

D A P M R.V.Dental College.

Clinical skill labs and simulation facilities

Department of Oral Medicine and Radiology

The department is a host to a comprehensive array of diagnostic equipments and houses one of the best infrastructure for congenial academic development as well as state of the art patient care.

SPECIAL EQUIPMENT

1. Cone Beam Computerized Tomography(CBCT)

The department acquired a CBCT unit from J. Morita Mfg Corp, Kyoto, Japan. This state of art unit comes from a reputed Japanese company who are the pioneers in CBCT technology. The unit comes with a multiple FOV choice which significantly reduces the radiation dose to the patient. CBCT scans give a 3-dimensional perspective of the patient's pathology. Reconstruction algorithms of the unit construct the image in axial, sagittal and coronal planes which helps in better understating of the pathology/anatomy. Apart from routine information of the teeth and associated structures, the unit also helps in airway analysis, implant planning surgical stent preparation and model scanning. In future this unit can be integrated with 3D printing technology.



2. Ultrasonography



The department is also equipped with a portable ultrasonography unit. This unit is a product of Wipro GE Logic Pro 800 and comes with 10MHz and 7MHz probe. The ultrasonography unit is used for training postgraduate students and for carrying out short-term research projects on various soft tissue conditions of maxillofacial area.

3. Panoramic Radiography Unit



The department is equipped with two panoramic radiography units with cephalography arm. ORTHORALIX 9200 PLUS is an Analog unit from Gendex. The digital machine is Kodak 8000C from Carestream Health India Ltd. Each unit is housed in separate enclosures that are surrounded by 1mm thick lead lined partitions. The digital unit is supported by a workstation and is attached to a laser printer for printing the images. Apart from routine panoramic and cephalometric images, these machines are also used for taking skull radiographs, lateral TMJ radiographs, maxillary sinus views and radiographs for assessment of implant sites. The department of Oral Medicine and Radiology and other departments including Oral and Maxillofacial surgery, Prosthodontics, Periodontics and Orthodontics, use these imaging services extensively.

4. Intraoral radiography unit



The department is equipped with three intraoral radiography units. Two machines are manufactured by Carestream Health India Ltd and has a fixed tube voltage of 65KvP and 10mAs. The newer 3rd machine was acquired in March 2019 from J Morita Mfg Corp, Kyoto Japan. The uniqueness of this intra oral radiography unit lies in its compact design, where the unit is attached to a chair. Another unique feature of this unit is that there are laser lights which indicate the entry point of the X ray beam. One intraoral radiography unit is used to acquire digital intraoral periapical images using Digoraoptime PSP based digital imaging system. The DigoraOptime unit is functioning in the department from 2013 and it has 6 different size sensors. This system also has the features of zooming of the images, clarity and contrast modification, measurement of the tooth length and angulation, three-dimensional visualization, colouring, inversion, subtraction of images, storage and retrieval of images. This system eliminates the usage of the radiographic film, thereby allowing storage of images by way of hard or soft copy and the images can be sent to distant places through tele radiography.

5. Extra oral Radiography Unit



The radiology department is equipped with 100mA extraoral radiography machine. This unit is useful in acquiring images of skull. The skull radiographs play an important role in diagnosis and management of maxillofacial pathology including maxillofacial trauma.

6. X- Ray film duplicator



The department is equipped with a radiograph duplicator unit from Dentsply. This unit is used to make duplicate copies of radiographs (intra-oral and extra-oral) so that re-exposure of the patient is avoided. The duplicating process requires special duplicating films that are similar to regular X-ray films with some modifications.

Automatic film processor



The department is equipped with two automatic film processors that are used for processing intraoral radiographs. These units make the processing and reporting of the radiographs quicker and more efficient.

7. TENS machine



The department is equipped with two TENS machines. Transcutaneous Electric Nerve Stimulation or TENS is routinely used in management of painful muscle conditions particularly the maxillofacial musculature. TENS therapy is an integral part of the pain clinic in the department. The machine has both muscle stimulation (physiostim) and TENS (physiotens) options. The machine delivers low intensity electric current to the patient through electrodes that is placed on the painful areas. The machine has a dial gauge each for indicating the intensity and frequency of the current.

8. DIGITAL CAMERAS

Nikon D80 Digital Camera With AF-S DX Zoom

9. LCD PROJECTOR

The department is equipped with 2 LCD projectors -**Epson EB X6 and Viewsonic**-compatible with the Laptop is used by the department for undergraduate classes, clinical demonstrations, seminars, journal clubs and interdepartmental clinicopathological meetings.

- Number of computers: **2**, laptops: **1**, scanners: **1**, printers: **2**, softwares and other accessories: **digital radiography and Intraoral Camera, Digital camera used for maintenances of patient records**
- Browsing centre and broadband facility: Central Library, Lan facility and wireless access to internet are also available.

Minor equipments in the department

Sl No	Equipment	Quantity
1.	Diagnostic instruments (Mouth mirror, probe, tweezer)	60 sets
2	Kidney trays	05
3	Biopsy Equipment	5 sets
4	Surgical Trolley	5
5	Emergency Medicine Kit	1 set
6	B.P.Apparatus with Stethoscope	5 sets
7	Digital B.P.apparatus	02
8	Electric Pulp tester	04
9	Micro Motor H.P. (Contra)	01
10	TENS Machine	02
11	Sialography kit	01

12	Digital thermometer	01
13	Weighing scale	02
14	Needle destroyer	01
15	Fergusson's mouth gag	01
16	Stainless Steel Cotton Bin	01
17	Dental model (pulp pathology model)	01
18	Crown remover	01
19	Punch biopsy kit	04
20	Mouth mirror with illuminator	02
21	Sailogram Kit 27 gauge	02
22	Sterilization equipments i. Goley autoclave with pressure gauge ii. Confident uni-clave C-79 autoclave. iii. Vapoclave iv. Sterilization pouch sealing machine	01 02 01 01

Radiology Equipment

SI No	Equipment	Quantity
1.	Lead Screens	05
2.	Lead Aprons	04
3	Thyroid collar	01
4	Radiograph processing equipment: i. Manual processing tanks	03

	ii. Safe light	02
	iii. Day light processor	01
	iv. Automatic processor	02
	v. Dryer	01
	vi Film storage container	02
	vii Clips and hangers	25
5	Lead gloves	1 pair
6	Extra oral Cassettes with Intensifying screen (rare earth)	
	6x12"	02
	8x10"	02
	5x 7"	01
7	X-Ray viewer boxes	06
8	Film badges	16
9	OPG viewer with magnifying lens	01
10	IOPA film viewer with magnifying glass	04
11	X Ray Viewer with TFD	01
12	Tracing table	01
13	Plastic Film holders	25
14	Bitewing & Intra Oral paralleling kit	02
15	Dentsply Rinn universal Duplicator	01

1. AUDIO-VISUAL EQUIPMENT & FACILITIES

SI No	Equipment	Quantity
1.	Laptop	01
2	Epson LCD Projector	01

COMPUTER ACCESSORIES

DESKTOP is loaded with DVD and CD writer and installed with WindowsXP software and softwares like digoraoptime for intraoral digital radiography and HP Image Zone for HP scanner. It also has Adobe Acrobat reader for retrieving Information from the journals. The Radiology unit is equipped with Acer system with Kodak Masterview 4.5.3 Beta version software and Kodak dental imaging software 6.12.26.0 and Trophy dicom 6.3.0.0 software to view and work on digital panoramic and other extraoral radiographs. The panoramic machine is connected to a Kodak Dry View 5700 laser printer to take digital image printouts of radiographs. The radiology unit also equipped with i-Dixel software by J. Morita Mfg Corp Kyoto Japan (version 3.7.1.1) for the CBCT image reconstruction. In addition to this software, the radiology unit is in possession of ON demand software for advanced functionalities of CBCT. Laptops loaded with DVD writer and Windows XP software.

HP LASER JET 1200 SERIES PRINTER HP SCANNER: SCANJET 3770 with features of scanning the text documents, photographs, transparencies, negatives and radiographs.

Department of Conservative Dentistry & Endodontics



Endodontic Microscope



Endodontic Operating Microscope at the PG clinic



Ceramic lab



Intraoral periapical Radiography/ Radiovisiography equipment



Casting lab



Casting lab



UG Clinics of Department of Conservative Dentistry & Endodontics



Sterilization room



Endosurgery Unit

Department of Oral and Maxillofacial Surgery



PG Clinic



Recovery room



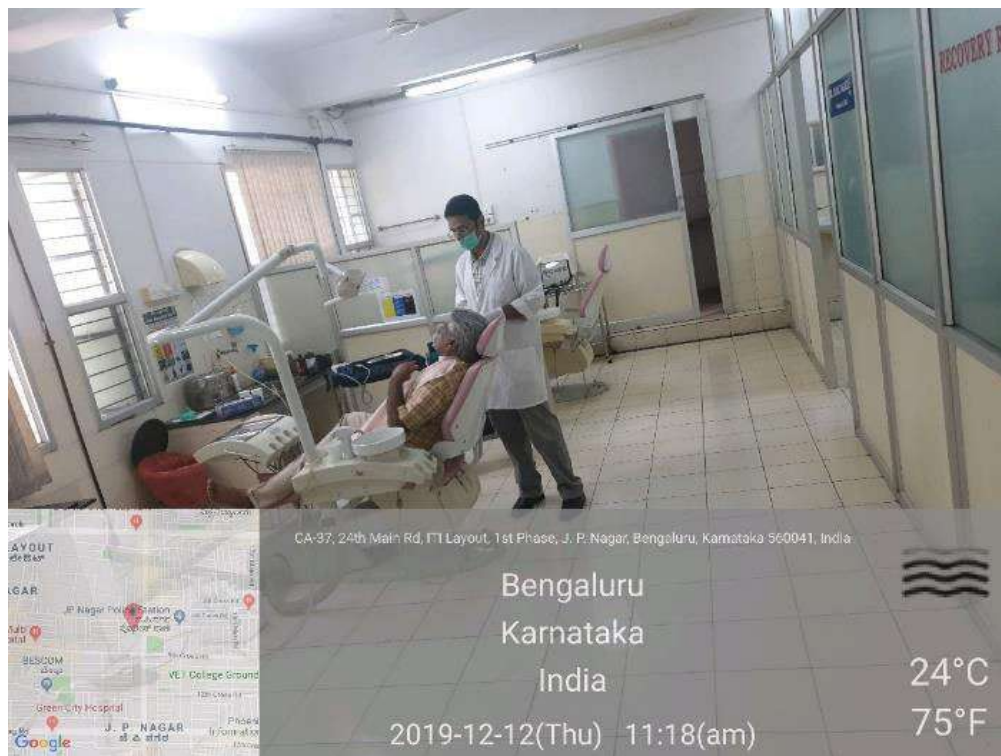
Operatory of the Department



Piezosurgery unit



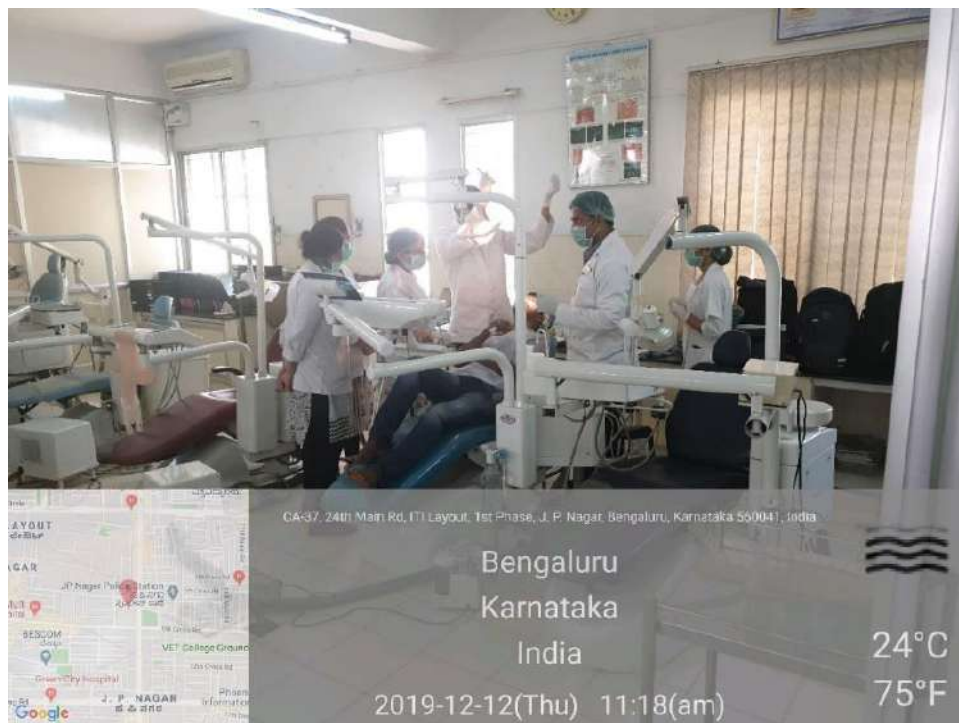
Physiodispenser



Implant clinic



Implant Kit

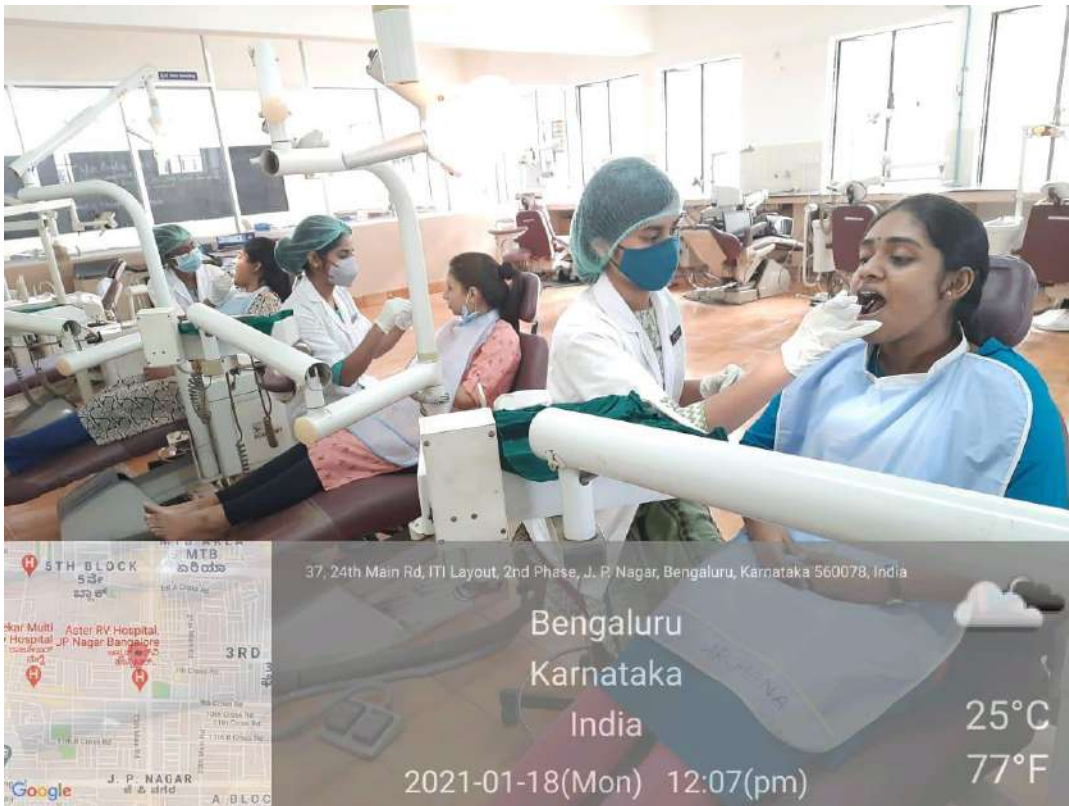


PG clinic

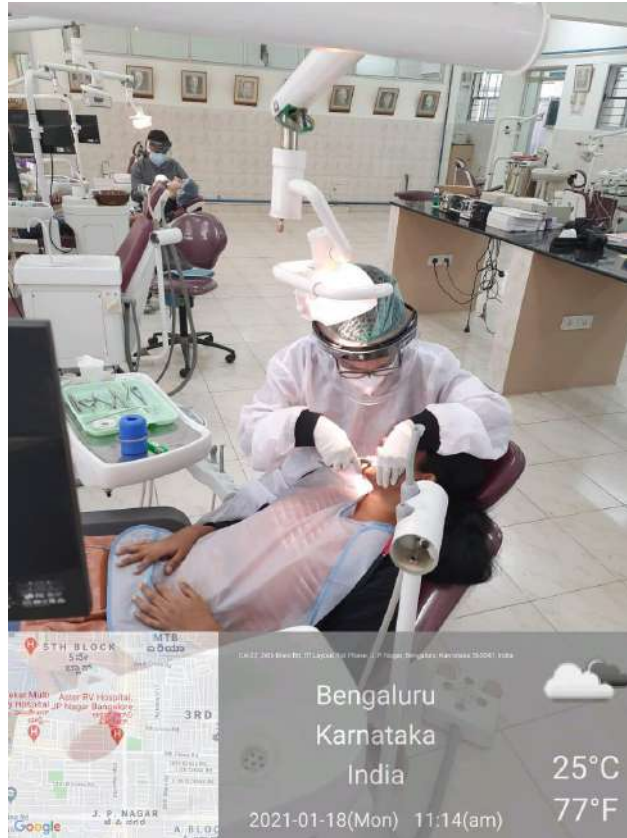
Board Room



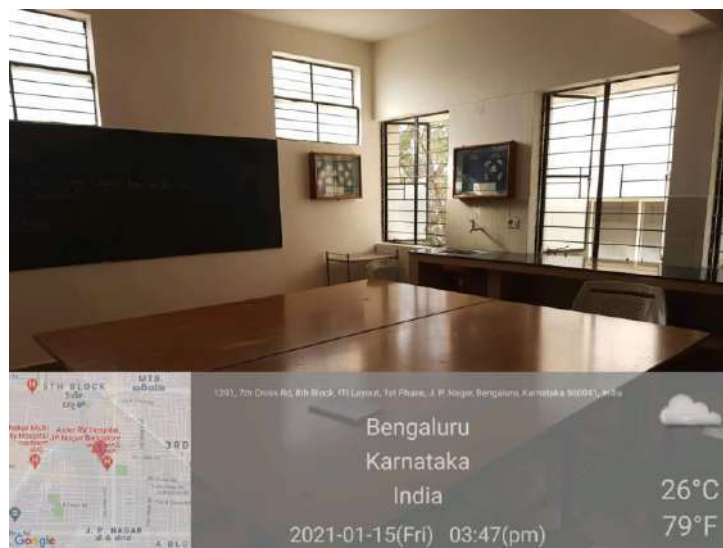
Department of Orthodontics



UG CLINICAL AREA



PG CLINICAL AREA



UG WIRE BENDING AREA



ACRYLIC POLISHING LATHE



ACRYLIC TRIMMER



ACRYLIC TRIMMER



CAST TRIMMING LATHE



ELECTROPOLISHING UNIT



CAST TRIMMING LATHE



MASTER BIOSTAR



PLASTER DISPENSER



POLYWAC



SHEU BIOSTAR



SOLDERING UNIT



THERMOSTAT



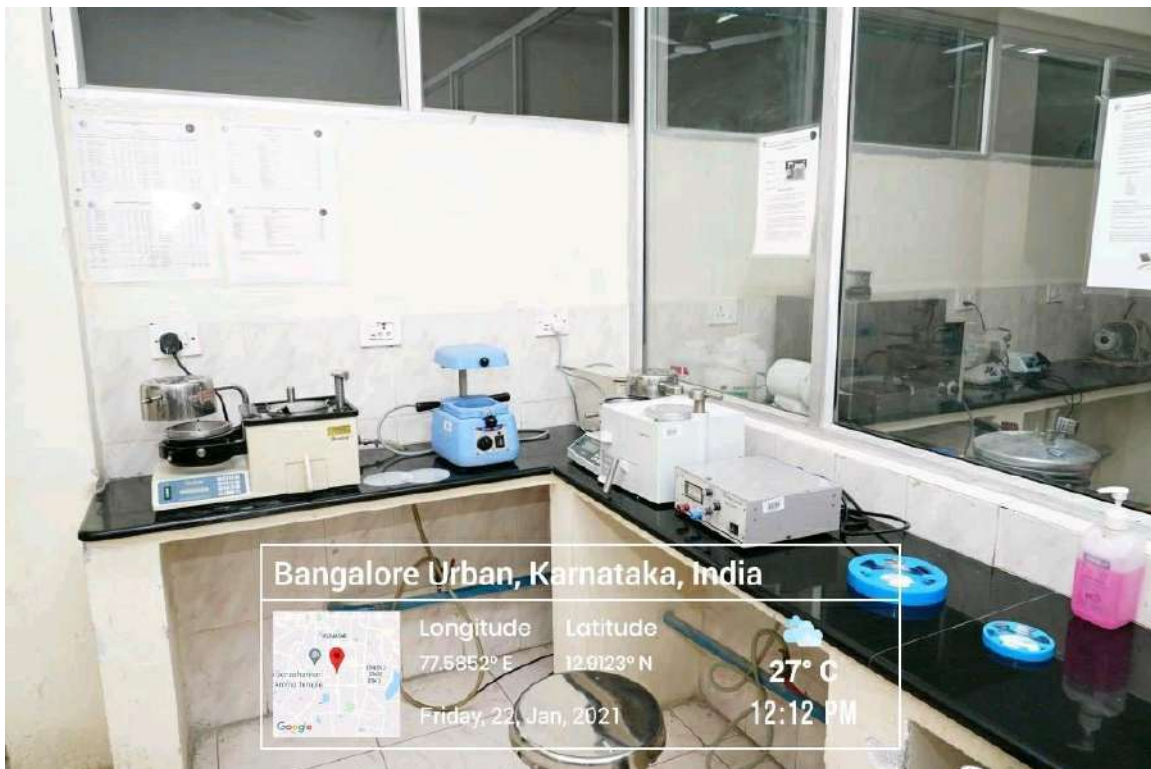
WELDING UNIT



Extraoral Photography room



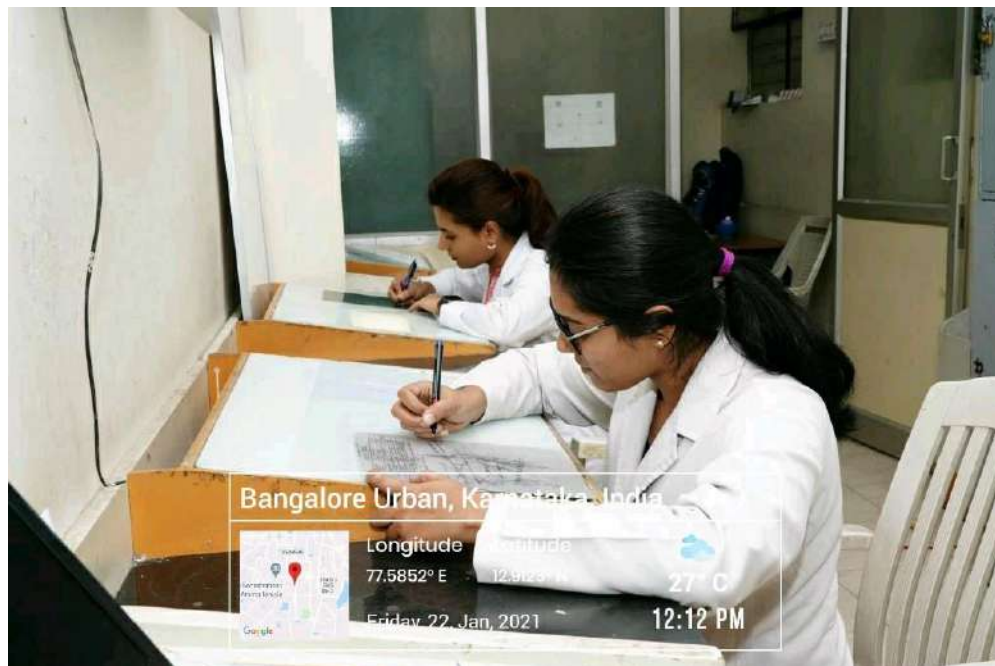
Sterilization unit



Dry lab



Wet lab



Cephalometric tracing room

Department of Oral and Maxillofacial Pathology



Pentaheaded Research Microscope



Dental Anatomy Lab



Oral histology and Pathology Lab



Histopathology Laboratory



Museum

Department of Periodontics



Diode laser



Preclinical work-practice of incision, suturing and splints



Periotron



Electrocautery unit

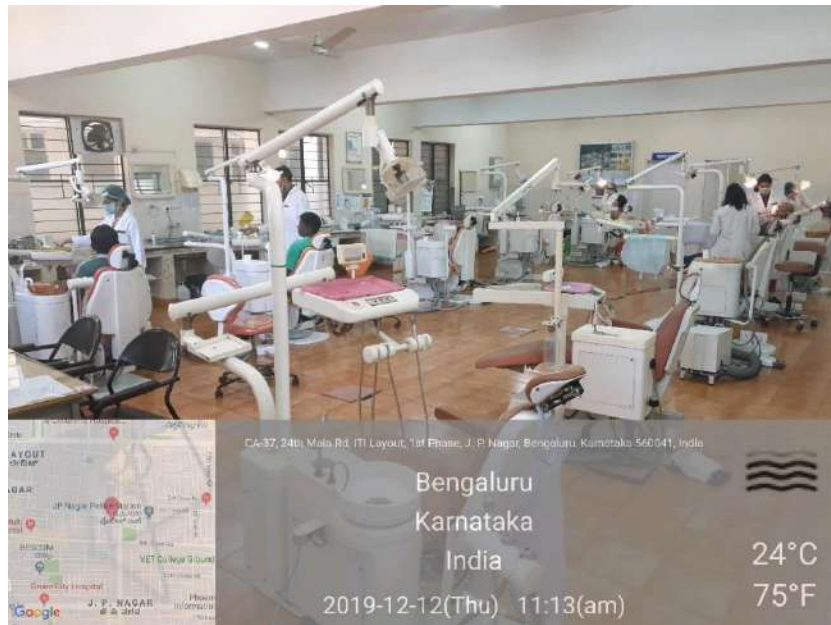


Iontophoresis unit

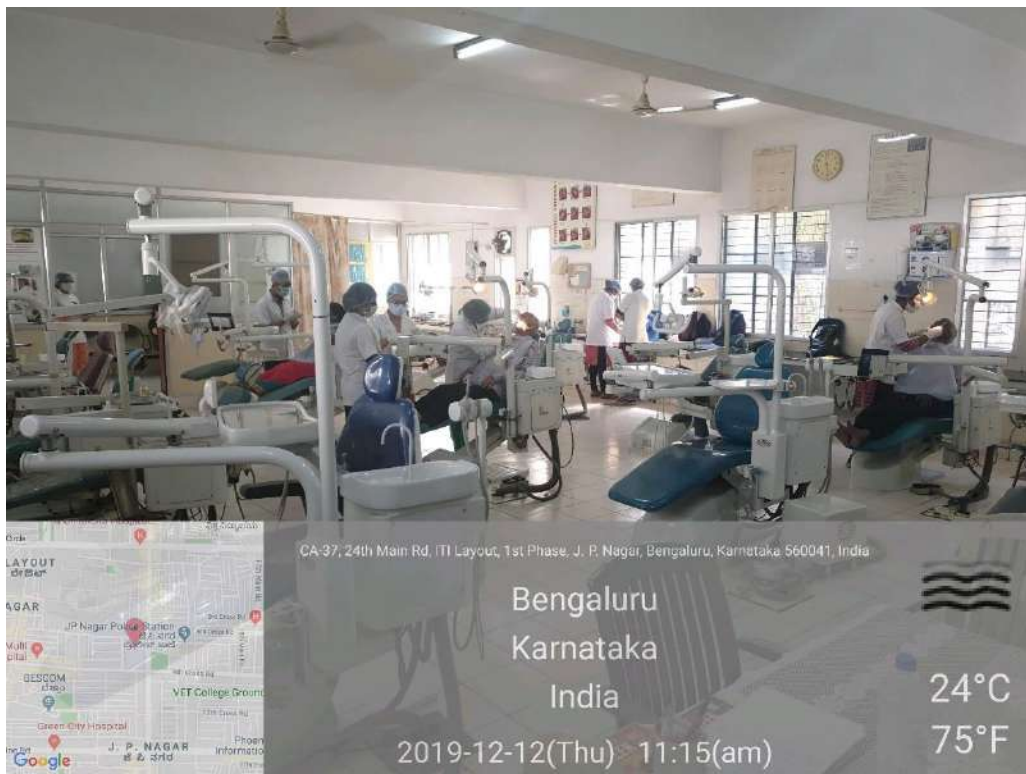


UG/PG clinic of the Department

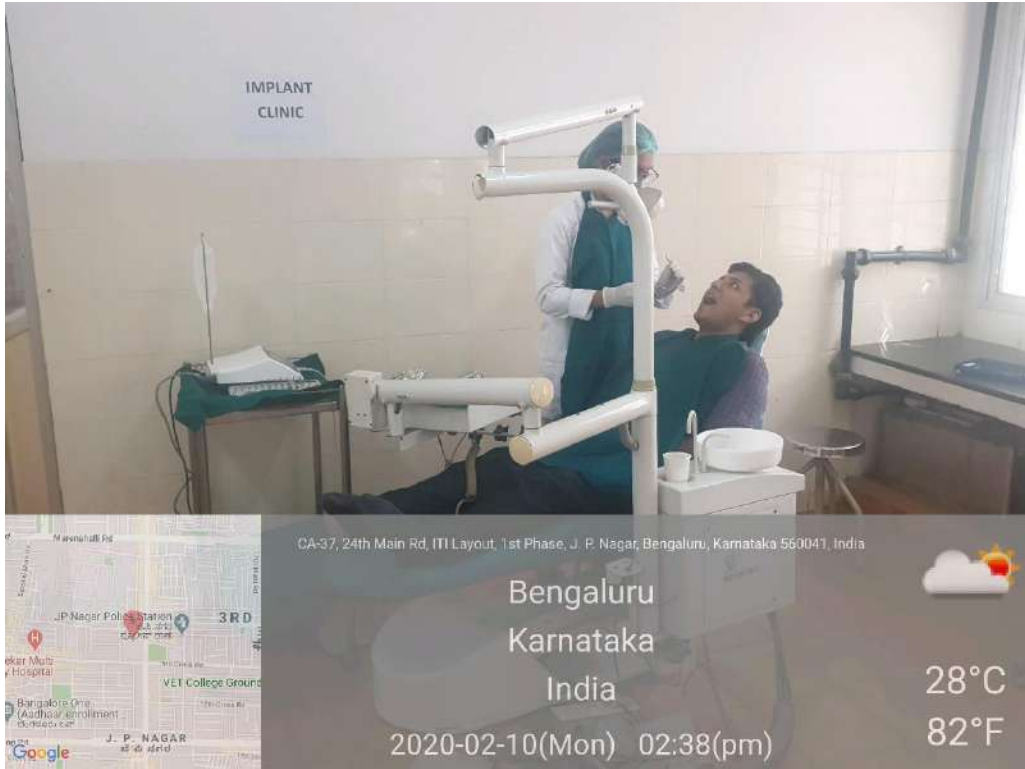
Department of Prosthodontics



PG clinic



UG clinic



Implant clinic



Geriatric clinic

Burn out furnace



Casting Machine



Precision milling machine



Touch and Press Densply Ceramic press



Stereomicroscope



Department of Pedodontics



Pre-clinic work station



Play area



PG clinics