

Question Paper

Exam Date & Time: 18-Apr-2022 (10:00 AM - 12:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER B.Sc. N.M.T. DEGREE EXAMINATION - APRIL 2022
SUBJECT: BNMT 203 - BASICS OF NUCLEAR MEDICINE INSTRUMENTATION
(2016 SCHEME)

Answer ALL questions.

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) Explain on the working principle of gamma ray spectrometer. Also list the performance characteristics assessment measures. (10)
(7+3 = 10 marks)
- 2) Explain the thyroid uptake probe and also explain the quality control of the thyroid probe. (10)
- 3A) Explain the quenching of liquid scintillation counter. (5)
- 3B) Explain the Quality control of the probe. (5)
- 3C) Write short note on quenching in GM counter. (5)
- 3D) How to rule out the linearity of Isotope calibrator? (5)
- 4A) Short note on intra operative probe. (2)
- 4B) Define Pulse height analyser. (2)
- 4C) What are the ideal properties of inorganic scintillators? (2)
- 4D) Define FWHM. (2)
- 4E) What is detection efficiency? (2)

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