

## EQUIPMENT REQUIREMENTS

As per Revised BDS Course Regulations, 2007

Department: **Oral Medicine and Radiology**

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
	(Space allocation for each dental chair 100 Sq.Ft. in all the Departments)				
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, Air Ventry Suction, X-Ray viewer, 3 way syringe, instrument tray, Dental Operator's Stool with height adjustment	6	12	Yes	
Panoramic X-Ray with Cephalometric	Preferably digital	1	1	Yes	
Intra Oral X-ray Unit	70 KV, 8 mA, high frequency preferably Digital timer	2	3	Yes	
Pulp testers	Digital			Yes	
Automatic periapical X-ray Developer		1	1	Yes	
Automatic Panoramic with Cephalometric X-ray Developer		1	1	Yes	
X-ray viewer	For Panoramic and Cephalometric films	2	2	Yes	
Radiovisiography	Digital Intra X-ray system with one Sensor and Software	1	1	Yes	
General X-ray Unit		1	1	Yes	
Ortho Pantmograph	Preferably digital	1	1	Yes	
Automatic Developers / Dark Room		1	2	Yes	
Lead aprons		2	2	Yes	
Lead Gloves		1	1	Yes	
X-ray Hangers		6	6	Yes	
X-ray Viewers		2	2	Yes	
Diagnostic Kits	Mouth mirror, dental probe, college tweezers	20	40	Yes	

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Lead Screen		1	1	Yes	*
Biopsy Kit		1	1	Yes	
Autoclave	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	1	2	Yes	
Computers	Minimum Pentium – IV	1	1	Yes	
Intra Oral Camera	With High resolution	1	1	Yes	
Needle Burner with Syringe Cutter		2	2	Yes	



Department: Oral Pathology and Oral Microbiology

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Dental Chairs and Units	With shadowless lamp, spittoon, 3 way syringe, instrument tray and suction	1	2	Yes	
Microscopes		20	40	Yes	
Microtome		1	1	Yes	
Wax bath		1	1	Yes	
Water bath		1	1	Yes	
Knife sharpener		1	1	Yes	
Hot plate		1	1	Yes	
Spencer Knife		1	1	Yes	



Department: Public Health Dentistry

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, Air Ventury suction, micromotor control light cure 3 way syringe, X-ray viewer, instrument tray Dental Operators stool with height adjustment with shadowless lamp, spittoon, 3 way syringe, instrument tray and suction, micromotor, airtor, light cure	8	16	Yes	
Autoclaves	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	1	2	Yes	
Ultrasonic cleaner	Minimum capacity 13 litres with mesh bucket with digital timer	1	2	Yes	
Needle burner with syringe cutter		2	4	Yes	
MOBILE CLINIC				Yes	
Mobile dental van	Mobile dental van with two dental chairs with all the attachments and adequate sitting space for 15 to 20 people				
Dental chair with unit	Hydraulically operated with spittoon attachment, halogen light with 2 intensity, air ventury suction, airtor, micromotor, 3 way-scaler and light cure, x-ray viewer, instrument tray, operating stool	2		Yes	
Autoclaves	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	1	1	Yes	
Intraoral x-ray	Portable, 70 KV, 8 mA	1	1	Yes	
Glassbead sterilisers		1	1	Yes	
Compressor	1.25 HP	1	1	Yes	
Metal Cabinet	With wash basin	1	1	Yes	
Portable dental chair	Suitcase unit with airtor, micromotor, scaler and compressor 0.25 HP	2	2	Yes	
Stabiliser	4 KV	1	1	Yes	
Generator	4 KV	1	1	Yes	
Water tank	400 ltrs	1	1	Yes	
Oxygen cylinder		1	1	Yes	
Public address system		1	1	Yes	

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Department: Paediatric and Preventive Dentistry

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, high power motorized evacuation system, Air rotor with miniature, Air rotor HPS, Micro motor with miniature contrangle Hand piece, 3 way syringe, ultrasonic sealer with 3 tips, Light cure unit LED based heat free, X-ray viewer, instrument tray Dental Operator's stool with height adjustment (Pedo chair preferred)	10	20	Yes	
Autoclaves	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	1	2	Yes	
Ultrasonic cleaner	Minimum capacity 13 liters with mesh bucket with digital timer	1	2	Yes	
Needle Burner with syringe cutter		2	3	Yes	
Amalgamator		1	1	Yes	
Pulp Tester Digital		1	1	Yes	
Rubber dam kit for pedo		3	5	Yes	
Apex locator		1	1	Yes	
Endo motor	With torque control HPs	1	1	Yes	
Injectable gutta percha with condensation		1	1	Yes	
Radiovisiography	Digital intra X-ray system with pedo sensor and software	1	1	Yes	
Intra Oral Camera	With high resolution	1	1	Yes	
Scale instruments		5	10	Yes	
Restorative instruments		5	10	Yes	
Extraction forceps		5	10	Yes	
Intra-oral X-ray		1	1	Yes	
Automatic Developer		1	1	Yes	
Computer	Minimum Pentium – IV	1	1	Yes	
<b>PEDO LAB</b>					
Plaster dispenser	One each for plaster and stone plaster	2	2	Yes	

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Model Trimmer	With diamond disc	1	1	Yes	
Model Trimmer	Double disc one diamond and one carborandum disc	1	1	Yes	
Welder with soldering attachments		1	1	Yes	
Vibrator		2	2	Yes	
Lab micro motor	Heavy duty with Hps	2	3	Yes	
Dental Lathe		1	1	Yes	
Model Trimmer		1	1	Yes	

Steam cleaner		1	1	Yes	
Pressure moulding machine		1	1	Yes	
Carborandum disc		1	1	Yes	
Diamond disc		1	1	Yes	




Department: **Orthodontics**

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, Air Ventury suction, micromotor control light cure 3 way syringe, X-ray viewer, instrument tray Dental Operators stool with height adjustment	9	18	Yes	
Unit mount scaler		3	5	Yes	
Autoclave	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	1	2	Yes	
Ultrasonic cleaner	Minimum capacity 13 litres with mesh bucket with digital timer	1	2	Yes	
ORTHO LAB				Yes	
Plaster dispenser	One each for plaster and stone plaster	2	2	Yes	
Vibrator		2	2	Yes	
Model Trimmer		1	2	Yes	
Micromotor	Heavy duey	2	4	Yes	
Lathe		1	2	Yes	
X-ray viewers		2	2	Yes	
OPG with cephalostat	If available in radiology its is adequate	1	1	Yes	
Welders		2	4	Yes	
Blue Torch		1	1	Yes	
Base Formers		2	4	Yes	
Typodont		2	4	Yes	
Set of pliers		5	10	Yes	
Welder with soldering attachments		1	1	Yes	
Hydro solder		1	1	Yes	
Typhodont articulator	With metal teeth wax rim of Class I, II, III	3	4	Yes	
Pressure moulding machine		1	1	Yes	





Department: **Periodontology**

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, high power evacuation system, Air Ventury suction, X-ray viewer, Airrotor, Micromotor with straight and contrangle Handpiece, with shadowless lamp, spittoon, 3 way syringe, Ultrasonic scaler with 3 tips, X-ray viewer, instrument tray Dental Operators stool with height adjustment	17	34	Yes	
Scaling instrument sets		5	10	Yes	
Surgical instrument sets		3	6	Yes	
Autoclave	Having wet and dry cycle, which can achieve 135 <sup>0</sup> C with minimum capacity of 20 liters	2	3	Yes	
Ultrasonic scaler	Minimum capacity 13 litres with mesh bucket	1	2	Yes	
Electro surgical cautery		1	1	Yes	
Needle burner with syringe cutter		4	6	Yes	
LASER	Soft tissue laser	1	1	Yes	
Surgical motor with physiodispenser		1	1	Yes	

  


Department: **Conservative Dentistry and Endodontics**

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, high power evacuation system, Air Ventury suction, X-ray viewer, Airrotor, Micromotor with straight and contrangle Handpiece, with shadowless lamp, spittoon, 3 way syringe, Ultrasonic sealer with 3 tips, X-ray viewer, instrument tray Dental Operators stool with height adjustment	17	34	Yes	
Rubber dam kits		4	6	Yes	
Restorative instruments kits		5	10	Yes	
R.C.T. instrument kits		5	10	Yes	
Autoclave	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	2	3	Yes	
Ultrasonic cleaner	Minimum capacity 13 litres with mesh bucket	1	2	Yes	
Needle Burner with Syringe Cutter		3	4	Yes	
Amalgamator	With auto proportion, auto dispenser	2	3	Yes	
Rubber dam kits		4	6	Yes	
Pulp Tester Digital		2	4	Yes	
Apex locator		1	2	Yes	
Glass bead		4	6	Yes	




sterilizers				Yes	
Plaster dispenser		2	2	Yes	
Vibrator		1	2	Yes	
Ceramic Unit		1	1	Yes	
Casting machine		1	1	Yes	
Intra-oral X-ray Unit	Proper radiation safety	1	1	Yes	
Automatic Developer		1	1	Yes	
Radiovisiography	RVG with Computer	1	1	Yes	
Endo motor	With torque control Hps	1	1	Yes	
Bleaching Unit		1	1	Yes	
Magnification loops		1	2	Yes	
Injectable gutta apercha		1	2	Yes	
PHANTOM L ABUNIT	Phantom Table fitted with Halogen Operating Light Phantom Head body type neck joint for all the movement, TMJ movement, Modular with Air rotor, Micro motor with contra angle Hps, 3 way syringe, jaw with ivorine teeth, preferably soft gingival, dental operator's stool (not to use extracted or cadaver teeth).	30	60	Yes	

#### Chemical Laboratory

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Plaster Dispenser	One each for plaster and stone plaster	2	2	Yes	
Model Trimmer	Carborandum disc	1	1	Yes	
	Diamond disc	1	1	Yes	
Lathe	Heavy Duty	1	2	Yes	
Lab Micromotor	With heavy duty handpiece	2	3	Yes	
Ultrasonic cleaner	Minimum capacity 5 litres	1	1	Yes	
Spindle Grinder		1	1	Yes	
Vibrator		1	2	Yes	
Burnout furnace		1	1	Yes	
Porcelain furnace		1	1	Yes	
Sandblasting Machine		1	1	Yes	

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Lab Airtor		1	1	Yes	*
Pindex System		1	1	Yes	
Circular saw		1	1	Yes	
Vacuum mixer		1	1	Yes	
Pneumatic chisel		1	1	Yes	
Casting machine	Motor cast / induction casting preferred	1	1	Yes	

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Department: Oral & Maxillofacial Surgery

A) Exodontia

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, Air Ventury suction, X-ray viewer, 3 way syringe, instrument tray Dental Operators stool and height adjustment and suction, Micromotor / Airotor	15	30	Yes	
Autoclave	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	2	2	Yes	
Ultrasonic cleaner	Minimum capacity 13 litres with mesh bucket	1	2	Yes	
Needle Burner with Syringe Cutter		4	6	Yes	
Extraction forceps sets	Complete set	10	20	Yes	
Dental elevators	Complete set	5	10	Yes	
Minor Oral Surgery kits		3	6	Yes	
Emergency drugs tray		1	1	Yes	
Oxygen cylinder with mask		1	1	Yes	
X-ray viewers		2	2	Yes	
Computer	Minimum Pentium – IV	1	1	Yes	

B) Minor Surgery

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, high power evacuation system, Air ventury suction, X-ray viewer, Airrotor, Micromotor with straight and contra-angle Handpiece, 3 way syringe, instrument tray Dental Operators stool and height adjustment and suction.	3	5	Yes	

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Department: Prosthodontics and Crown & Bridge

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Dental Chairs and Units	Electrically operated, Spittoon attachment, Halogen Light with 2 intensity, high power evacuation system, Air Ventury suction, X-ray viewer, Airrotor, Micromotor with straight and conrtriangle Handpiece, 3 way syringe, Ultrasonic sealer with 3 tips, Light cure unit, instrument tray and suction, Dental Operators stool with height adjustment	17	34	Yes	
Semi-adjustable articulator	With face bow	2	2	Yes	
Extra oral / intraoral tracer		2	2	Yes	
Dewaxing unit		1	2	Yes	
Curing unit		1	2	Yes	
Dental casting machine		1	1	Yes	
Wax burnout furnace		1	1	Yes	
Pre heating furnace		1	1	Yes	
Surveying unit		1	2	Yes	
Heavy duty hand piece	Lab micromotors	3	4	Yes	
Autoclave	Having wet and dry cycle, which can achieve 135°C with minimum capacity of 20 liters	1	2	Yes	
Needle Burner with Syrin geCutter		1	2	Yes	
Plaster dispenser	One each for plaster and stone plaster	2	2	Yes	
Model Trimme rwith Carborandum disc		1	1	Yes	
Model Trimmer with diamond disc		1	2	Yes	
Acryliser		2	3	Yes	
Lathe		1	2	Yes	
Flask press		4	4	Yes	

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Deflasking unit		4	4	Yes	
Dewaxing unit		2	3	Yes	
Hydraulic Press		2	3	Yes	
Mechanical Press		1	2	Yes	
Vacuum mixing machine		1	1	Yes	
Lab Micro motor	With heavy duty handpiece	3	4	Yes	
Curing pressure pot		1	1	Yes	
Porcelain furnace		1	2	Yes	
Vibrator		1	2	Yes	
Sandblasting unit		2	2	Yes	
Ultrasonic cleaner		1	2	Yes	
Model Trimmer		2	4	Yes	
Hot water sterilizer		1	2	Yes	
Geyser	Compound bath	1	2	Yes	
H.P. grinder with suction		2	3	Yes	
Heavy duty lathe		2	2	Yes	
Phantom heads		50	50	Yes	
Pre-clinical working tables	Gas connection & Bunsen burner	50	100	Yes	




**Ceramic and Cast Partial Laboratory**

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
		50 Intake	100 Intake		
Plaster dispenser	One each for plaster and stone plaster	2	2	Yes	
Duplicator		1	1	Yes	
Pindex System		1	1	Yes	
Circular saw		1	1	Yes	
Burnout furnace		1	1	Yes	
Sandblasting Machine	With two containers	1	1	Yes	
Electro polisher		1	1	Yes	
Model Trimmer with Carborandum disc		1	1	Yes	
Model Trimmer with diamond disc		1	1	Yes	
Induction casting machine		1	1	Yes	
Programmable porcelain furnace with vacuum pump with instrument kit and material kit		1	1	Yes	
Spot welder with soldering attachment of cable		1	1	Yes	
Vacuum mixing machine		1	1	Yes	
Steam Cleaner		1	1	Yes	
Spindle Grinder 24000 rpm with vacuum suction		1	1	Yes	
Wax heater		1	1	Yes	
Wax carver		1	1	Yes	
Curing pressure pot		1	1	Yes	
Milling machine		1	1	Yes	
Heavy duty lathe with suction		1	1	Yes	
Preheating furnace		1	1	Yes	
Palatal trimmer		1	1	Yes	
Ultrasonic cleaner	5 liters capacity	1	1	Yes	
Composite curing unit		1	1	Yes	
Micro surveyor		1	1	Yes	
Pre-clinical Prosthetic Laboratory	Work table preferably complete stainless steel fitted with light, Bunsen burner, air blower, working stool. Adequate number of lab micromotor with attached hand piece.	30	60	Yes	
Plaster room for pre-clinical work				Yes	






Plaster dispenser	One each for plaster and stone	2	2	Yes	*
Vibrator		2	2	Yes	
Lathe		2	2	Yes	
Model Trimmer		1	1	Yes	
Carborandum Disc		1	1	Yes	
Diamond disc		1	1	Yes	



As per MDS Course Regulations, 2017

Department: Conservative Dentistry and Endodontics

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
Dental Chairs and Units	Electrically operated with shadowless lamp, spittoon, 3 way syringe, instrument tray and motorized suction, micromotor, airtor attachment with hand pieces	One chair & unit per post-graduate student and two chairs with unit for the faculty		Yes	
		1 Unit	2 Units		
ENDOSONIC HANDPIECES – Micro endosonic Tips, retro treatment		2	3	Yes	
Mechanised rotary instruments including hand pieces (speed and torque control) and hand instruments various systems		3	6	Yes	
Rubber dam kit		1 per chair	1 per chair	Yes	
Autoclaves for bulk instrument sterilization vacuum (Front loading)		2	3	Yes	
Autoclaves for hand piece sterilization		1	1	Yes	
Apex locators one for every two chairs		2	4	Yes	
Pulp tester		2	4	Yes	
Equipments for injectable thermoplasticized gutta percha		1	2	Yes	
Operating microscopes 3 step or 5 step magnification		1	1	Yes	
Surgical endo kits (Microsurgery)		2	2	Yes	
Set of hand instruments (specifications required)		1	2	Yes	
Sterilizer trays for autoclave		4	4	Yes	
Ultrasonic cleaner capacity 3.5 lts		1	1	Yes	
Variable Intensity polymerization equipments - VLC units	Desirable	1	1	Yes	
Conventional VLC units one for every two		2	4	Yes	



Chairs					
Needle destroyer		2	2	Yes	
Magnifying loupes one for students and one for faculty		1	2	Yes	
LCD projector		1	1	Yes	
Composite kits with different shades and polishing kits		2	4	Yes	
Ceramic finishing kits, metal finishing kits	In ceramic labs	2	3	Yes	
Amalgam finishing kits		2	3	Yes	
RVG with x-ray machine developing kit		1	1	Yes	
Chair side micro abrasion		1	1	Yes	
Bleaching unit		1	1	Yes	
Instrument retrieval kits		1	1	Yes	
Computer with internet connection with attached printer and scanner		1	1	Yes	
Refrigerator		1	1	Yes	
Equipments for casting procedures					
Equipments for ceramics including induction casting machines/ burnout preheat furnaces/wax elimination furnaces		1	1	Yes	
Lab micro motor/ metal grinders / sand blasters/ polishing lathes/ duplicator equipment/ vacuum investment equipments		1	1	Yes	
Laser (preferably hard tissue)		1	1	Yes	
Face bow with semi adjustable articulator		1	2	Yes	




Department: Orthodontics and Dentofacial Orthopedics

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
Dental Chairs and Units	Electrically operated with shadow less lamp, spittoon, 3 way syringe, instrument tray and motorized suction	One chair & unit per PG student and Two chairs with unit for the faculty			
		1 Unit	2 Units		
Vacuum /pressure moulding unit		1	1	Yes	
Hydrogen soldering unit		1	1	Yes	
Lab micromotor		3	5	Yes	
Spot welders		3	5	Yes	
Model trimmer (Double disc)		2	3	Yes	
Light curing unit		2	2	Yes	
High intensity light curing unit		1	2	Yes	
Polishing lathes		2	3	Yes	
Tracing tables		3	5	Yes	
SLR digital camera		1	1	Yes	
Scanner with transparency adapter		1	1	Yes	
X-ray viewer		3	4	Yes	
LCD projector		1	1	Yes	
Autoclaves for bulk instrument Sterilization vacuum (Front loading)		1	1	Yes	
Needle destroyer		1	1	Yes	
Dry heat sterilizer		1	1	Yes	
Ultrasonic scaler		1	1	Yes	
Sets of Orthodontic pliers		3	3	Yes	
Orthodontic impression trays		3	5	Yes	
Ultrasonic cleaner capacity 3.5 lts		1	1	Yes	
Electropolisher		1	1	Yes	
Typodonts with full teeth set		3	3	Yes	
Anatomical articulator with face bow attachments		1	1	Yes	
Free plane articulators		1	1	Yes	
Hinge articulators		4	4	Yes	
Computer software for cephalometrics		1	1	Yes	
Computer with internet connection with attached printer and scanner		1	1	Yes	
Refrigerator		1	1	Yes	



Department: Paediatric and Preventive Dentistry

Name	Specification	Quantity		Details on College Website	Adequate / Inadequate
Dental Chairs and Units	Electrically operated with shadowless lamp, spittoon, 3 way syringe, and motorised suction, micromotor attachment with contra angle miniature handpiece, a rotor attachment with miniature handpiece, dental operator stool (40% dental chairs shall be pedo chairs)	One chair and unit per post-graduate student and Two chairs with unit for the faculty		Yes	
		1 Unit	2 Units		
Pedo extraction forceps sets		3	4	Yes	
Autoclaves for bulk instrument sterilization vacuum (Front loading)		1	2	Yes	
RVG with intra oral x-ray unit		1	1	Yes	
Automatic developer		1	1	Yes	
Pulp tester		2	3	Yes	
Apex locator		1	1	Yes	
Rubber dam kit	One set per student	1	1	Yes	
Injectable GP condenser		1	1	Yes	
Endodontic pressure syringe		1	1	Yes	
Glass bead steriliser		2	4	Yes	
Spot welder		2	3	Yes	
Ultrasonic scalers		2	4	Yes	
Needle destroyer		1	1	Yes	
Formalin chamber		1	1	Yes	
Ultrasonic cleaner capacity 3.5 lts		1	1	Yes	
X-ray viewer		2	3	Yes	
Amalgamator		1	2	Yes	
Plaster dispenser		2	2	Yes	
Dental lathe		1	2	Yes	
Vibrator		2	3	Yes	
Typodonts	One set per student	1	1	Yes	

  


Soldering unit		1	1	Yes	
Band pinching beak pliers		2 Sets	2 Sets	Yes	
Proximal contouring pliers		2	3	Yes	
Crown crimping pliers		2	3	Yes	
Double beak pliers anterior and posterior		2	3	Yes	
Lab micro motor		2	3	Yes	
Acryliser		1	2	Yes	
Magnifying loupes		1	1	Yes	
Conscious sedation unit	Desirable	1	1	Yes	
Pulse oxymeter		1	1	Yes	
Phantom head table with attached Light, Airtor and micro motor	One set per each P.G. Student	1	1	Yes	
Computer with internet connection with attached printer and scanner		1	1	Yes	
LCD projector		1	1	Yes	
Refrigerator		1	1	Yes	




Dean / Principal Stamp & Signature













