

T. Y. B. Sc. (Biotechnology) SEM – VI (CBCS - 2015 COURSE) :

WINTER - 2018

Subject: Animal Biotechnology

Day: Saturday
Date: 20/10/2018

W-2018-1186

Time: 10.00 AM TO 01.00 PM
Max. Marks: 60

N.B.:

- 1) Q1 and Q5 are compulsory.
- 2) Answer ANY TWO questions from Q 2, 3, 4 in Section I.
- 3) Answer ANY TWO questions from Q 6, 7, 8 in Section II.
- 4) Answers to Both the sections to be written in SEPARATE answer books.
- 5) Draw a labeled diagram WHEREVER necessary.

SECTION - 01

Q.1) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

- a) Write the advantages of retrovirus mediated gene transfer methods in transgenesis.
- b) Give two examples of transgenic animals and write its uses.
- c) What is emergency vaccination in animals?
- d) Explain live viral vaccines.
- e) What are HEPA filters? State their role in ATC.
- f) Is passage number same as generation number? Justify your answer.

Q.2) Answer the following: (5 Marks X 2 = 10)

- a) Explain technique used in animal biotechnology to enhance life stock productivity.
- b) Explain the role of animal biotechnology in improving animal health by vaccination.

Q.3) Explain the following: (5 Marks X 2 = 10)

- a) Explain artificial twinning method for animal cloning.
- b) Role of serum in tissue culture medium

Q.4) Write short notes on the following: (5 Marks X 2 = 10)

- a) Artificial insemination and its advantages.
- b) Organ Culture

SECTION - 02

Q.5) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

- a) Enlist various enzymes used for disaggregation of tissue.
- b) Define "vaccination".
- c) What is the function of human growth hormone?
- d) Give two examples each of growth factors and therapeutic proteins for human use.
- e) Enlist different types of stem cells. State their sources.
- f) What is the role of biotechnology in prevention of diseases? Explain with an example

Q.6) Answer the following: (5 Marks X 2 = 10)

- a) Compare anchorage dependent cell line with anchorage independent cell line.
- b) Explain the method and significance of dye exclusion and dye uptake assays.

Q.7) Explain the following: (5 Marks X 2 = 10)

- a) Applications of animal tissue culture in biotechnology industry
- b) What are attenuated vaccines? Explain in detail with the help of cholera vaccine.

Q.8) Write short notes on the following: (5 Marks X 2 = 10)

- a) Chemically linked monoclonal antibodies.
- b) Edible vaccines
