

M.D. DEGREE EXAMINATION – APRIL, 2015

RADIOTHERAPY

PAPER-I : BASIC SCIENCES

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

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WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1) What are the risk factors for the development of cancer of the endometrium? Write the staging system used for Endometrial cancer.
- 2) Write in brief on Wedges.
- 3) What is meant by sievert? How is it obtained? Write the annual limits of radiation exposure to different population sub-groups, as recommended by the NCRP.
- 4) Thermo-luminescent dosimeters.
- 5) What are the risk factors for the development of Breast cancer? Write the pathological classification of Breast tumours.
- 6) What is meant by Screening for cancer? What are the pre-requisites for Screening? Write a brief note on Prostate specific antigen.
- 7) P value.
- 8) Describe the lymphatic drainage of Tongue. Mention the acute and late effects observed following radical radiation treatment of head and neck cancers.
- 9) Enumerate the different strategies for modifying Radiation response. Write briefly on Amifostine.
- 10) What is meant by isodose curves? What are the factors affecting the isodose distribution?

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