

Code No.

N – 3565

Entrance Examination for Admission to the P.G. Courses in the Teaching Departments, 2022

CSS

APPLIED AQUACULTURE

General Instructions

1. The Question Paper is having two Parts — Part 'A' Objective type (60%) & Part 'B' Descriptive type (40%).
2. Objective type questions which carry 1 mark each are to be (✓) 'tick marked' in the response sheets against the appropriate answers provided.
3. 8 questions are to be answered out of 12 questions carrying 5 marks each in Part 'B'.
4. **Negative marking** : 0.25 marks will be deducted for each wrong answer in Part 'A'.

Time : 2 Hours**Max. Marks : 100**

To be filled in by the Candidate									
Register Number	in Figures								
	in words								

PART – A

(Objective Type)

Choose appropriate answer from the options in the questions. **One mark each.**

(60 × 1 = 60 marks)

1. Protozoan with Chloroplast is _____.

- | | |
|---------------|------------------|
| a) Paramecium | b) Euglena |
| c) Amoeba | d) All the above |

DO NOT WRITE HERE

2. Canal system is found in _____.
- a) Coelentrata b) Ascidians
- c) Porifera d) Echinodermata
3. Nauplius is the larva of the phylum _____.
- a) Mollusca
- b) Echinodermata
- c) Arthropoda
- d) Colenterata

4. Balanoglossus belongs to _____.
 - a) Annelida
 - b) Urochordata
 - c) Hemichordate
 - d) Cephalochordata
5. Veliger is the larva of _____.
 - a) Mollusca
 - b) Echinodermata
 - c) Crustacea
 - d) Coelenterate
6. Synsacrum is found in _____.
 - a) Fishes
 - b) Aves
 - c) Amphibians
 - d) Reptiles
7. Cartilaginous bone is the characteristic feature of _____.
 - a) Reptilia
 - b) Amphibia
 - c) Teleostei
 - d) Elasmobranchi
8. Embden Meyerhoff Pathway is the alternate name of _____.
 - a) Glycolysis
 - b) Glycogenolysis
 - c) Krebs Cycle
 - d) Krebs urea cycle
9. The pathway of fatty acid metabolism in which ω - Carbon is oxidised
 - a) Beta oxidation
 - b) Omega oxidation
 - c) Alpha oxidation
 - d) Hydroxyl oxidation

10. Ecdysone is a
- a) Steroid hormone
 - b) Peptide hormone
 - c) Amino acid
 - d) Glycopeptide
11. Skeletal muscle is a _____.
- a) Striated muscle
 - b) Non striated muscle
 - c) Cardiac muscle
 - d) None of the above
12. The change in electrical potential associated with the passage of an impulse along the membrane of a nerve cell is _____.
- a) Neural impulse
 - b) Reflex arc
 - c) Reflex action
 - d) Action potential
13. The process by which amino groups are removed from amino acids and transferred to acceptor keto acid to generate amino acid version of a keto acid is _____.
- a) Deamination
 - b) Transamination
 - c) Omega oxidation
 - d) Beta oxidation
14. Melanocyte stimulating hormone (MSH) in lower vertebrates is secreted by _____.
- a) Pancreas
 - b) Pars distalis of pituitary
 - c) Pars intermedia of pituitary
 - d) Adrenal gland
15. Diagram depicting the lines of evolutionary descent of different species from a common ancestor is _____.
- a) Phylogenetic tree
 - b) Pie diagram
 - c) Bar diagram
 - d) All the above

16. Amino acids are transferred by _____.
 - a) Ribosomes
 - b) Ribozyme
 - c) r- RNA
 - d) t-RNA
17. A protein needed for initiation of transcription in bacteria is _____,
 - a) globulin
 - b) Albumin
 - c) Sigma factor
 - d) Lactose
18. A section of DNA that is wrapped around a core of proteins is called as _____.
 - a) Nucleolus
 - b) Nucleosome
 - c) Nucleoid
 - d) Histone
19. Amount of picograms of DNA contained within haploid nucleus is called _____.
 - a) C value
 - b) Pictogram
 - c) gametes
 - d) Haploid genome
20. An isolated cell that is able to produce a fertile adult individual is _____.
 - a) Pleuropotency
 - b) Reproductive potency
 - c) Totipotency
 - d) Penetrance
21. A method of species identification using a short section of DNA from a specific gene or genes is called as _____.
 - a) DNA sequencing
 - b) DNA Barcoding
 - c) DNA fragmentation
 - d) All the above

28. White Blood cells that non specific killers of microbes are _____.
- a) Phagocytes
 - b) Beta cells
 - c) Killer T cells
 - d) Helper T Cells
29. Which of the following antibodies initiates an allergic reaction _____.
- a) Ig A
 - b) Ig E
 - c) Ig G
 - d) Ig M
30. Cell mediated immune responses are _____.
- a) Enhanced by depletion of complement
 - b) Suppressed by cortisol
 - c) Enhanced by depletion of T Cells
 - d) Suppressed by anti histamine
31. Agency for promoting the development of aquaculture in Kerala is
- a) ADAK
 - b) MPEDA
 - c) CIFA
 - d) Matsyafed
32. PUFA us found rich in _____.
- a) Fish
 - b) Rice
 - c) Wheat
 - d) Egg

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43. Duck cum fish culture is an example for
- a) Composite fish culture
 - b) Polyculture
 - c) Monospecies culture
 - d) Integrated farming
44. 'Pokkali fields' is the traditional aquaculture system in _____.
- a) Tamil nadu
 - b) Andhra pradesh
 - c) Kerala
 - d) Karnataka
45. Which of the following is not a carp
- a) Catla
 - b) Rohu
 - c) Tilapia
 - d) Mrighal
46. Fish widely used in monosex fish culture is _____.
- a) Channa
 - b) Catla
 - c) Common carp
 - d) Tilapia
47. Rigor mortis is caused by _____.
- a) Temperature
 - b) Salinity
 - c) Dissolved oxygen
 - d) Death
48. Which of the following is a fish?
- a) Silver fish
 - b) Silver carp
 - c) Star fish
 - d) Giant prawn

49. Central Inland Fisheries Research Institute (CIFRI) is located in _____.
 - a) Cochin
 - b) Chennai
 - c) Kolkata
 - d) Mumbai
50. Scroll valve is found in _____.
 - a) Frog
 - b) Shark
 - c) Calotes
 - d) All the above
51. Which of the following organism do not have radial symmetry?
 - a) Sea anemone
 - b) Sea urchin
 - c) Sea bass
 - d) Jelly fish
52. The organism capable of respiration through lungs and skin is
 - a) Fish
 - b) Frog
 - c) Calotes
 - d) Crocodile
53. Fish that can tolerate low oxygen level (hypoxia) is
 - a) Murrels
 - b) Carps
 - c) Milk fish
 - d) Mulletts
54. Trawling prohibited months in Kerala is _____.
 - a) November – December
 - b) December – January
 - c) June – July
 - d) August – September

55. Which of the following is not a method of chilling in processing fish?
- a) Iced storage
 - b) Deep freezing
 - c) Chilled sea water storage
 - d) Cold air storage
56. Which of the following is not a crustacean?
- a) Prawn
 - b) Sepia
 - c) Crab
 - d) Lobster
57. The ecological factor not to be considered in the site selection of a pond is _____.
- a) Soil
 - b) Water
 - c) Topography
 - d) Wind direction
58. Which of the following is not sedentary?
- a) Balanus
 - b) Sea lilly
 - c) Sea anemone
 - d) Sea bass
59. *Gombusia affinis* is a fish widely used for
- a) Aquaculture
 - b) Paddy cum fish culture
 - c) Biological control
 - d) Integrated farming
60. Miss Kerala is also known as
- a) Denison barb
 - b) Tiger barb
 - c) Aplocheilus
 - d) Amblypharyngodon

ANSWER SHEET — PART – A

1	A	B	C	D	E
2	A	B	C	D	E
3	A	B	C	D	E
4	A	B	C	D	E
5	A	B	C	D	E
6	A	B	C	D	E
7	A	B	C	D	E
8	A	B	C	D	E
9	A	B	C	D	E
10	A	B	C	D	E
11	A	B	C	D	E
12	A	B	C	D	E
13	A	B	C	D	E
14	A	B	C	D	E
15	A	B	C	D	E
16	A	B	C	D	E
17	A	B	C	D	E
18	A	B	C	D	E
19	A	B	C	D	E
20	A	B	C	D	E

21	A	B	C	D	E
22	A	B	C	D	E
23	A	B	C	D	E
24	A	B	C	D	E
25	A	B	C	D	E
26	A	B	C	D	E
27	A	B	C	D	E
28	A	B	C	D	E
29	A	B	C	D	E
30	A	B	C	D	E
31	A	B	C	D	E
32	A	B	C	D	E
33	A	B	C	D	E
34	A	B	C	D	E
35	A	B	C	D	E
36	A	B	C	D	E
37	A	B	C	D	E
38	A	B	C	D	E
39	A	B	C	D	E
40	A	B	C	D	E

41	A	B	C	D	E
42	A	B	C	D	E
43	A	B	C	D	E
44	A	B	C	D	E
45	A	B	C	D	E
46	A	B	C	D	E
47	A	B	C	D	E
48	A	B	C	D	E
49	A	B	C	D	E
50	A	B	C	D	E
51	A	B	C	D	E
52	A	B	C	D	E
53	A	B	C	D	E
54	A	B	C	D	E
55	A	B	C	D	E
56	A	B	C	D	E
57	A	B	C	D	E
58	A	B	C	D	E
59	A	B	C	D	E
60	A	B	C	D	E

APPLIED AQUACULTURE

PART – B

(Descriptive Type)

Answer **any eight** questions.

(8 × 5 = 40 Marks)

1. Write down the general characters of fishes.
2. Write an account on crustacean larvae.
3. Write an account on invertebrate hormones.
4. Write an account on gene mapping.
5. Describe regulation of cell cycle.
6. Write an account on MHC Complex.
7. Discuss the importance of wetlands in fisheries resource management.
8. Describe the role of MPEDA in marine product export from India.
9. Write an account on selection of species for aquaculture.
10. Write an account on monosex fish culture.
11. Write an account on bacteria of human health significance in sea food.
12. Write an account on Inland fish marketing in India.

