

S.No. 5089

16 SCCBT 6

(For candidates admitted from 2016–2017 onwards)

B.Sc. DEGREE EXAMINATION, APRIL 2022

Part III – Biotechnology – Major

ANIMAL BIOTECHNOLOGY

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20)

Answer ALL questions.

1. Stem cells
2. IVF
3. Apoptosis
4. Cytotoxicity
5. GMO
6. Dolly
7. RFLP
8. Gene silencing

9. Cytokines

10. Insulin.

PART B — ($5 \times 5 = 25$)

Answer ALL questions, choosing either (a) or (b).

11. (a) Explain gametogenesis and fertilization in animals.

Or

(b) Explain IVF and IUF

12. (a) Elaborate on different media.

Or

(b) Explain equipment's used for cryopreservation in animal cell culture

13. (a) Sketch and write a short note on Hybridoma technology.

Or

(b) Write about different GMO.

14. (a) Write about the gene silencing techniques and its applications.

Or

(b) Elaborate on the HGP.

15. (a) Explain about the various merits and demerits of Transgenics.

Or

(b) Transgenic microbes.

PART C — ($3 \times 10 = 30$)

Answer any THREE questions.

16. Write in detail about the embryonic stem cells and its types.

17. Write in detail about the cell apoptosis based on proteolytic cascade.

18. Elaborate on the different DNA transfer techniques in animal cells.

19. Write a note on RFLP and RAPD.

20. Sketch and write a note on production of insulin from animal tissues.