Write short notes on:

1. a) PET myocardial perfusion tracers  
   b) Radionuclide assessment of RV function   

2. a) Radio-colloides and their applications  
   b) Peritoneal scintigraphy  

3. a) Enumerate the causes of painful limp in a child.  
   b) Role of skeletal scintigraphy in the differential diagnosis.  

4. a) $^{11}$C PIB.  
   b) $^{18}$F- Choline  
   c) $^{18}$F-FLT  
   d) $^{99m}$Tc EC  

5. Role of PET-CT in:  
   a) Ca rectum.  
   b) Sarcoidosis.  

6. a) Role of Nuclear Medicine in reflux nephropathy.  
   b) Role of USG in the evaluation of thyroid nodule.  

7. Critically analyse the role of V/Q scan and CT pulmonary angiogram in the evaluation of pulmonary thromboembolism.  

8. a) $^{99m}$Tc N-NOET.  
   b) QC tests for FDG.  

9. Detail the methods of limiting exposures to:  
   a) Occupational workers.  
   b) Patients.  
   c) General Public.  

10. a) ROC.  
    b) Student ‘t’ test.  
    c) Bayesian analysis.  
    d) Inter & intra observer reliability.  

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