

The APOLLO UNIVERSITY
Saketa, Chittoor, AP
AHS- V Semester End Examination, June-2024
Paper-II-IMTT 3502- MODERN IMAGING TECHNOLOGY AND
QUALITY ASSURANCE

Time: 3 hours

Max. Marks: 60

Section –A (10x2=20 marks)

Answer all Questions

1. Draw the probe and label the parts.
2. Write down any four properties of ultrasound.
3. Define Doppler Effect.
4. What do the acronyms PACS and DICOM stand for?
5. Write the indication of ultrasound abdomen.
6. Define neurosonography.
7. Abbreviate AERB and ICRP.
8. Define safety standards and codes.
9. Define scatter radiation.
10. Define Ma meter.

Section –B (5X8=40 marks)

Answer all Questions either A or B in 400 words each

11. A) Describe about acoustic coupling agent (ultrasound gel) and acoustic impedance.

OR

B) Explain in detail any 10 knobologies.

12. A) Explain in detail about the A mode and B mode.

OR

B) Explain detail about PACS and DICOM

13. A) Define PC PNDDT act and explain in detail about the PC PNDDT form.

OR

B) Define TAS, TVS, and TRUS and explain in detail about these procedures.

Cont....

14. A) Define ALARA. Explain in detail about justification, optimization and limitations.

OR

B) Draw and explain in detail about the installation and layout of x-ray unit.

15. A) Describe in detail about the Congruence of Radiation and Optical field and beam.

OR

B) Elaborate in detail Radiation protection survey, in and around of diagnostic installations.
