

# Question Paper

Exam Date & Time: 01-Sep-2022 (10:00 AM - 12:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

FOURTH SEMESTER B.Sc. RADIO THERAPY TECHNOLOGY DEGREE EXAMINATION - SEPTEMBER 2022  
SUBJECT: RTT2241 - PHYSICS OF BRACHYTHERAPY (PROGRAM ELECTIVE - I)  
(2020 SCHEME)

Marks: 50

Duration: 120 mins.

Answer all the questions.

- 1) Discuss in detail the brachytherapy treatment technique. (10)
- 2) Discussion in detail the specification of any four brachytherapy sources. (10)
- 3A) What are the ideal characteristic of brachytherapy source. (5)
- 3B) Write a short note on TG 43 formalism. (5)
- 3C) Write a short note on Intracavitary therapy. (5)
- 3D) Discuss about bladder and rectum point in intracavitary brachytherapy. (5)
- 4A) Define point A and point B. (2)
- 4B) Mention the classification of brachytherapy based on dose rate. (2)
- 4C) Mention the various sources used in permanent implant brachytherapy. (2)
- 4D) Sievert integral method. (2)
- 4E) Mention the half life, specific activity and exposure rate constant of Iridium 192 source. (2)

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