Write short notes on:

1. Isotopes in use for genitorurinary brachytherapy.  
   
2. Compare Gamma Knife with X-Knife.  
   
   
4. Rationale and technique of intraoperative radiation therapy.  
   
5. Enumerate radioisotopes used for PET scan along with their half lives. Provide evidence of usefulness of PET scan in oncological management of cancers.  
   
6. What are the advantages and disadvantages of fast neutron radiotherapy? Give appropriate clinical examples.  
   
7. Therapeutic ratio and its clinical significance.  
   
8. a) What are tyrosine Kinase inhibitors?  
    b) Their clinical application in any one cancer.  
   
9. What is thermoluminiscence? What are its clinical and lab applications?  
   
10. a) Principles of Palliative Care.  
    b) Euthanasia: Legal aspects in India.  

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