

# CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

15BT553

Fifth Semester B.E. Degree Examination, Dec.2018/Jan.2019

## Animal BT

Time: 3 hrs.

Max. Marks: 80

**Note: Answer any FIVE full questions, choosing ONE full question from each module.**

### Module-1

- 1 a. List out the components of cell culture media and add a note on role of serum. (08 Marks)  
b. Explain how do you measure cell viability and cytotoxicity. (08 Marks)

OR

- 2 a. Enumerate the process of sterilization methods employed in Animal cell culture. (06 Marks)  
b. Comment on : i) Dye exclusion and inclusion tests ii) Features of DMEM and RPMI media. (06 Marks)  
c. Role of serum in the media. (04 Marks)

### Module-2

- 3 a. Discuss the various steps in establishing primary cell cultures and add a note on sub culturing of cells. (06 Marks)  
b. List out the salient features of normal and transformed cell lines. (04 Marks)  
c. Explain the strategies employed in scale up of monolayer culture. (06 Marks)

OR

- 4 a. Give an account of maintenance and preservation of cell lines. (06 Marks)  
b. Explain the methods of immortalization of normal cell line. (06 Marks)  
c. Write short note on Organotypic culture. (04 Marks)

### Module-3

- 5 a. Write short notes on : i) IVF ii) Transgenic manipulation of animal embryo. (06 Marks)  
b. Discuss the ethical and moral issues of cloning. (06 Marks)  
c. What are antifertility animal vaccine. (04 Marks)

OR

- 6 a. Enumerate the protocol for embryo culture and embryo transfer. (06 Marks)  
b. Explain how you preserve germplasm. (06 Marks)  
c. Write a note on gene knock – out technology. (04 Marks)

### Module-4

- 7 a. Give an account of Marker assisted breeding of livestock. (06 Marks)  
b. Write short note on : RFLP and RAPD. (06 Marks)  
b. Explain DNA based detection of adulteration in meat. (04 Marks)

OR

- 8 a. Give an account of genetic characterization of livestock breeds. (06 Marks)  
b. Taking RELP and RAPD method as an example, explain how do you characterize the animal genome. (06 Marks)  
c. Discuss the role of DNA based method for detection of adultrents. (04 Marks)

**Module-5**

- 9 a. List out the applications of Animal cell culture. (04 Marks)  
b. Give an account of Tissue engineering. (06 Marks)  
c. Discuss the role of Probiotics in aquaculture. (06 Marks)

**OR**

- 10 Give an account of:  
a. Pearl culture. (06 Marks)  
b. Applications of Tissue engineering. (06 Marks)  
c. Probiotics in Aquaculture. (04 Marks)

\*\*\*\*\*