

F-2123

Sub. Code

7PZO2C1

M.Phil. DEGREE EXAMINATION, APRIL 2019

Second Semester

Zoology

ANIMAL BIOTECHNOLOGY

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(5 × 5 = 25)

Answer any **five** questions.

1. List out the scope of animal biotechnology.
2. Write briefly about the applications of bio-security methods.
3. Write shortly on gene cloning techniques.
4. Explain how proteins are isolated using SDS-PAGE.
5. Explain the structure of prokaryotic gene.
6. Write briefly on genetic mapping of animals.
7. Explain any two methods of gene transfer into animal cells.
8. Explain how insulin is produced by cell culture technique.

Part B

(5 × 10 = 50)

Answer **all** questions, choosing either (a) or (b).

9. (a) Give an account of tools of genetic engineering.

Or

- (b) Describe the various molecular techniques used in disease diagnosis.

10. (a) Write in detail about gene cloning vectors.

Or

- (b) Give a detailed account of nuclear transfer technique.

11. (a) Describe the various steps of recombinant DNA technology.

Or

- (b) Give detail about southern and northern blotting techniques.

12. (a) Describe graft types and mechanisms of graft rejection.

Or

- (b) Give a detailed account of human genome project.

13. (a) Give an account of embryonic and adult stem culture technology.

Or

- (b) Write an essay on cell culture products.