

[LJ 1016]

OCTOBER 2016

Sub. Code: 3602

**P.G. DIPLOMA IN RADIOLOGY & IMAGING TECHNOLOGY EXAMS
PAPER II – RADIO DIAGNOSTIC EQUIPMENTS – INSTRUMENTATION,
RADIATION, SAFETY & QUALITY CONTROL**

Q.P. Code : 363602

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail the working and construction of rotating anode X-ray tube. Write a note about the advantages of rotating anode over stationary anode X-ray tube.
2. Write a short note on Tomosynthesis. Explain the working principle of a Mammography system.

II. Write notes on:

(10 x 6 = 60)

1. Image intensifier.
2. Reasons for grid cut-off.
3. Multi detector CT scanner.
4. Electronic timer.
5. Spin echo and inversion recovery sequence.
6. Indirect flat panel detectors.
7. Doppler ultrasound and Doppler shift.
8. Automatic exposure control.
9. Gamma camera.
10. Principles of Radiation safety.
