

Question Paper

Exam Date & Time: 25-Jun-2024 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FOURTH SEMESTER M.Sc. NMT DEGREE EXAMINATION - JUNE 2024
SUBJECT: NMT6201 - QUALITY ASSURANCE IN NUCLEAR MEDICINE
(2021 SCHEME)

Marks: 100

Duration: 180 mins.

Answer all the questions.

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| 1) | Explain working of a PET/CT device and discuss its various quality control parameters. | (20) |
| 2) | Explain different Quality control parameters of a gamma camera. | (20) |
| 3A) | Discuss the use of Jaszczak phantom in nuclear medicine imaging. | (10) |
| 3B) | Discuss working and various quality control tests for radionuclide generators. | (10) |
| 3C) | Discuss different tests pertaining to cold kits formulation. | (10) |
| 3D) | Explain quality checks for radioisotope handling fume hood, laminar flow hoods and lead aprons. | (10) |
| 4A) | Explain working of a SPECT camera and list important quality control parameters. | (5) |
| 4B) | Explain working of a dose calibrator and list important quality control parameter. | (5) |
| 4C) | Identify pitfalls in non-imaging nuclear medicine procedures. | (5) |
| 4D) | Compare Quality Assurance and Quality Control. | (5) |

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