

M.Sc. REGENERATIVE MEDICINE DEGREE EXAMINATION

(2013-2014 Batch onwards)

SECOND YEAR

PAPER I – CELL CULTURE BASICS AND PROTOCOLS

Q.P. Code : 281511

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. Write in detail about fluorescence activated cell sorting and magnetic activated cell sorting system?
2. (a) Discuss about clean room construction and services.
(b) Write on ISO standard bio-safety levels and its specifications.

II. Write Notes on:

(10 x 6 = 60)

1. Write on MTT assay principle, procedure and application in cell culture
2. Define cell immortalization? Write about the strategy of creating cell immortalization?
3. Give three examples of cell adhesion molecules and their application in cell culture?
4. Discuss about mycoplasma contamination in cell culture and commonly used antibiotics to eliminate the mycoplasma in cell culture?
5. Write note on Time lapse recording?
6. Write about biohazards?
7. Differentiate the characteristic feature of finite and continuous cell line?
8. Draw an inverted microscope and write its principle?
9. Write a short note on G-CSF, EGF and FGF?
10. Write about HAT medium and selection?
