

# NUCLEAR MEDICINE

## PAPER-I

TIME:3HOURS  
Max. Marks:100

NM/F/II/2007/1

**Attempt all questions in order.**

**Each question carries 10 marks.**

**Write short notes on:**

1. Methods to obtain beta dosimeter of a radionuclide
2. Relation between CET and RBE and its relevance
3. Dose limits prescribed by AERB AND ICRP
4. Biological effects of radiations
5. Describe in detail the method to ascertain critical organ of a new radiopharmaceutical
6. Dose response curve
7. Factors affecting the outcome of any radiation therapy
8. Monitoring and preventive practices in a PET-Cyclotron facility for radiation exposure
9. Radio protectors – examples, mode of action and their applications
10. Radiosensitizer – example, mode of action and their applications