

[LS 120]

NOVEMBER 2020
(OCTOBER 2020 SESSION)

Sub. Code: 3016

M.D. DEGREE EXAMINATION

BRANCH XXIV – NUCLEAR MEDICINE

**PAPER I – BASIC SCIENCES AND INSTRUMENTATION IN
NUCLEAR MEDICINE COMPUTERS AND MATHEMATICS IN NUCLEAR
MEDICINE AND COMPARTMENTAL ANALYSIS**

Q.P. Code: 203016

Time : Three Hours

Maximum : 100 Marks

I. Write short notes on:

(20 x 5 = 100)

1. Secular & Transient equilibrium
2. Half life
3. Chemical bonds
4. Radio nuclide generator
5. Specific activity
6. Bremsstrahlung radiation
7. HPLC
8. Probability distribution
9. QC of PETCT
10. Thermal neutrons
11. Principles of nuclear reactor
12. Quantitative measurement of uniformity
13. PET mammography
14. SPECT phantom
15. PHA
16. Gated list mode data acquisition
17. Image file formats
18. Thyroid probe
19. Cardiac PET
20. Gas filled ionisation detectors
