



B.TECH DEGREE EXAMINATIONS: MAY 2015

(Regulation 2009)

Sixth Semester

BIOTECHNOLOGY

BTY209: Cancer Biology

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

- In mammalian cell cycle, CDK4 and CDK 6 will bind with.....
 - Cyclin A
 - Cyclin B
 - Cyclin D
 - Cyclin E
- CDK1 was formerly known as.....
 - INK4
 - CIP
 - cdc2
 - cdc28
- Which one of the following Ionizing Radiation has large mass and travel short distance?
 - X-Ray
 - Beta Particle
 - Alpha Particle
 - Gamma Ray
- The λ range UV-A is from..... to.....
 - 305 to 360 nm
 - 345 to 400 nm
 - 315 to 400 nm
 - 365 to 415 nm
- Which one of the following oncogene is an example of EGFR family?
 - IGF-1*
 - c-kit*
 - c-erbB1*
 - trk-B*
- TGF-Beta growth factor will bind with.....
 - RTKs
 - Thr/ser kinase
 - Ser/Thr kinases
 - All the above
- Regular Exercise can lower breast cancer risk in adult upto.....
 - 60%
 - 40%
 - 30%
 - 20%

b) How will you distinguish Ionizing with non-ionizing radiation and list out the different types of Ionizing radiation? Briefly describe the symptoms of ionizing and non-ionizing radiation with suitable example.

23. a) Briefly explain any two techniques that are commonly practiced to detect the oncogenes in human cancer cells.

(OR)

b) Describe in detail account on PDGF and their role in RTKs stimulation and activation.

24. a) Write a detailed account on the cancer metastasis and their various stages

(OR)

b) Write detailed account on the etiology, risk factors, and symptoms of oral and lung cancer.

25. a) Write a short note on molecular tools and their applications in cancer diagnosis.

(OR)

b) Discuss in detail the radio and chemotherapies with suitable examples.
