

[LL 1017]

OCTOBER 2017

Sub. Code: 4016

**M.Sc. MEDICAL PHYSICS EXAMS
FIRST YEAR
PAPER VI – PHYSICS OF MEDICAL IMAGING**

Q.P. Code: 284016

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail about the factors influencing the quality of X-ray image.
2. Describe about production of ultrasound and characteristics of transducers.

II. Write notes on:

(10 x 6 = 60)

1. Differentiate T1 and T2 images.
2. Write about orthopan tomography.
3. Write about modulation transfer function.
4. Explain about advantages of air gap technique.
5. Write about latent image formation.
6. Automatic brightness control.
7. Explain about continuous spectrum.
8. Write about X-ray tube rating.
9. Write about high voltage circuits.
10. Explain about the necessity of filtration.
