

B.Sc. RADIOTHERAPY TECHNOLOGY
THIRD YEAR
PAPER I – QUALITY ASSURANCE IN RADIOTHERAPY

Q.P. Code: 801921

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Explain the quality assurance tests required for a simulator.
2. Discuss about the acceptance testing of linear accelerator.
3. Discuss staffing requirements in radiotherapy department.

II. Write notes on:

(8 x 5 = 40)

1. Cassette leak test.
2. X-ray focal spot size check test.
3. Radiation field analyzer.
4. QA Check for beam flatness and symmetry in linear accelerator.
5. Remote afterloading QA tests.
6. Output calculation in Telecobalt unit.
7. Intracavitary sources leak test.
8. Monthly QA tests for Linear accelerators.

III. Short answers on:

(10 x 3 = 30)

1. Monthly checks in telecobalt machines.
2. Collision device check in linear accelerators.
3. X-ray output check.
4. Field alignment for fluoroscopic devices.
5. Quality control of applicators.
6. Laser alignment.
7. Air pressure check in pneumatic system.
8. Field congruence test.
9. Source identity.
10. Source movements in remote after loading brachytherapy units.
