

2021

ZOOLOGY — HONOURS

Sixth Paper

(Unit - II)

Full Marks : 50

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer **any ten** questions.

1. (a) Briefly describe the rearing room of sericulture.
(b) Name a bacterial disease of silkworm and its causative agent. 3+2
2. (a) Define Kusmi and Rangeeni strains of lac insects.
(b) What are shellac and seed lac? 3+2
3. Describe the structure of a Newton Box with suitable diagram. 5
4. (a) What is the importance of polyculture in aquaculture and fisheries?
(b) Give an example of successful hybridization of Indian major carps. 3+2
5. (a) Define adherent and suspension cell culture.
(b) Comment on use of serum and antibiotic in cell culture. 3+2
6. (a) What is continuous cell culture?
(b) Write the difference between Ex-vivo & In-vivo gene therapy. 2+3
7. What is 'mother of pearl'? Briefly describe natural pearl formation mechanism. 1+4
8. (a) Comment on semi-intensive and extensive prawn cultures.
(b) Mention four desirable traits of honey bee species to be the best choice for bee keeping. 3+2
9. Schematically describe the process of hypophysation. 5

Please Turn Over

- 10.** (a) Write the composition of RPMI-1640 cell culture media.
(b) Define major, minor and accidental pest with example. 2+3
- 11.** (a) Mention use of transgenic chicken.
(b) Define EIL and ETL. 2+3
- 12.** Write a short note on: DNA micro-injection. 5
- 13.** Write notes on gene augmentation therapy and anti-sense therapy. 5
- 14.** Comment on merits and demerits of composite fish culture. $2\frac{1}{2}+2\frac{1}{2}$
- 15.** What do you mean by Broiler and Layer strains? Give one example from each. $(1\frac{1}{2}+1)\times 2$
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