

கிடைக்கக்கூடிய அனைத்து உரிமைகளும் பதிப்பாளியிடம் உள்ளன / முழுப் பதிப்புரிமையுடையது / All Rights Reserved]

புரட்சி கிரேடுகளின்படியான பாடத்திட்டம் / Old Syllabus

இலங்கைப் பரீட்சைத் திணைக்களம் Sri Lanka Department of Examinations	இலங்கைப் பரீட்சைத் திணைக்களம் Sri Lanka Department of Examinations	82 E I, II
OLD		
අධ්‍යයන පොදු සහතික පත්‍ර (සාමාන්‍ය පෙළ) විභාගය, 2017 දෙසැම්බර් கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர)ப் பரீட்சை, 2017 டிசெம்பர் General Certificate of Education (Ord. Level) Examination, December 2017		
பீலர் හා ආහාර තාක්ෂණය கடற்றொழிலும் உணவுத் தொழில்புவியிலும் Fisheries and Food Technology	I, II I, II I, II	පැය තුනයි மூன்று மணித்தியாலம் Three hours

Fisheries and Food Technology - I**Note :**

- Answer *all* questions.
- In each of the questions from 1 to 40, pick one of the alternatives (1), (2), (3), (4), which is *correct or most appropriate*.
- Mark a cross (X) on the number corresponding to your choice in the answer sheet provided.
- Further instructions are given on the back of the answer sheet. Follow them carefully.

- Demersal fishes live in the sea are
 - Sardine and Herring.
 - Grouper and Snapper.
 - Skipjack tuna and Yellowfin tuna.
 - Flying fish and Anchovy.
- Area which is connected to the sea in some duration of the year and remain separated for the rest of the period is called
 - villu.
 - lagoon.
 - estuary.
 - bay.
- Major portion of the total fish harvest in Sri Lanka consists of
 - offshore tuna fish and other large pelagic fishes.
 - offshore tuna fish and demersal fishes.
 - coastal small fish and squids.
 - coastal small fish and shrimp.
- Duration where the south, west and southwest sea get rough in Sri Lanka is
 - February to April.
 - May to September.
 - October to November.
 - December to January.
- A student has submitted the following statement about the fishery resources in the areas where water currents exist.

A - Higher fish population due to up-welling.

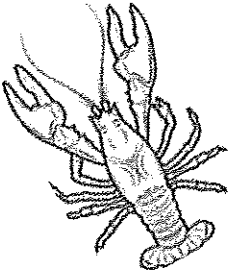
B - Abundance of fish resources due to facilitation of fish migration by water currents.

C - Lower fish population due to out-flowing of food via water currents.

The true statements of the above are

 - A and B.
 - A and C.
 - B and C.
 - All A, B and C.
- Fully submerged aquatic plant is
 - Eichhonia.
 - Salvenia.
 - Lotus.
 - Vallisneria.
- Aquatic animal which is conserved in Sri Lanka is
 - Tortoise.
 - Eel.
 - Murrel.
 - Clams.
- Which statement explains well, the large potential in developing aquaculture in Sri Lanka?
 - Having a sea area of eight times more than the land area.
 - Having three hectare of still inland water bodies per 1 km² land area.
 - Exclusive Economic Zone surrounded by International Sea.
 - Presence of 103 rivers and many seasonal tanks in Sri Lanka.

[see page two]

9. Which fish gets a single fin of fusing pelvic, anal and caudal fins together?
 (1) Skipjack tuna (2) Pony fish (3) Catfish (4) Eel
10. The fishes get sense from
 (1) eye, skin and lateral line. (2) mouth, anal fin and scales.
 (3) pectoral fin, pelvic fin and dorsal fin. (4) dorsal fin, slime layer and barbels.
11. The fishes who can be alive for sometime out of water habitat are
 (1) Shark and Skate. (2) Skipjack tuna and Yellowfin tuna.
 (3) Pony fish and Travallies. (4) Climbing perch and catfish.
12. Aquatic animal depicted in the picture is
 (1) Lobster.
 (2) White shrimp.
 (3) Freshwater prawn.
 (4) Tiger shrimp.
- 
13. Freshwater endemic fish species in Sri Lanka are currently fast becoming severely endangered. The major reason for this is due to
 (1) loss of their habitats. (2) export of these fish in large quantities.
 (3) impact of climate change. (4) take water for irrigation.
14. The traditional fishing gear used in catching large fish schools at once is
 (1) fish kraal. (2) stilt fishing. (3) beach seine net. (4) pole and line.
15. Major portion of the total fish harvest of Sri Lanka is caught by
 (1) beach seine nets. (2) gill nets. (3) long lines. (4) troll lines.
16. The traditional fishing craft made from a hollowed tree trunk is
 (1) log raft. (2) catamaran. (3) wooden raft. (4) dugout canoe.
17. Which of the following fishing gear is operated by pulling?
 (1) Gill net (2) Trawl net (3) Trammel net (4) Purse seine net
18. 'Weights' in gill-net is
 (1) floats, that are fixed to control the buoyancy of the head rope.
 (2) the rope used to maintain stability of the upper surface.
 (3) heavy stuff that are used in sinking the foot rope.
 (4) a rope used to maintain stability of the lower end.
19. What is the passive fishing gear of the followings?
 (1) Purse seine net (2) Beach seine net (3) Stake net (4) Trawl net
20. A fishing gear commonly used in sport fishing is
 (1) cast net. (2) hand line. (3) long line. (4) gill net.
21. Most suitable growth stage of fish to stock in reservoirs is
 (1) eggs. (2) fry. (3) fingerlings. (4) adult fishes.
22. The amount of salt needed to produce dried fish with 10 kg of fresh fish is
 (1) 1kg. (2) 2 kg. (3) 3 kg. (4) 4 kg.
23. A traditional fishing gear used in catching shrimps is
 (1) bottom trawling. (2) trammel nets. (3) fish kraals. (4) pulling nets.
24. If an emergency situation, what is the closest harbour that a multi-day boat fishing in northeast sea area of Sri Lanka can approach immediately?
 (1) Kalpitiya (2) Trincomalee (3) Valachchenai (4) Dikkowita

[see page three]

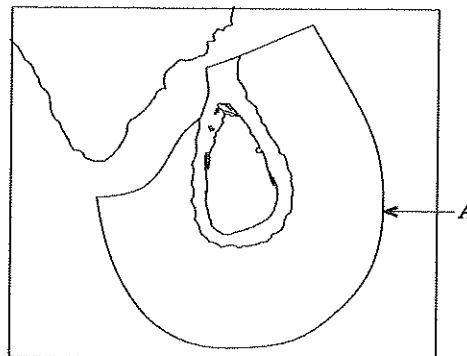
25. An aquatic species that migrates from lagoon to sea for breeding is
 (1) Sea Bass. (2) Squid. (3) Shrimp. (4) Turtle.
26. Fattening of mud crabs could get higher revenue. This involves using
 (1) egg bearing crabs. (2) egg shed crabs. (3) water crabs. (4) mature crabs.
27. Some equipment used in testing water quality is given below.
 A - pH meter
 B - Refractometer
 C - Secchi disk
 D - Oxygen meter

Of the above equipment, which is used in measuring salinity of water?

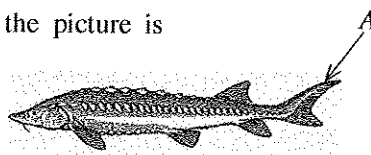
- (1) A (2) B (3) C (4) D

28. The sea margin depicted as A in the picture is

- (1) continental shelf.
 (2) international sea.
 (3) Exclusive Economic Zone.
 (4) offshore area.



29. The water source recently constructed in Sri Lanka is
 (1) Parakrama samudraya. (2) Minneriya tank.
 (3) Lunugamwehera reservoir. (4) Basawakkulama tank.
30. An indigenous fish species found in freshwater habitats of Sri Lanka is
 (1) Tilapia. (2) Climbing perch. (3) Trout. (4) Carp.
31. The main constituent to be included in the fish feed ration is
 (1) protein. (2) carbohydrate. (3) fat. (4) vitamin.
32. A fish having fin-shape marked as 'A' in the picture is
 (1) Murrel.
 (2) Sea bass.
 (3) Skipjack tuna.
 (4) Shark.



33. In order to select a suitable site for pond construction in fish culture, a student has stated the following facts.

- A - Land of sandy soil
 B - Shady place
 C - Place close to the market

Out of the above, the correct statement/s is/are

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

34. Aquatic plant which can grow in water where the salinity is even 35 ppt or above is
 (1) Hydrilla. (2) Gracilaria. (3) Vallisneria. (4) Rizophora.
35. What is the name used for the body shape of skate?
 (1) Fusiform (2) Laterally flattened
 (3) Dorsoventrally flatten (4) Snake head

36. Shown below are some equipment used in fishing boats.

A - Compass

B - Global Positioning System (GPS)

C - Echosounder

Out of the instruments given above, which are used to determine the direction of the vessel?

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

37. A fish after caught, gets spoiled through autolytic by

- (1) fungi. (2) bacteria. (3) virus. (4) enzyme.

38. The amount of energy passed from one trophic level to the next higher trophic level is

- (1) 5%. (2) 10%. (3) 50%. (4) 90%.

39. What name is used for a riverine seasonally inundating water area?

- (1) Estuary (2) Salt marsh (3) Villu (4) Lagoon

40. The toxic aquatic animals are

- (1) Catla and Cormorant. (2) Scribbled goby and Sea Cucumber.
(3) Climbing perch and Eel. (4) Puffer-fish and Seawater Eel.

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[see page five]

සියලු ම හිමිකම් ඇවිරිණි / முழுப் பதிப்புரிமையுடையது / All Rights Reserved

පැරණි නිර්දේශය/பழைய பாடத்திட்டம்/Old Syllabus

ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව ශ්‍රී ලංකා විභාග දෙපාර්තමේන්තුව Department of Examinations, Sri Lanka OLD இலங்கைப் பரீட்சைத் திணைக்களம் Department of Examinations, Sri Lanka	82 E I, II
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கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர)ப் பரீட்சை, 2017 டிசெம்பர்
General Certificate of Education (Ord. Level) Examination, December 2017

ධීවර හා ආහාර තාක්ෂණය கடற்றொழிலும் உணவுத் தொழினுட்பவியலும் Fisheries and Food Technology	I, II I, II I, II
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Fisheries and Food Technology II

* Answer five questions only, selecting the first question and four others.

- Fishery resources should be harvested ensuring sustainability of the aquatic ecosystems and minimum impact to fish resources. Further, it is important to handle the fish in a proper manner to reduce post harvest losses.
 - Mention **two** environmental friendly fishing gears used in fish harvesting.
 - Name **one** environmentally destructive fishing gear.
 - Write **two** features that should be in a fish hold of a vessel.
 - State **two** correct procedures to be followed when unloading of fish from the fishing vessel.
 - Mention **two** instances where fish harvest can get spoiled.
 - Mention **two** characteristics of a quality fish harvest.
 - Name a state institution engaged in fish marketing.
 - Mention **one** fish preservation principle.
 - Name **two** traditional fish preservation methods.
 - Mention a management process in place which enables sustainability of aquatic ecosystems.
- It has been observed presently that people have a higher tendency to go for aquaculture of food species.
 - Mention **four** characteristics to be considered in selecting food fish for aquaculture.
 - Name **three** aquaculture systems on the basis of management and describe them briefly.
 - Describe the way of introducing fish into a fish pond.
- Sri Lanka has a high potential to improve ornamental fish industry.
 - Mention **four** benefits of growing ornamental fishes.
 - (a) Mention **two** conditions that should be controlled in the water of ornamental fish culture structures.
 - Mention **one** measure each to be followed for each of these conditions in order to achieve control.
 - Describe **two** measures that can be implemented to promote ornamental fish industry in Sri Lanka.

[see page six]

4. In the aquaculture industry, keeping the fish harvest without being spoiled will realize better profit.
 - (i) Mention **three** facts that affect fish spoilage.
 - (ii) Write **four** adverse outcomes of fish spoilage.
 - (iii) Describe **three** measures that can be taken to increase fish consumption.
5. Fish industry in Sri Lanka is conducted in marine, brackish and fresh water bodies, the dominant being the marine fish industry.
 - (i) Mention **two** reasons for the abundance of fish resources in some sea areas.
 - (ii) Write **two** measures that the government has taken to develop fisheries industry.
 - (iii) Explain the importance of fish industry to the economy of Sri Lanka.
6. Fish harvest is preserved by canning.
 - (i) Name **three** fish species frequently used in canning.
 - (ii) (a) Mention **two** advantages of fish canning.
(b) Name **two** substances used as medium in fish canning.
 - (iii) Briefly describe, the preservation principles applied in fish canning.
7. Fishing community contributes to the economic development of Sri Lanka to a great extent.
 - (i) Mention **three** strengths of fishing community.
 - (ii) Explain briefly **four** challenges that are faced by fishing community.
 - (iii) Describe **two** measures the government has taken to the development of fishing community.

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