Facilities of Genetic Research Unit

Instrument	Model	Uses	Images
Real-Time PCR	QuantStudio 5 Thermofisher/ USA	The system supports a broad range of genomic applications, such as: analyses of gene expression, microRNAs and noncoding RNAs, copy number variation, drug metabolism enzymes, and protein expression; SNP genotyping; and mutation detection	
Nano Scanning Micro volume spectrophotometer	747501 JENWAY, England	For determination the concentration and purity of DNA and RNA. Programmed measurement modes include: photometric for single wavelength measurement, concentration for measuring concentration using a standard or factor, spectrum for a high purity scan across the entire wavelength range, quantitation with the ability to create a calibration curve using up to 20 standards, kinetics to monitor change over time, as well as multi-wavelength mode.	
Bioair Aura Vertical laminar flow hood	AURA SDV 1.2 BIOAIR/ Italy	Provide suitable sterile area for different experiments that need aseptic conditions. Provide highly safe tools that prevent contaminations as well as prevent pathogenic dissemination for the researcher. Provide stable running, low noise, and small power consumption. Provide sample preparation, laminar flow clean bench.	

Horizontal gel electrophoresis	Cleaver scientific	Generally used for the analysis and size separation of DNA, RNA, and proteins according to molecular size. In gel electrophoresis, the molecules to be separated are pushed by an electrical field through a gel that contains small pores. The gel matrix is cast horizontally and submerged in a running buffer within the electrophoresis tank.	

Basic equipment

