

The APOLLO UNIVERSITY

Saketa, Chittoor, AP

AHS- V Semester End Examination, June -2024

Paper-I- IMTT 3501 -CT INSTRUMENTATION AND TECHNIQUES

Time: 3 hours

Max. Marks: 60

Section –A (10x2=20 marks)

Answer all Questions

1. Define Tomography and mention its types.
2. What is the spiral mode and sequential mode in CT scanner?
3. What is bow-tie filter?
4. Define 'pixel' and 'voxel'.
5. What is resolution?
6. What is artifact?
7. Mention the patient preparation for Kub.
8. What is radiation protective equipment used in CT?
9. Define FNAC.
10. What is the contra indication for CECT Abdomen?

Section –B (5X8=40 marks)

Answer all Questions either A or B in 400 words each

11. A) Difference between computer tomography and computer radiography.
OR
B) What is PACS? Explain its functioning and advantages.
12. A) Discuss in detail about computer tomography principle and the image processing system.
OR
B) Explain in detail about the CT table, gantry, and CT control console.
13. A) Describe in detail about the post processing technique in computer tomography.
OR
B) Describe in detail about window width, window level, image display and representation.

Cont.....

14. A) Write in detail about the CT Brain protocol.

OR

B) Write down the disinfection methods of computer tomography room.

15. A) Difference between CT brain contrast and non-contrast study.

OR

B) Differentiate computer tomography and MRI.
