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SUB	Radiation protection

QNO : 01:

ANS: The Radiation protection officer is main role in radiology department

- He is responsible recommending or approving corrective action
- identifying radiation safety problems, initiating action and ensuring compliance with regulations.

- The Radiation Safety officer is also responsible for assessing the Radiation Safety Committee

- The officer will schedule briefing and educational session to inform worker of ALARA program

QNO: 02:

ANS:

A: Occupational Exposure

(1) Effective dose

(2) Annual: 50 mSv

(3) Cumulative: $10 \text{ mSv} \times \text{age}$

(a) Equivalent Annual dose for tissue and organs

(1) Lens of Eye: 150 mSv

(2) Thyroid, Skin, hand & feet: 500 mSv

B: Public Exposure:

(1) Effective dose frequent Exposure: 1 mSv

(2) Equivalent dose for tissue and organs

(a) Lens of Eye: 15 mSv

(b) Skin hand & feet: 50 mSv

C Educational and training Exposure:

(1) Effective dose: 1 mSv

(2) Equivalent dose for tissue and organs:

(a) Lens of Eye: 15 mSv

(b) Skin hand & feet: 50 mSv

D Embryo-fetus exposure:

(1) Total Equivalent dose: 5 mSv

(2) Equivalent dose in one month: 0.5 mSv

E: Negligible individual dose: 0.01 mSv

QNO: 03

ANS:

Radiation Hazard.

Radiation is energy in the form of wave and particles.

→ Radiation is emitted naturally in Sun light and is also made by man for use in X-rays, cancer treatment and for nuclear facilities and weapons.

→ Long term exposure can lead to risk of cancer, tumor, contract even after several years.

→ While exposure to large amount over brief period can lead to radiation sickness. Such as nausea, skin burn and reduce organ function.

QNO : 04

ANS: Time distance and Shielding.

- X-room have barrier wall and windows that keep exposure inside the room. during these imaging procedure radiologic technologist leave the room or stand behind the protective shield. Such as curtain that as design to keep out of radiation.