Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (BT) (2014 to 2017) (Sem.–4)

STEM CELL TECHNOLOGY

Subject Code : BSBT-210

M.Code : 47052

Time : 3 Hrs. Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Q1. Define :

a. Dedifferentiation

b. Transit cells

c. Hematopoietic stem cells

d. Stem cell Niche

e. Pluripotent cell

f. Xenograft

g. Allograft

h. Teratoma

i. Assymetric division of stem cells

j. Trophoblast stem cells

SECTION-B

Q2. Write a note on stem cell plasticity.

Q3. What is the difference between Differentiation and dedifferentiation?

Q4. What are properties and source of embryonic stem cells?

Q5. Write a note on Hematopoietic Microenvironment.

Q6. Discuss ethical issues pertaining to stem cell research.

SECTION-C

Q7. Deliberate on the source, properties and therapeutic applications of hematopoietic stem cells.

Q8. What are epidermal stem cells? Write about the epithelial stem cells in small intestine, pancreas and liver.

Q9. Discuss about the use of stem cells for gene therapy.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.