2019/EVEN/BTCH-403/221

TDC Even Semester Exam., 2019

BIOTECHNOLOGY

(Honours)

(4th Semester)

Paper No. : BTCH-403

(Animal Biotechnology)

Full Marks : 35 Pass Marks : 12

Time: 2 hours

The figures in the margin indicate full marks for the questions

Answer **all** questions

 What are special secondary metabolites? Discuss the process of production of growth hormones. 2+5=7

OR

- **2.** Write short notes on : $3\frac{1}{2}\times2=7$
 - (a) Interferon
 - *(b)* Overproduction and processing of proteins

J9/1426

(Turn Over)

(2)

Define monoclonal antibodies. Describe the process of production of monoclonal antibodies. 1+6=7

OR

- Discuss in brief the role of growth factor in promoting proliferation of animal cells.
- What do you mean by bioreactors? Mention their types and different components. 2+5=7

OR

- 6. Discuss the steps involved in *in-vitro* fertilization (IVF). Add a note on embryo transfer in cattle.
- Define transgenics. Discuss the various methods of gene transfer in animals. 2+5=7

OR

- 8. Define gene therapy. Discuss the steps involved in gene therapy. 2+5=7
- J9**/1426**

(Continued)

(3)

- **9.** Write short notes on any *two* of the following : $3\frac{1}{2}\times2=7$
 - (a) Cryopreservation
 - (b) Transfection
 - (c) Molecular biological techniques for rapid detection of genetic diseases
 - (d) Transgenic sheep

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