SI.No.M21600 Course Code : 32718301

VINAYAKA MISSION'S RESEARCH FOUNDATION (DU), SALEM

B.SC (NUCLEAR MEDICINE TECHNOLOGY) DEGREE EXAMINATION - September 2021

Third Year

RECENT ADVANCES IN NUCLEAR MEDICINE TECHNIQUES

Three Hours Maximum: 75 marks

I. Write an essay on any ONE of the following: (1 x 20 = 20)

1. Different parts and working principle of rectilinear scanner.
2. Instrumentation of PET scanner and its working principles.

II. Write short notes on any TWO of the following: (2 x 10 = 20)

3. Cyclotron.
4. Scintillation detector.
5. Radiation safety precautions in 18F-FDG PET study
6. Advanced tracers in PET imaging of Heart.

III. Write short answers on any SEVEN of the following: (7 x 5 = 35)

7. Spatial resolution of collimator in gamma camera.
8. Focal length of collimator in rectilinear scanner.
9. Image guidance for stereotactic Surgery.
10. Rate meters in Rectilinear Scanner.
11. Spatial resolution of collimator in gamma camera.
12. Sodium Iodine Crystal.
13. Cyclotron.
14. Compare 2D and 3D modes in PET.
15. PET imaging for Epilepsy.
16. Newer computer applications in nuclear medicine.

*****