THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0222] FEBRUARY 2022 Sub. Code: 2303 (OCTOBER 2021 EXAM SESSION)

M.Sc. NUCLEAR MEDICINE TECHNOLOGY FIRST YEAR

(Candidates admitted from 2019-2020 onwards – Paper III) (Candidates admitted from 2020-2021 onwards – Paper IV) PAPER III & IV – MATHEMATICS AND STATISTIC Q.P. Code: 282303

I. Elaborate notes on:

 $(2 \times 20 = 40)$

- 1. Describe the uses of student-t-tests with examples.
- 2. a) What is the medical decision making and principle of receiver operating Characteristic (ROC)?
 - b) Explain in detail about types of data with example.

II. Write Short Notes on:

(10x6 = 60)

- 1. Explain about normal distribution with example.
- 2. What are most commonly used continuous functions in nuclear medicine?
- 3. What are the methods used to describe dispersion of data.
- 4. Explain the concept of correlation with example.
- 5. Explain coordinate system and its types.
- 6. Explain Mann Whitney U test.
- 7. Explain Chi-square test.
- 8. Explain Mean, Median and Mode with example.
- 9. Methods of least square fitting.
- 10. Explain parametric functions.
