

Rajiv Gandhi University of Health Sciences

Post-Graduate Fellowship Examination – JULY-2019

Time: Three Hours**Max. Marks: 100 Marks****Advance Technology in Radiation Oncology - PAPER – II****QP Code: F018**

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

LONG ESSAY (These questions carry 20 marks each)**2 X 20 = 40 Marks**

1. Define stereotactic radiosurgery and stereotactic radiotherapy. What are the radiobiologic considerations in relation to above? Describe in brief radio-surgical techniques employed in the treatment of tumor.
2. Role of SRS in AV malformation and the RT planning in detail

SHORT ESSAY (These questions carry 10 marks each)**6 X 10 = 60 Marks**

3. Various treatment delivery unit for SRS and SBRT and explain in detail planning of SRS in Novalis.
4. Describe the difference between gamma knife and cyberknife radiosurgery in detail.
5. Indication for re-irradiation with Brachytherapy and precaution to be taken while planning Brachytherapy
6. Molecular classification of Glioma and role of SBRT in Glioma
7. Role of targeted therapy in recurrent high grade Glioma and give evidence for benefit of targeted therapy with SBRT in high grade Glioma.
8. Explain the Brachytherapy procedure for base of tongue and describe the various methods of treatment planning in Brachytherapy.

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