

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATIONS-2022

B.Tech-VII Semester (BT)

COURSE CODE (CREDITS): 14B1WBT739 (3)

MAX. MARKS: 15

COURSE NAME: Stem Cells and Regenerative Medicines

COURSE INSTRUCTORS: Dr. Udayabanu

MAX. TIME: 1 Hour

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

- Q1. Two types cells work complementary to each other in maintaining the bone formation? What are they and how do they function? [2Marks] (CO1&2)
- Q2. Hematopoietic stem cells are found in two locations in the bone marrow? Do they have different roles? If so what are their roles? [2 Marks] (CO2)
- Q3. Differentiate between Progenitor cells and stem cells.[2 Marks] (CO1)
- Q4. Alizarin red, Oil Red O, and toluidine blue staining act as indicators for which cell types? [3 Marks] (CO1&2)
- Q5. Erythrocytes have a _____ life span? How macrophages sense aged erythrocytes that have to be cleared from human body? [2 Marks] (CO1&2)
- Q6. (a) What is the interesting fact about Einstein's brain with regard to neuron/neuroglia? [1 Mark] (CO3)
- (b) Which type of cells in the brain are involved in the formation of blood brain barrier [1 Mark] (CO2&3)
- Q7. Stem cells are unspecialized cells. What are the features of stem cells? [2 Marks] (CO1)