Reverse primer for a gene can be a part of the sequence of 1. 5' end of cDNA 2. 5' end of mRNA 3. 3' end of cDNA 4. 3' end of mRNA A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

68	2348	Most of the fishes are unable to synthesize polyunsaturated fatty acids of n-3 and n-6 series. Which one of the following fish has the capacity to convert alpha-linolenic acid to docosahexaenoic acid? 1. Hilsa 2. Halibut 3. Rainbow trout 4. Common carp A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

69	2349	Which one of the following vitamins serves as a hydrogen donor in many hydroxylation reaction: 1. Vitamin A 2. Vitamin C 3. Choline 4. Inositol A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

70	2350	The essential amino acid tryptophan deficiency leads to 1. Scoliosis and lordosis 2. Cataracts 3. Excess pigmentation 4. Reduce dopamine secretion A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

71	1002801		4.0	1.00
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Carbohydrates are well known

1. Organic compounds of high molecular weight
2. Triglycerides where glycerol is esterified
3. Inorganic compounds of high molecular weight
4. All statements are true

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

72	1002802	Structures of proteins are complex, having many amino acids linked together through 1. Peptide bonds 2. Cross-linked between chains by sulfhydryl bonds, hydrogen bonds 3. Van der Waals forces 4. All the above statements are true A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

73	1002803	ω-3 is an important 1. Fatty acid 2. Amino acid 3. Mineral 4. All statements are true A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

74	1002804		4.0	1.00
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..... is an Essential Amino Acid

1. Tryptophan
2. Proline
3. Alanine
4. Monosaccharide

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

75	1002805	Lipids having metabolic energy (ATP) and the energy value of lipid is 1. 4.1 kcal/g 2. 5.6 kcal/g 3. 9.5 kcal/g 4. 100 kcal/g A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

76	1002806	One calorie is equivalent to 1. 4.184 Joules 2. 41.84 Joules 3. 418.4 Joules 4. 4184 Joules A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

77	1002807		4.0	1.00
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		Sparing effect of methionine is with 1. Cystine 2. Menadione 3. Phylloquinone 4. Not a nutrient concerning sparing effect A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
78	1002808	By studying feeding habit , is a surface feeder fish 1. Mrigal 2. Rohu 3. Silver carp 4. Common carp A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
79	1002809	Fish do have a low energy requirement because 1. No energy expenditure is involved for maintenance of body temperature 2. Less muscle activity to maintain their position in water 3. Less energy expenditure for excretion of ammonia 4. All Statements are true A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
80	1002810		4.0	1.00

.....commonly called wheel animalcules

1. Small stages of fish
2. Rotifers
3. Algae
4. All statements are false

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

81	1002811	Nutritional requirement of shellfish is effected by 1. Abiotic factors & age of fish 2. Water quality & stage of fish 3. Biotic factors & health of fish 4. All statements are true A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

82	1002812	Reproductive health of a fish depends on fish feed having 1. Vitamin E 2. Proteins and Carotenoids 3. Fatty acids 4. All the above nutrients A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

83	1002813		4.0	1.00
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		Study of fish nutrition and energy shows that a fish get energy from..... 1. Only trace minerals 2. Macro nutrients 3. Water soluble vitamins 4. All statements are false A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
84	1002814	The term vitamin is coined by 1. R.Paul Raj 2. Aristotle 3. Casimir Funk 4. John Halver A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
85	1002815	Due to deficiency of Essential Amino Acid- Tryptophan, the symptoms in a fish may be 1. Scoliosis 2. Caudal fin erosion 3. Decreased carcass lipid content 4. All the statements are true A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
86	1002816		4.0	1.00

What is the major role of calcium and phosphorus in fish feed?

1. Structural component
2. Muscle
3. Blood cells formation
4. Mucus

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

87 1002817

In bony fishes, catabolism of protein leads to the release of which of the following?

1. Uric acid
2. Ammonia
3. Urea
4. Nitrite

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

88 1002818

Cobalt is a constituent of which vitamin?

1. Vitamin C
2. Vitamin B₁₂
3. Vitamin A
4. Vitamin D

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

89 1002819

4.0 1.00

Which of the following content is inversely proportional to the fat content of fish muscle?

1. Protein
2. Carbohydrate
3. Ash
4. Water

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

90 1002820

Fatty acids are represented by the formula R-COOH where R stands for which of the following?

1. Alkyl group
2. Alkaloid group
3. Aldehyde group
4. Acetyl group

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

91 1002821

Feed intake can be increased by the addition of which of the following?

1. Antioxidants
2. Hormones
3. Attractants
4. Pigments

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

92 1002822

4.0 1.00

Herbs are incorporated in the fish diet to enhance which of the following?

1. Palatability
2. Immunity
3. Water stability
4. Nutritional value

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

93 1002823

4.0 1.00

Which of the following is an example of monounsaturated fatty acids?

1. Arachidonic acid
2. Palmitic acid
3. Oleic acid
4. Linolenic acid

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

94 1002824

4.0 1.00

In most fishes, gastric digestion requires how much pH?

1. Near neutral
2. >5
3. Alkaline
4. 4 or less

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

95 1002825

4.0 1.00

To minimize the risk due to oxidative damage, which of the following is added to delay the collapse caused by lipid oxidation?

1. Glycerine
2. Sucrose
3. Butylated hydroxyanisole
4. Lactic acid

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

96 1002826 4.0 1.00

Which of the following are the most limiting amino acids?

1. Glycine and Leucine
2. Methionine and Lysine
3. Valine and Tyrosine
4. Proline and Lysine

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

97 1002827 4.0 1.00

Name the mould inhibitor which is commonly used in aqua feed?

1. Sodium Chloride
2. Barium Chloride
3. Propionic Acid
4. Sulphuric Acid

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

98 1002828 4.0 1.00

Pepsinogen is secreted by which of the organ?

1. Stomach
2. Small intestine
3. Pancrease
4. Liver

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

99	1002829	Most probiotics proposed as biological control agents in aquaculture belong to which of the following group?	4.0	1.00
		1. <i>Escherichia coli</i> 2. <i>Nitrobacter</i> 3. <i>Aspergillus</i> 4. <i>Lactobacillus</i>		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

100	1002830	Primary structure of proteins is due to the presence of_____	4.0	1.00
		1. Hydrogen bonds 2. Ionic bonds 3. Peptide bonds 4. Disulphide (S-S) linkages		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

101	1002831		4.0	1.00
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Stomach is thick and sac-like in which of the following fishes?

1. Carnivorous fishes
2. Omnivorous fishes
3. Herbivorous fishes
4. Detritivorous fishes

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

102 1002832

4.0

1.00

The sum total of all the chemical reactions occurring in fish body is called

1. Anabolism
2. Catabolism
3. Metabolism
4. Enzymatic hydrolysis

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

103 1002833

4.0

1.00

Which of the following is the cheapest source of energy ?

1. Lipid
2. Carbohydrate
3. Protein
4. Vitamins

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

104 1002834

4.0

1.00

Which is the major pigment present in the shrimp?

1. Alanine
2. Phenol
3. Astaxanthin
4. Leukothriene

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

105 1002835

Which is the mathematical technique for selecting the best combination of feed ingredients to make a diet?

1. Quadratic programming
2. Pearson's square method
3. Linear programming
4. Best buy techniques

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

1.00

Objective Question

106 1002836

Which of the following epigenetic interactions take place both with DNA and histones?

1. Biotinylation
2. Acetylation
3. Methylation
4. Deacetylaton

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0

1.00

Objective Question

107 1002837

4.0

1.00

Which of the following is not a method of DNA sequencing?

1. Edman degradation
2. Maxam Gilbert chemical method
3. Pyrosequencing
4. Illumina (Solexa)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

108	1002838	Acetyl CoA oxidase is an enzyme present in _____ 1. Mitochondria 2. Cytoplasm 3. Smooth endoplasmic reticulum 4. Peroxisome A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

109	1002839	The science of analysing biological data with the help of computational sciences is known as _____ 1. Biostatistics 2. Bioinformatics 3. Biomechanics 4. Biodynamics A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

110	1002840		4.0	1.00
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Which of the following transcription factor is induced by reduced cholesterol levels?

1. PPAR
2. LXR
3. SREBP
4. FXR

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

111	1002841	Pinocytosis occurs in which part of the intestine? 1. Duodenum 2. Jejunum 3. Ileum 4. Rectum A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

112	1002842	The reason for transporting short-chain fatty acids to tissues surpassing hepatic portal circulation 1. Toxic to liver 2. Use as an immediate energy source 3. Synthesis of long-chain fatty acids 4. To incorporate into lipoproteins A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

113	1002843		4.0	1.00
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Which is not true about RGL (Relative Gut Length)?

1. Increases with growth
2. Changes with feeding habit
3. Constant
4. Changes with the stage of development

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

114	1002844	Apparent digestibility coefficient 1. Underestimates true digestibility 2. Overestimate true digestibility 3. Same as true digestibility 4. More difficult to estimate than the digestibility A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

115	1002845	Which of the following is an RGL (Relative Gut Length) of carnivore? 1. 6.2 2. 0.33 3. 2.4 4. 4.7 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

116	1002846		4.0	1.00
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Vitamins are usually very fragile in nature. Which one of the following vitamins is more sensitive to heat treatment?

1. Niacin
2. Tocopherol
3. Riboflavin
4. Ascorbic acid

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

117	1002847	Which one of the following statements related to essential fatty acids (EFA) requirement of fish is true?	4.0	1.00
1. Equilibrium should be maintained between n-3 and n-6 PUFA 2. No equilibrium is required between n-3 and n-6 PUFA 3. Equilibrium should be maintained between n-3 and phospholipid level 4. Equilibrium should be maintained between phospholipid and n-6 PUFA level				
A1 : 1				
A2 : 2				
A3 : 3				
A4 : 4				

Objective Question

118	1002848	Which one of the following is true for aromatic amino acid tyrosine?	4.0	1.00
1. Give rise to thyroid hormones 2. Maintain ionic balance 3. Helps in calcium deposition 4. Serves as precursor of choline				
A1 : 1				
A2 : 2				
A3 : 3				
A4 : 4				

Objective Question

119	1002849		4.0	1.00
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		Which one of the combination of diet is most useful for fish? 1. Diet, <i>Bacillus clausii</i>, mannan oligosaccharide 2. Diet, mannan oligosaccharide 3. Diet, <i>Bacillus clausii</i> 4. Diet, fructo- oligosaccharide A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
120	1002850	Which one of the following statements is true for natural immunostmulants? 1. Stimulates immune system and easily available 2. Growth enhancement, pigmentation and eco-friendly 3. Enhances growth, provides protection against pathogens and eco-friendly 4. Provides protection against pathogens and eco-friendly A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00