

**Contents of 5-day Training course in QA/QC of Nuclear Instruments/Counting Systems for Technical Personnel from 9<sup>th</sup>-13<sup>th</sup> October 2017.**

<b>Lectures:</b>	<b>Duration(hrs)</b>
1. Introduction to radiation and Interaction with matter	01
2. Radiological characteristics and Calibration of Radiation monitoring instruments/devices	02
3. Radiation Detectors (Ion chamber, Proportional, GM, Scintillation, Semiconductor)	02
4. Radiation Measuring systems (GM counters, SCA, MCA and Instrumentation & troubleshooting)	02
5. Counting statistics & error propagation	01
6. QA/QC/maintenance of therapy level dosimeter	01
7. Importance of Work-place monitoring & Personal monitoring	01
8. Radiation Quantities (physical, protection, operational)	01
9. Radiation safety Procedures	01
<b>Total lecture Hours:</b>	<b>12</b>
<b>Practical:</b>	
1. Familiarization of test and measuring equipment	02
2. Q.C. of SCA	02
3. Q.C. of radiation survey meters / Calibration	02
4. Personal Monitoring for occupational exposure control	02
5. Introduction of Gamma Spectroscopy system and QA	02
6. GM counting / counting with statistics	02
<b>Total Practical Hours:</b>	<b>12</b>