

Rajiv Gandhi University of Health Sciences Second Year M.Sc [Radiation Physics] Degree Examination - SEP-2019

[Time: 3 Hours] [Max. Marks: 100]

ADVANCED RADIATION PHYSICS O.P. CODE: 9805

Your answers should be specific to the questions asked. Draw neat, labeled diagrams wherever necessary.

LONG ESSAY 2 X 20 = 40 Marks

- L. Explain various steps of Brachytherapy source calibration.
- 2. a) What are the salient features of ICRU 38?
 - b) Explain various implant principles used in Brachytherapy.

SHORT ESSAY 6 X 10 = 60 Marks

- 3. Explain the construction and working of EPID.
- 4. Write a note on
 - a) 2D array detector
 - b) TLD
- 5. What are the QA tests for IMRT? Explain them.
- 6. Write a note on three dimensional compensation in radiotherapy.
- 7. Write a note on IGRT.
- 8. Write a note on following field shaping devices used in radiotherapy a)MLC
 - b) Wedge

