

## **Preparation of agarose gel (1%) for DNA electrophoresis**

Following protocol was used for the preparation of 1% agarose gel:

- 1) Adequate volume of 1.0X TAE buffer was prepared to fill the electrophoresis tank and to prepare the agarose gel.
- 2) For 1% agarose gel, 0.3 g of agarose was taken in a flask containing 30 ml TAE buffer (1.0X) and was melted in microwave oven.
- 3) Molten agarose was cooled to 45-55°C and poured onto the gel-casting tray. A comb was inserted into it.
- 4) Air bubbles were removed, if any, underneath the comb or on the surface of gel and the gel was allowed to solidify at room temperature for 30 minutes.
- 5) After solidification of gel, the comb was removed carefully to avoid tearing of wells.
- 6) The gel casting tray, containing gel, was placed in electrophoretic tank, having 1.0X TAE buffer in it. 10 microlitre of ethidium bromide was added to the tank.
- 7) DNA samples were mixed with appropriate volume of loading dye (Appendix # 8) and loaded into the wells with a micropipette.
- 8) Voltage was set at 70 V. Movement of dye indicated the migration of DNA from cathode to anode through gel.
- 9) When dye covered the distance sufficient for separation of DNA fragments, the power supply was turned off.
- 10) DNA fragments were visualized under UV light and images were saved using a gel documentation system.