

E 3744



Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, NOVEMBER 2022

Fourth Semester

Core Course-X—GENETICS AND BIOTECHNOLOGY

(Common for B.Sc. Aquaculture and Industrial Fish and Fisheries)

[2013—2016 Admissions]

Time : Three Hours

Maximum Marks : 80

Part A (Short Answer Questions)

Answer all questions.

Each question carries 1 mark.

1. Mutation.
2. Artificial fertilisation.
3. PCR.
4. Protogyni.
5. Hypophysation.
6. Induced breeding.
7. Cytogenesis.
8. Quantitative genetics.
9. Hybridisation.
10. Probiotics.

(10 × 1 = 10)

Part B (Brief Answer Questions)

Answer any eight questions.

Each question carries 2 marks.

11. Inter-specific hybrids.
12. Progeny testing.

Turn over





E 3744

13. Hermaphroditism.
14. Gene manipulation.
15. Cryopreservation.
16. Supplementary genes.
17. Inter-specific hybrids.
18. Cloning.
19. Genotypic selection.
20. Tissue culture in seaweed production.
21. Mono sex production.
22. Antibiotics in aquaculture.

(8 × 2 = 16)

Part C (Descriptive/Short Essay Type Questions)

*Answer any **six** questions.
Each question carries 4 marks.*

23. Biochemical genetics.
24. Use of antibiotics in aquaculture.
25. Cryopreservation of gametes.
26. Industrial chemicals from marine sources.
27. Inter-specific hybridisation.
28. Marine toxins.
29. Synthetic hormones.
30. Quantitative genetics.
31. Genetic selection.

(6 × 4 = 24)





E 3744

Part D (Long Essays)

*Answer any **two** questions.*

Each question carries 15 marks.

32. Principles of genetics.
33. Role of gonadotropin in fish breeding.
34. PCR in the defection of white spot syndrome in shrimp.
35. Super male and female fish production techniques.

(2 × 15 = 30)

