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 twining 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

*****