

[LD 0212]

AUGUST 2013

Sub. Code: 1414

**DIPLOMA IN RADIOLOGY IMAGING TECHNOLOGY
SECOND YEAR
PAPER IV – QUALITY CONTROL IN RADIOLOGY AND
RADIATION SAFETY**

Q.P. Code : 841414

Time : Three hours

Maximum : 100 marks

Answer All questions

I. Elaborate on:

(3 X 10=30)

1. Explain the NABH quality control procedure.
2. Explain the various effects of radiation on the human body.
3. How does time, distance and shielding play a role in radiation control?

II. Write Short notes on:

(10 X 5=50)

1. Explain the principle and working of pocket dosimeter.
2. What is equivalent dose?
3. What are the guidelines for using film badge?
4. Name the radiation safety instruments used and explain their use.
5. Atomic Energy Regulatory Board recommendations for radiation protection.
6. How will you plan the construction of an X-ray room
7. Explain the principle and working of free air Ionization chamber
8. Give an account of cautious steps taken in a radio diagnostic department.
9. Explain about area monitoring
10. Explain about the painting and flooring of an X-Ray dark room

III. Short Answers on:

(10 X 2=20)

1. Explain about use of Thermo luminescence Dosimeter.
2. What is the unit of radiation dose?
3. What is area monitoring?
4. What is MPD?
5. What is ALARA?
6. What is Roentgen?
7. What is Filter?
8. What is Lead equivalence?
9. Explain the working film badge.
10. Define kV and list its importance.
