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**B.Sc. IN MEDICAL IMAGING TECHNOLOGY
(BMIT)**

Term-End Examination

June, 2017

**BAHI-056 : ADVANCE PHYSICS OF
RADIOLOGICAL EQUIPMENT - II**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any six questions. Question No. 9 is compulsory.

1. Describe the construction and working of spiral CT. 8
2. Describe various types of shielding used in MRI along with their uses. 8
3. What is doppler effect ? Explain its use in diagnostic ultra sound. 8
4. Discuss about safety issues in MRI. 8
5. Discuss about recent advances in CT detector technology. 8
6. What is Power Doppler ? Explain its advantages and disadvantages. 8

7. Explain in detail about image formation in MRI. 8
8. What steps you will take to minimise radiation dose in CT. 8
9. Write notes on **any five**, each note carries 6 marks. 6x5=30
- (a) CT collimators
 - (b) 'B' mode ultrasound
 - (c) Shimming in MRI
 - (d) Slip ring technology
 - (e) Piezo-electric effect
 - (f) Various coils used in MRI
 - (g) Image reconstruction in CT
 - (h) Super conductivity and its use in MRI
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