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Roll No .....

**FT - 605**

**B.E. VI Semester**

Examination, June 2014

**Nuclear Safety and Radioactive Materials**

*Time : Three Hours*

*Maximum Marks : 70*

**Note:** All questions are compulsory. Attempt one question from each unit.

**Unit - I**

1. What is radio active material? Explain the decay theories of radio active material.

OR

2. What are techniques of area and air monitoring in the case of radio activity, also explain one counter in deep.

**Unit - II**

3. What are the sources of radio active waste and how we can minimize it?

OR

4. Give one case study of any one of the nuclear power plants explosion and what are the steps taken?

**Unit - III**

5. Explain handling and shipping of radio isotope also give schematic layout of building for radio isotope work.

OR

6. How radio active emission are controlled in any nuclear reactor? Give radio active chain reaction also.

**Unit - IV**

7. What are the measures to be taken for protection in case of any hazard? Give one operation method in detail.

OR

8. How rescue operation are take place in case of radio active explosion? What steps you will take to prevent this type of happening in future.

**Unit - V**

9. What are the safety objectives defined for nuclear power plant? Explain in detail.

OR

10. a) Give the list of nuclear power plants of the world.  
b) Discuss the safety conditions required during an accident in Nuclear power plant.

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