053/2026

Question Booklet Alpha Code **A**

Question Booklet Serial Number

Total No. of questions : 100 Time : 1 Hour 30 Minutes

Maximum : 100 Marks

INSTRUCTIONS TO CANDIDATES

1. The question paper will be given in the form of a Question Booklet. There will be four versions of question booklets with question booklet alpha code viz. A, B, C & D.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the question booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a question booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your question booklet is un-numbered, please get it replaced by new question booklet with same alpha code.
6. The question booklet will be sealed at the middle of the right margin. Candidate should not open the question booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the question booklet supplied to him contains all the 100 questions in serial order. The question booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. A blank sheet of paper is attached to the question booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball-Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

053/2026

Maximum : 100 marks

Time : 1 hour and 30 minutes

1. Which programme of ELEFAN provides the estimation of growth parameters?

(A) ELEFAN-I (B) ELEFAN-II

(C) ELEFAN-III (D) ELEFAN-IV

2. What is the term used for the group of fish of same age belonging to same stock?

(A) Year class (B) Zero year class

(C) Age group (D) Cohort

3. What is the name of stock, when abundance is over MSY?

(A) Under exploited (B) Over exploited

(C) Virgin stock (D) Equilibrium stock

4. What is the annual mortality rate, if survival rate is 0.54?

(A) 0.44 (B) 0.54

(C) 0.46 (D) 0.64

5. Which of the following is not a Surplus Production Model?

(A) Schaefer model (B) Fox model

(C) Ricker model (D) Pella Tomlinson

6. Which of the following statement is/are correct for estimation of MEY?

(i) It shows the relationship between sustainable revenue, fishing costs and fishing effort.

(ii) The open access point where earning from the catch just balance the fishing cost.

(iii) The level of fishing effort required to get the MEY occurs at one third of the fishing effort than MSY.

(A) Only (i) & (ii) (B) Only (ii) & (iii)

(C) Only (i) & (iii) (D) All the above (i), (ii) & (iii)

7. Out of which is not a growth parameter of von Bertlanffy growth function?

(A) K (B) L_{∞}

(C) t_m (D) t_0

8. Which of the following statement is/are correct for natural mortality (M) of fish?

(i) Small Pelagic fishes have higher initial natural mortality

(ii) Natural mortality is related to longevity

(iii) Fish mature early in life have high natural mortality

(A) Only (i) & (ii)
(B) Only (ii) & (iii)
(C) Only (i) & (iii)
(D) All the above (i), (ii) & (iii)

9. Which of the following statement is/are correct for application of remote sensing in fisheries?

(i) It focuses in data collection of remote location.

(ii) It is a software based frame wok.

(iii) It is used to locate PFZ.

(A) Only (i) & (ii)
(B) Only (i) & (iii)
(C) Only (ii) & (iii)
(D) All the above (i), (ii) & (iii)

10. Which of the following statement is/are correct for eumetric fishing?

(i) It focuses on implementing specific mesh sizes.

(ii) It provides the ideal combination of fishing level and mesh size.

(iii) It decreases the operational cost.

(A) Only (i) & (ii)
(B) Only (i) & (iii)
(C) Only (ii) & (iii)
(D) All the above (i), (ii) & (iii)

11. With reference to the "Malia boat", consider the following points.

(1) Flat bottom boat which measure about 6-7 m in length, breadth 1.5 m with 65 cm draft.

(2) Ends are pointed and there is a small rudder.

(3) Carvel planking.

(4) Two masts carry two lateen sails.

(5) Used in tidal waters for prawn fishery.

Which of the above points are the features of the Malia boat?

(A) (1) and (2) only
(B) (1), (2), (4) and (5) only
(C) (1), (2), (3) and (4) only
(D) (1), (2), (3) and (5) only

12. With reference to the "Boat construction", consider the following materials.

(1) Wood

(2) Steel

(3) Copper

(4) Aluminum

(5) Ferro–cement

Which of the above materials are considered as ideal for construction of the boat?

(A) (1) and (2) only

(B) (1), (2), (4) and (5) only

(C) (1), (2), (3) and (4) only

(D) (1), (2), (3) and (5) only

13. Consider the following devices.

(1) Battery, switch

(2) Bentix

(3) Starter pinion

(4) Flywheel

(5) Air compressor, Air bottle

Which of the above have link with the electrical starting system of marine engine?

(A) (1), (2) and (3) only

(B) (1), (2), (3) and (4) only

(C) (1), (4) and (5) only

(D) (1), (2), (3), (4) and (5) only

14. With reference to the "Deck layout", consider the following areas?

(1) Aft or stern deck

(2) Side decks

(3) Engine room

(4) Main working deck

(5) Fore deck

Which of the above are the main areas, with reference to the "Deck layout"?

(A) (1) and (2) only

(B) (1), (2), (4) and (5) only

(C) (1), (2), (3) and (4) only

(D) (1), (2), (3) and (5) only

15. Consider the following statements:

Assertion [A] : Whenever the boat is heeled, there is change in the position of centre of gravity, while the position of centre of buoyancy remains same.

Reason [R] : The position of centre of gravity changes due to change in position of the body, but the volume of displacement of the boat remains same.

Choose the correct answer from the options given below:

(A) Both Assertion and Reason are true and Reason is the correct explanation for the Assertion

(B) Both Assertion and Reason are true and Reason is not the correct explanation for the Assertion

(C) Assertion is true, but Reason is false

(D) Both Assertion and Reason are false

16. With reference to the "Fishing gear", consider the following statements.

(1) Gill net is dragged at the bottom with the help of the otter boards.

(2) Pole and line fishing is commercially used in Lakshadweep to catch Tuna.

(3) Purse seine net is used to catch shoal of fish by encircling.

Which of the above statements are correct?

(A) (1) and (2) only (B) (2) and (3) only

(C) (1) and (3) only (D) (1), (2) and (3) only

17. Match List-I with List-II :

List-I		List-II	
(a)	Poly Amide	(I)	PVAA
(b)	Poly Vinylidine Alcohol	(II)	PVC
(c)	Poly Ester	(III)	PA
(d)	Poly Vinyl Chloride	(IV)	PES
		(V)	PVA

Choose the correct answer from the options given below :

	(a)	(b)	(c)	(d)
(A)	I	III	II	V
(B)	II	V	III	I
(C)	III	I	IV	II
(D)	III	I	II	IV

18. Match List-I with List II :

	List-I		List II
(a)	Oval type otter board	(I)	Dragged at the bottom/ Mid-water / pelagic.
(b)	Trawling	(II)	Used to get the Horizontal mouth opening of the net
(c)	Bobbins	(III)	Used to get the Vertical mouth opening of the net
(d)	Head rope and foot rope	(IV)	Used in rocky and uneven bottom
		(V)	Used in pole and line fishing

Choose the correct answer from the options given below :

	(a)	(b)	(c)	(d)
(A)	I	IV	V	III
(B)	V	II	III	I
(C)	II	I	IV	III
(D)	III	II	IV	I

19. Consider the following pairs

	Webbing		Merits and Demerits
(1)	Knotless webbing	–	It is less in weight
(2)	Knotted webbing	–	It is more in weight
(3)	Trawl net	–	PP twine
(4)	Squid Jigging	–	Nylon

How many pairs given above are correctly matched?

(A) Only one pair (B) Only two pairs

(C) Only three pairs (D) All four pairs

20. Match List-I with List II :

	List-I		List II
(a)	Trawling	(I)	Nylon webbing
(b)	Purse Seining	(II)	Monofilament
(c)	Pole and line	(III)	Poly propylene webbing
(d)	Gill net	(IV)	Coir webbing
		(V)	Monofilament/Nylon webbing

Choose the correct answer from the options given below:

	(a)	(b)	(c)	(d)
(A)	I	IV	V	III
(B)	III	I	II	V
(C)	IV	I	V	II
(D)	III	II	IV	I

21. With reference to the "INTERNATIONAL CODE OF SIGNALS" consider the following statements.

(1) My engines are going astern.

(2) I require a TUG.

(3) When made by fishing vessel "it means" I am shooting my nets.

Which of the above meanings are correct according to the international code of signal "ZULU"?

(A) (1) and (2) only (B) (2) and (3) only

(C) (1) and (3) only (D) (1), (2) and (3)

22. With reference to the "LIFE SAVING APPLIANCES" consider the following statements :

(1) Inner diameter is 400 mm.

(2) Outer diameter is 800 mm.

(3) Inner diameter is 600 mm.

Which of the above statements are correct of an approved "LIFE BUOY"?

(A) (1) and (2) only (B) (2) and (3) only

(C) (1) and (3) only (D) (1), (2) and (3)

23. Consider the following pairs :

	Code of signal		Its meaning
(1)	O (Oscar)	–	Man over board
(2)	F (Foxtrot)	–	I have a diver down, keep clear of me at slow speed
(3)	U (Uniform)	–	You are running into danger
(4)	Y (Yankee)	–	I am dragging my Anchor

How many pairs given above are correctly matched?

(A) Only one pair (B) Only two pairs

(C) Only three pairs (D) All four pairs

24. Considering the 'Rule of the Road' (ROR) to avoid collision out at sea.

(1) A 'sailing vessel'.

(2) A 'power driven vessel'.

(3) A 'vessel aground'.

Which of these vessels has to be kept out of the way of a vessel which is engaged in trawling?

(A) (1) and (2) only (B) (2) and (3) only

(C) (1) and (3) only (D) (1), (2) and (3)

25. With reference to the "Vessel at Distress" consider the following statements:

(1) International code of signals indicated by NC.

(2) Slowly and repeatedly raising and lowering of arms outstretched on each side.

(3) Use of sextant.

Which of the above statements are correct?

(A) (1) and (2) only (B) (2) and (3) only

(C) (1) and (3) only (D) (1), (2) and (3)

26. Which of the following statement is/are correct with reference to uFiSh1.0?

(i) It is an ISO Global Food Composition Database for Fish and Shellfish

(ii) It provides energy, macronutrients, minerals, vitamins, amino acids and fatty acids data for various fish and shellfish species

(iii) The database contains a total of 78 fish and shellfish species, holding 515 food entries

(A) Only (i) and (ii)

(B) Only (ii) and (iii)

(C) Only (i) and (iii)

(D) All the above (i), (ii) and (iii)

27. Which of the following statement is/are correct with reference *Photobacterium phosphoreum*, a specific spoilage organism in fish?

(i) It produces TMA during fish spoilage, 10-100 times higher than *Shewanella putrefacians*

(ii) It produces H_2S, methyl mercaptan, dimethyl sulfide and dimethyl disulfide during fish spoilage

(iii) It is a facultative anaerobic capable of producing histamine in fish

(A) Only (i) and (ii)

(B) Only (ii) and (iii)

(C) Only (i) and (iii)

(D) All the above (i), (ii) and (iii)

28. Assertion [A] : Dehydration produces good quality fish with better texture retention and low risk of contamination

Reason [R] : Dehydration is a slow process done in mechanical dryers at fluctuating temperature.

(A) Both [A] and [R] are true; and [R] is the correct explanation of [A]

(B) Both [A] and [R] are true but [R] is NOT the correct explanation of [A]

(C) [A] is true, but [R] is false

(D) [A] is false, but [R] is true

29. Match the traditional fermented fish product of North East India and its preparation method.

(1)	Ngari	(a)	Salt-free, semi-fermented *Puntius* in Assam
(2)	Hentak	(b)	Salt-fermented *Tenulosa ilisha* in Bengal
(3)	Shidal	(c)	Fermented fish paste from *Esomus* in Manipur
(4)	Lona Illis	(d)	Fermented sub-dried *Puntius* in Manipur

(A) (1) – (c), (2) – (d), (3) – (b), (4) – (a)

(B) (1) – (b), (2) – (c), (3) – (d), (4) – (a)

(C) (1) – (b), (2) – (a), (3) – (c), (4) – (d)

(D) (1) – (d), (2) – (c), (3) – (a), (4) – (b)

30. Given below:

The amount of energy required to freeze 1 kg of shrimp at 25°C to – 30°C at each stage of freezing process. At which stage does the thermal arrest period occur during the freezing process?

Stage 1 : $1000 \times 26 \times 1 = 26$ kcal

Stage 2 : $1000 \times 80 = 80$ kcal

Stage 3 : $1000 \times 29 \times 0.5 = 14.5$ kcal

(A) Stage 1

(B) Stage 2

(C) Stage 3

(D) Stage 2 & 3

31. Which of the following statement is/are correct relating to refrigerants used in fish preservation?

(i) R717 is used in large-scale and industrial cold storage system

(ii) Liquid Nitrogen is a cryogenic refrigerant used for direct-contact rapid freezer

(iii) R12 is employed in modern block ice and flake ice machines used to chill fish

(A) Only (i) and (ii)
(B) Only (ii) and (iii)
(C) Only (iii)
(D) Only (ii)

32. A Fishing Harbour needs ice that cools rapidly without damaging fish. Which one is most suitable?

(A) Dry ice
(B) Flake ice
(C) Tube ice
(D) Slush ice

33. Arrange the refrigeration cycle in sequence?

1. Compression
2. Condensation
3. Expansion
4. Evaporation

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

34. Match the fish products with the most suitable packaging

(1)	Fresh chilled fish	(a)	HDPE bags
(2)	Fish pickle	(b)	EPS boxes
(3)	Salted fish	(c)	LDPE pouches
(4)	Surimi	(d)	PET jars

(A) (1) – (c), (2) – (d), (3) – (b), (4) – (a)

(B) (1) – (d), (2) – (b), (3) – (a), (4) – (c)

(C) (1) – (b), (2) – (d), (3) – (a), (4) – (c)

(D) (1) – (c), (2) – (a), (3) – (d), (4) – (b)

35. Statement — Status (T/F)

(1) Reefer containers are used for frozen fish transport

(2) Temperature, between –25°C and –30°C, maintains good frozen fish quality during sea or road transit

(3) Addition of ice helps to reduce spoilage during frozen fish transport

(4) T-bar stacking in reefer container ensures air circulation through cargo during frozen fish transport

(A) T, T, F, T (B) F, T, F, F

(C) T, T, T, F (D) T, F, F, T

36. Assertion [A] : Acid value is used to assess fish quality

Reason [R] : It indicates enzymatic hydrolysis of fish phospholipids.

(A) Both [A] and [R] are true; and [R] is the correct explanation of [A]

(B) Both [A] and [R] are true but [R] is NOT the correct explanation of [A]

(C) [A] is true, but [R] is false

(D) [A] is false, but [R] is true

37. Match the instrumental fish quality assessment methods

(1)	HPLC	(a)	Heavy metals – Cd, As, Pb, Hg
(2)	GC-MS	(b)	Histamine, Biogenic amines
(3)	NIR Spectroscopy	(c)	Benzopyrene, PAH
(4)	ICP-MS	(d)	Free fatty acid, TVB-N

(A) (1) – (c), (2) – (d), (3) – (a), (4) – (b)

(B) (1) – (b), (2) – (c), (3) – (d), (4) – (a)

(C) (1) – (d), (2) – (c), (3) – (a), (4) – (b)

(D) (1) – (b), (2) – (a), (3) – (d), (4) – (c)

38. Assertion [A] : Salmonellosis is frequently caused by naturally occurring marine bacteria in fish

Reason [R] : Salmonella contamination usually occurs through fecal contamination and poor hygiene

(A) Both [A] and [R] are true; and [R] is the correct explanation of [A]

(B) Both [A] and [R] are true but [R] is NOT the correct explanation of [A]

(C) [A] is true, but [R] is false

(D) [A] is false, but [R] is true

39. In HACCP implementation, a metal detector installed after packaging is primarily an example of

(A) Pre-requisite programme

(B) Corrective action

(C) Critical control point

(D) Verification audit

40. Which of the following statement is/are correct with reference to Seafood Regulations?

(i) FSSAI primarily regulates food safety standards for seafood sold domestically and seafood imported to India

(ii) A seafood batch is considered non-compliant, if it passes microbiological limits and lacks mandatory labelling

(iii) A seafood testing laboratory gets NABL accreditation fulfilling ISO 22001 requirements

(iv) In seafood processing plants, HACCP is mainly intended to control sanitation and hygiene conditions

(A) Only (i) and (ii)

(B) Only (i) and (iv)

(C) Only (ii) and (iii)

(D) Only (ii) and (iv)

41. A symbiotic relationship in which one organism benefit whereas other partner is neither harmed benefited is known as

(A) Commensalism

(B) Mutualism

(C) Parasitism

(D) Amensalism

42. The tide which occurs when the earth, sun and moon are in line with each other is:

(A) Spring tide
(B) Neap tide
(C) Diurnal tide
(D) Semidiurnal tide

43. Which one of the following is an example of western - boundary currents?

(A) Humboldt
(B) Peru
(C) Bengulea
(D) Gulf Stream

44. Method of treating contaminated soils by drawing oxygen through the soil to stimulate microbial growth and activity is known as :

(A) Bio - augmentation
(B) Bio - filters
(C) Bio - reactors
(D) Bio - venting

45. Ecological succession that starts on the sandy habitat is known as :

(A) Lithosere
(B) Psammosere
(C) Mesosere
(D) Hydrosere

46. Food chain starts from dead organic matter into microorganisms is known as :

(A) Predator food chain
(B) Parasitic food chain
(C) Saprophytic food chain
(D) Detritus food chain

47. Feed additives which are added to improve metabolic efficiency and to promote protein deposition is known as :

(A) Hormones
(B) Pigments
(C) Anabolic agents
(D) Feeding stimulants

48. Petrichor is a term that is associated with :

(A) Earthy smell stimulates the spawning
(B) Multiple breeding of carps
(C) Maturation process of fish
(D) Breeding season of fish

49. Which of the following is correctly matched?

(i) Golden mahseer – *Carassius carassius*

(ii) Chocolate Mahseer – *Neolissochilus hexagonolepis*

(iii) Fringed lipped carp – *Labeo fimbriatus*

(iv) Pacu – *Pygocentrus nattereri*

(A) (i) & (ii) only (B) (ii) & (iii) only

(C) (iii) & (iv) only (D) (i) & (iii) only

50. In Kerala's "One Paddy, One Fish" integrated farming scheme, which fish species is most commonly cultured along with rice?

(A) Atlantic salmon (B) Catla

(C) Pearl spot (D) Rainbow trout

51. Match the following :

Group A		Group B	
(1)	Pituitary gland	(a)	Synthetic spawning agent
(2)	Ovaprim	(b)	Hypophysation in carps
(3)	Ablation	(c)	Reproductive hormone
(4)	Gonadotropin	(d)	Shrimp maturation

	(1)	(2)	(3)	(4)
(A)	b	a	d	c
(B)	a	b	c	d
(C)	c	d	a	b
(D)	c	b	a	d

52. Which of the following is an essential amino acid for the fishes?

(A) Proline (B) Glutamic acid

(C) Hydroxyproline (D) Arginine

53. Under the Exclusive Economic Zone (EEZ) Rules, 2025, which of the following fishing practices has been specifically restricted/banned?

(A) Long lining (B) Gill netting

(C) Drift net (D) Pair trawling

54. The ideal percentage of organic carbon in pond soil suitable for fish culture is:

(A) 3 – 4% (B) 5 – 6%

(C) 1.5 – 2% (D) 7 – 8%

55. The device used Recirculatory Aquaculture System (RAS) to increase settling of waste particles and to remove the suspended particles is:

(A) U-tube (B) Hydrocyclone

(C) Counter – current injector (D) Micro – bubble device

56. Ouch ouch disease is caused by eating fish contaminated with :

(A) Mercury (B) Zinc

(C) Cadmium (D) Fluorine

57. Which shrimp disease has not been reported in India?

(A) WSD (B) YHD

(C) AHPND (D) IHHN

58. Decapod iridescent virus 1 was reported in :

(A) India (B) Thailand

(C) Indonesia (D) China

59. Which one of the following is not a "antigen-presenting cell"?

(A) Dendritic cell (B) B lymphocytes

(C) Red blood cells (D) Macrophages

60. Which is the first immunoglobulin to be produced during a primary immune response?

(A) IgG (B) IgM

(C) IgA (D) IgE

61. Immuno-stimulants are effective against ————————.

(A) Overt disease (B) Acute diseases

(C) Overt & sub-clinical diseases (D) Clinical diseases

62. Which organ contains the enzyme systems involved in the biotransformation of drugs?

(A) GI tract (B) Liver

(C) Kidneys (D) Lungs

63. ———————— is a measure of its capacity to bind to the receptor.

(A) Potency (B) Intrinsic activity

(C) Affinity (D) Efficacy

64. Aqualact is a ————————.

(A) Disinfectant (B) Probiotics

(C) Antiseptics (D) Immunostimulant

65. Non-specific immunity is mediated through :

(A) Erythrocyte (B) Leucocyte

(C) Thrombocyte (D) None

66. Which ornamental fish is globally recognized as the 'King of Aquarium Fishes' due to its vibrant colours and hardy nature?

(A) Angelfish (*Pterophyllum scalare*)

(B) Discus (*Symphysodon Spp.*)

(C) Goldfish (*Carassius auratus*)

(D) Betta (*Betta splendens*)

67. Which disease is most commonly associated with neon tetras in ornamental aquaculture?

(A) Columnaris

(B) Mycobacteriosis

(C) Ichthyophthiriasis (White Spot)

(D) Pleistophora hyphessobryconis

68. Which of the following is a live-bearing ornamental fish?

(A) Zebra danio (B) Swordtail

(C) Discus (D) Oscar

69. Which body in India is responsible for trade certification in India for export?

(A) MPEDA (B) CAA

(C) EIC (D) MSC

70. Velvet disease in ornamental fish is caused by which organism?

(A) *Saprolegnia spp.*

(B) *Ichthyophthirius multifiliis*

(C) *Myxobolus spp.*

(D) *Oodinium pillularis*

71. A heterogeneous fish population is divided into species-based groups before sampling. Which method is used?

(A) Simple random sampling

(B) Stratified sampling

(C) Systematic sampling

(D) Cluster sampling

72. Fish length data collected from a large population show a symmetric bell-shaped pattern. Which distribution best describes this?

(A) Poisson (B) Binomial

(C) Normal (D) Geometric

73. The general formula for the length-weight relationship in fishes is :

(A) $W = aL^b$ (B) $W = a + bL$

(C) $W = L/a$ (D) $W = aL$

74. A fisheries scientist increases the sample size from 25 to 100 while estimating the mean fish weight. What happens to the standard error?

(A) Increases (B) Remains constant

(C) Becomes Zero (D) Decreases

75. A strong positive correlation is observed between fish length and weight. What does this imply?

(A) No relationship (B) Inverse relationship

(C) Direct relationship (D) Random variation

76. Large sample data is used to test the population mean of fish length. Which test is most appropriate?

(A) t-test (B) Z-test

(C) F-test (D) Chi-square

77. A researcher takes repeated samples from fish population and computes mean each time. The distribution of these means is called :

(A) Sampling distribution

(B) Population distribution

(C) Frequency distribution

(D) Probability distribution

78. A regression model is developed to predict fish weight from length. What is the purpose of this model?

(A) Measure variability

(B) Test significance

(C) Calculate probability

(D) Predict one variable from another

79. A scientist compares variability in fish growth between two ponds. Which test should be used?

(A) t-test

(B) F-test

(C) Z-test

(D) Chi-square

80. Skewness of the normal distribution is:

(A) Positive

(B) Negative

(C) Zero

(D) Infinite

81. Which statement best describes the main objective of extension education?

(A) To control farmers' decisions through government rules

(B) To award academic degrees to rural learners

(C) To replace traditional knowledge completely with modern science

(D) To bring about voluntary changes in the behaviour and practices of people

82. Which principle of extension education emphasizes involving all family members, regardless of gender or age, in the family profession or enterprise?

(A) Principle of voluntary participation

(B) Principle of cultural change

(C) Principle of whole family approach

(D) Principle of indigenous technical knowledge

83. According to the principle of cultural change, extension workers should :

(A) Encourage people to completely discard all indigenous technical knowledge

(B) Avoid any attempts to change traditional beliefs, myths, and taboos

(C) Prohibit agricultural activities like ploughing land using animals on Mondays

(D) Educate people to desirable cultural changes when cultural practices have a negative effect on social structure

84. According to the distinction made by Coombs and Ahmed (1974), which type of education is described as a "lifelong process" where knowledge and skills are acquired from daily experiences?

(A) Formal Education

(B) Non-Formal Education

(C) Extension Education

(D) Informal Education

85. In comparing Formal and Extension Education, which of the following is true regarding their approach to teaching and learning?

(A) In formal education, the extension agent teaches through local leaders

(B) In extension education, knowledge only flows from teacher to learners

(C) Formal education starts with the theoretical and works up to the practical

(D) Extension education has a fixed curriculum with examinations and degrees

86. Which of the following is classified as a "Group method" of fisheries extension?

(A) Farm and home visit

(B) Demonstration

(C) Television

(D) Circular letter

87. Mass methods are particularly useful for:

(A) Teaching complex practices and changing attitude of people

(B) Direct, face-to-face contact for practical skill building

(C) Creating general awareness among people quickly

(D) Interacting with small, homogeneous groups

88. According to the principles of adult learning, why should adults be motivated to learn new knowledge and skills?

(A) Because they can be taught everything in a formal setting

(B) Because their past experience is always an asset to learning

(C) Because they cannot be 'taught' and must have a strong inner motivation

(D) Because pedagogy emphasizes the importance of diagnosis of needs by the teacher

89. Which characteristic is used to classify individuals into adopter categories in the technology transfer programme?

(A) Profitability

(B) Innovativeness

(C) Cosmopolite channels

(D) Education level

90. Which adjective is specifically paired with the characteristic of "Laggards"?

(A) Skeptical
(B) Venturesome
(C) Deliberate
(D) Traditional

91. What are the different ways to measure GDP?

(i) Output Method
(ii) Income Method
(iii) Expenditure Method

(A) Only (ii) & (iii)
(B) Only (i) & (iii)
(C) Only (i) & (ii)
(D) All of the above (i), (ii), (iii)

92. Which statement is applicable for long run production function?

(i) All factors are variable
(ii) No Fixed factor
(iii) At least one of the factors remains fixed

(A) Only (i) & (ii)
(B) Only (i) & (iii)
(C) Only (ii) & (iii)
(D) All of the above (i), (ii), (iii)

93. A point where the marginal product is maximum is known as

(A) Point of inflexion
(B) Local maxima
(C) Stationary point
(D) Turning point

94. The areas of intellectual property that covers under the TRIPS are :

(i) Copyright
(ii) Trademarks
(iii) Geographical indications

(A) Only (i) & (ii)
(B) Only (i) & (iii)
(C) Only (ii) & (iii)
(D) All of the above (i), (ii), (iii)

95. Which of the following deals with GMO trials or release in India?

(A) Genetic Engineering Appraisal Committee under MoEFCC
(B) GMO Approval Committee under DST
(C) Genetic Engineering Monitoring Committee under DBT
(D) None of the above

96. Which of the following statements are true for PM-MKSSY scheme?

(i) It is a Central Sponsored sub-scheme under the PMMSY

(ii) NFDP is created under PM-MKSSY

(iii) The scheme was approved in 2024

(iv) Improving fisheries value chain is one objective of this scheme

(A) Only (i), (ii) & (iii)
(B) Only (ii), (iii) & (iv)
(C) Only (i), (ii), & (iv)
(D) Only (i), (iii) & (iv)

97. Fisheries in India fall under which list of the Constitution

(A) Union list
(B) State list
(C) Concurrent list
(D) Residuary list

98. Uniform fishing ban is in effect on India's East Coast from :

(A) April 15 to June 14
(B) June 01 to July 31
(C) April 01 to May 31
(D) June 15 to August 14

99. Which of the following Fisheries Institution's headquarter is situated in Kochi?

(i) Central Institute of Fisheries Technology

(ii) National Institute of Fisheries Post Harvest Technology and Training

(iii) Marine Products Export Development Authority

(iv) Coastal Aquaculture Authority

(A) Only (i), (ii) & (iii)
(B) Only (ii), (iii) & (iv)
(C) Only (i), (ii), & (iv)
(D) Only (i), (iii) & (iv)

100. Consider the following Statements for MSME :

(i) Micro enterprise with turnover below 10 CR rupees

(ii) Small enterprise with turnover below 100 CR rupees

(iii) Medium enterprise with turnover below 500 CR rupees

(A) Only (i) & (ii) are true

(B) Only (i) & (iii) are true

(C) Only (ii) & (iii) are true

(D) All of the above (i), (ii), (iii) are true

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