

M.D. DEGREE EXAMINATION
BRANCH XXIV – NUCLEAR MEDICINE
PAPER I – BASIC SCIENCES AND INSTRUMENTATION OF
NUCLEAR MEDICINE

Q.P. Code: 203001

Time : Three Hours

Maximum : 100 Marks

I. Write short notes on:

(20 x 5 = 100)

1. Anatomy of the Biliary system.
2. Cervical lymph nodes.
3. Mechanism of bone mineralisation.
4. Pathophysiology of renin dependent renovascular hypertension.
5. Ventricular system of the brain.
6. Thyroid hormone synthesis and release.
7. Cardiac ejection fraction.
8. Physiology of adrenal medulla.
9. Drugs that interfere in iodine uptake.
10. Bacterial endotoxins test.
11. Mechanism of norepinephrine uptake and storage.
12. Poisson distribution.
13. Photoelectric absorption.
14. Theory of operation of gas filled detectors.
15. Sodium iodide spectroscopy.
16. Auger electrons.
17. Collimator design parameters.
18. Semiconductor detector.
19. SPECT camera acceptance tests.
20. Corrections for PET data.
