No. of Printed Pages : 3

BAHI-057

00534

B.Sc. IN MEDICAL IMAGING TECHNOLOGY (BMIT)

Term-End Examination

June, 2013

BAHI-057 : QUALITY ASSURANCE AND RADIATION PROTECTION IN RADIOLOGY

Time : 3 hours *Maximum Marks : 70*

PART-A

Answer ***any five*** questions. Each question carries ***8 marks.*** **5x8=40**

1. Describe a few dose reduction strategies to be followed in CT.

2. Describe on how to perform acceptance testing for a conventional radiography machine.

3. Describe in detail 5 basic methods to be performed as a part of routine quality assurance program for a CT Scanner.

4. Draw a diagram of room layout for installing a CT machine and describe the specification laid by AERB as a part of regulation.

5. Describe a few dose reduction strategies to be followed in Mammography.

6. Describe how to perform radiation safety survey for a 750 bedded hospital.

7. Describe in detail routine QA required in a dark room for processing films.

8. Discuss in detail the biological effects of radiation.

PART-B

Write short notes on ***any five*** of the following.
Each carries six marks. **5x6=30**

(a) Dose area product

(b) Exposure meter

(c) Deterministic effects

(d) Step wedge

(e) Dose limits

(f) Shielding requirements for conventional radiography room.

(g) Acceptance testing

(h) Effective dose