7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

To provide ecofriendly environment to the University, it has MoU with the Kalgidhar Trust for managing its degradable and non-degradable waste.

Solid waste management: There is a specific department that collects solid waste from various sources viz. kitchen waste, animal waste, road side waste from specific container and dumps at the specific site. The collection is done by a specialized van every day.Separate dustbins with prescribed colors for collecting green waste (green dustbin), recyclable waste like glass, cotton and paper (yellow dustbin) and plastic waste (blue dustbin), to sort waste at the initial stage easily. It is further if required is segregated into degradable and non-degradable waste. The degradable waste (kitchen waste, plant leaves, sewage sludge, mess food waste etc.) is placed in the rotary drum (capacity 175 kg) for drying and crushing into fine powder. It is dumped into the vermicomposting pits for manure stabilization. The cattle dung waste is used to generate biogas through the Janta type biogas plant. Pathogenic medical waste and sanitary pads are incinerated. Other waste viz. old non wearable cloths, wooden chairs are either sold or donated to the needy. The paper waste (examination sheets, newspapers) are shredded into small pieces by machine in the printing press hall for selling in the open market. A portion of it is used for making cardboard and file covers. The segregated Plastic (although it is banned in the campus) if any is used to make bricks after mixing with sand and cement.The settled solid remnants in the water treatment plant is dried and used directly as manure in the agricultural fields. University is managing solid waste by its own waste treatment plant with the help of competent & trained personnel.

Liquid waste management: The waste water is discharged into the Giri river after its proper treatment through the treatment plant. The hospital waste water and sewerage wastes are treated in 35 KLD ETP and 1000 KLD STP respectively. The settling tank of STP provides good amount manure for the agricultural field. The supernatant in the other tank is aerated and further released in to the river.

Biomedical waste management:

- Bacterial, viral and fungal contamination is autoclaved before it is disposed.
- Biological waste is properly handled as per BMW Rules, 2016.
- Dry toxic waste is burnt in an incinerator.
- Liquid toxic waste mixed with caustic solution is put in a cemented pit.

E-waste management:

University has tie-up with external authorized agencies details mentioned in legislation compliances.

Waste recycling system:

Glass, tin, paper, tetra packs and waste plastic are segregated manually with accuracy and sold to Trash buyers by weight for recycling.

Hazardous Chemicals and radioactive waste management:

- Department of Chemistry of University installed fume hoods to remove hazardous gases.
- Care is taken with regards to storage of acids and other volatiles to keep laboratory safe and pollution free.

Medicines, paint, bulbs, fluorescent tubes, spray cans, shoe polish and disinfectant containers is quite hazardous therefore is very carefully managed at Bio-medical waste plant of Akal Charitable Hospital.