C 20509	(Pages : 2)	Name
		Reg. No

SIXTH SEMESTER U.G. DEGREE EXAMINATION, MARCH 2022

(CBCSS—UG)

Aquaculture

AQC 6B 17—FISH GENETICS, BIOTECHNOLOGY AND BIOINFORMATICS

(2019 Admissions)

Time: Two Hours and a Half

Maximum: 80 Marks

Section A

Answer at least ten questions. Each question carries 3 marks. All questions can be attended. Overall Ceiling 30.

- 1. Mitochondria.
- 3. Prophase.
- 5. Mutagens.
- 7. Hermaphroditism.
- 9. Cloning vectors.
- 11. BLAST.
- 13. Law of segregation.
- 15. Trisomy.

- 2. Nucleosome.
- 4. Co-dominance.
- 6. Hybrid vigor.
- 8. Restriction Enzymes.
- 10. Saxitoxin.
- 12. FAO.
- 14. Taq polymerase.

 $(10 \times 3 = 30 \text{ marks})$

Section B

Answer at least **five** questions.

Each question carries 6 marks.

All questions can be attended.

Overall Ceiling 30.

- 16. Difference between prokaryotic and eukaryotic cell.
- 17. Types of biological databases.

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- 18. Chromosome structure and types.
- 19. Complete, incomplete and co-dominance.
- 20. Sex determination in fishes.
- 21. Transgenic fish.
- 22. Cryopreservation.
- 23. Marine toxins.

 $(5 \times 6 = 30 \text{ marks})$

Section C

Answer any **two** questions. Each question carries 10 marks.

- 24. Discuss about applications of biotechnological tools in aquaculture.
- 25. Write in detail about the types of mutations and mutagens.
- 26. Explain mitosis and its various stages with diagram.

 $(2 \times 10 = 20 \text{ marks})$