

Siemens' Definition AS 64 Slice CT Scanner

The following steps must be performed with proficiency to demonstrate ability to operate Siemens's Definition AS 64 slice CT scanner.

Preceptor: Please place a check mark in the blank if the skill has been properly performed.

WORKING SAFELY

- 1. Understand the location and operation of all safety and warning labels, messages and gantry controls and indicators.
- 2. Locate all emergency stops and perform emergency shutdown.
- 3. Understand the location and operation of all gantry/table controls and indicators including x-ray on indicators.
- 4. Attach and detach table cradle accessories and patient restraints.
- 5. Perform emergency patient extraction.
- 6. Locate the safety and dose information in the Operator Manual.
- 7. How do you obtain service on this unit?

GETTING STARTED

- 8. Power system up after a normal shutdown and total power down.
- 9. Restart system software.
- 10. Perform tube warm-up when prompted and/or appropriate.
- 11. Perform Daily Prep.
- 12. Perform QA scans
- 13. Shutdown the system software.
- 14. Power down the system.

SCANNING

- 16. Position and landmark patient.
- 17. Enter patient information.
- 18. Select protocol and verify scan parameters for Scout, Axial, Helical or Cine.
- 19. Prescribe Care Bolus parameters.
- 20. Understand detector configuration, images per rotation, helical pitch and their effect on image quality.
- 21. Prescribe a scan range using explicit and graphic prescription.
- 22. Understand image quality obtained from parameters prescribed.
- 23. Prescribe MPR's with different slice thickness' and scan locations.
- 24. Use Prescribed Tilt.
- 25. Optimize scan parameters when prompted.
- 26. Build a scan protocol.
- 27. Understand Care Dose functionality
- 28. What are kernels?

**SCAN UNIT, PATIENT TABLE and
GANTRY 2 HRS**

- _____ 29. Main console (Acquisition Workplace)
- _____ 30. CT control box
- _____ 31. Computers and generators
- _____ 32. Storage/Archiving devices
- _____ 33. Gantry panels and display
- _____ 34. Gantry aperture
- _____ 35. Gantry tilt
- _____ 36. Detector design
- _____ 37. Table weight limits
- _____ 38. Table movements (vertical and horizontal)
- _____ 39. Scan range
- _____ 40. Laser localizers

SYSTEM DOCUMENTATION

- _____ 41. Online help
- _____ 42. Operator manuals
- _____ 43. LifeNet

***syngo* SOFTWARE and SYSTEM
PERIPHERALS 2.5 HRS**

- _____ 44. Windows XP
- _____ 45. Menu bar
- _____ 46. Active segment
- _____ 47. Task and tool cards
- _____ 48. *syngo* Browser configuration
- _____ 49. Exam main menu
- _____ 50. Keyboard functions
- _____ 51. Mouse functions

SCANNING PRINCIPLES 6 HRS

- _____ 52. Patient registration
- _____ 53. HIS/RIS scheduler
- _____ 54. Patient model dialogue/protocol selection
- _____ 55. Topogram
- _____ 56. Creating/modifying/deleting scan ranges and parameters
- _____ 57. Chronicle
- _____ 58. Scan assistant
- _____ 59. Spiral vs. sequential scanning
- _____ 60. Dynamic scanning, biopsy mode
- _____ 61. Image reconstruction
- _____ 62. CARE Bolus
- _____ 63. Adaptive Dose Shield
- _____ 64. Scan Protocol Assistant

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- _____ 65. Creating/modifying/deleting scan protocols
- _____ 66. Auto-tasking
- _____ 67. e-Logbook

IMAGE EVALUATION and MANIPULATION

- _____ 68. Viewing card
- _____ 69. Study Split
- _____ 70. Window/center settings/presets
- _____ 71. 2D tools
- _____ 72. Image archiving, networking
- _____ 72. Filming card
- _____ 73. 3D card
- _____ 74. Data management
- _____ 75. How to make a service call
- _____ 76. How to call Applications.
- _____ 77. Merging series
- _____ 78. Create a new folder

Name _____

Preceptor _____

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