

Surendera Dental College and Research Institute
H.H Gardens, Power House Road, Sri Ganganagar, Rajasthan

List of laboratories and details of activities of BDS Curriculum

1) **Department of Anatomy**

LAB1-Dissection hall

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|---------------------------------|
| ➤ Dissection of cadavers |
| ➤ Study of Prosected specimens |
| ➤ Osteology Demonstration |
| ➤ Study of Embryology models |
| ➤ Study of Gross Anatomy Models |

LAB 2 Histology Lab

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| ➤ Study of Histology slides of specimen |
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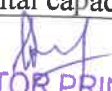
2) **Department of Physiology**

LAB 1-Hematology Lab

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| ➤ Study of Compound Microscope (common objects) |
| ➤ Introduction to Hematology |
| ➤ Estimation of Hemoglobin |
| ➤ Determination of total RBC count |
| ➤ Blood Indices |
| ➤ Determination of total WBC count |
| ➤ Differential Leukocyte Count |
| ➤ Blood Group |
| ➤ Bleeding Time and Clotting Time |

LAB 2-Human Physiology Lab

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| ➤ Introduction to Nerve muscle physiology |
| ➤ Study of Simple muscle twitch (SMT) |
| ➤ Effect of temperature on SMT |
| ➤ Effect of increase in strength on skeletal muscle contraction |
| ➤ Effect of increase in frequency of strength on skeletal muscle contraction |
| ➤ Phenomenon of Fatigue |
| ➤ Stethography |
| ➤ Vitalography and effect of posture on vital capacity |


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- Recording of normal cardiogram and effect of temperature on heart beat
- Electrocardiograph (ECG)
- Effect of vagal stimulation drugs on heart
- Determination of Blood Pressure
- Effect of Posture on blood pressure
- Effect of moderate exercise on blood pressure
- General Physical Examination
- Clinical examination of Respiratory system
- Clinical examination of Cardiovascular system
- Clinical examination of Sensory system
- Clinical examination of motor system
- Clinical examination of Cranial nerves

3) Department of Biochemistry

LAB 1-Qualitative Analysis

- Colour reactions of carbohydrates
- Colour reactions of amino acids
- Precipitation reactions PF proteins
- Normal urine analysis
- Abnormal urine analysis
- NPN Substances

LAB 2-Quantitative Analysis

- Estimation of Blood Sugar
- Estimation of Serum Total Protein


4) Department of Dental Anatomy and Histology

LAB-1

- Carving of tooth on wax blocks

LAB-2-Histology

- Learning normal oral histology/anatomy using educational slides under the microscope
- Making histological diagram in the note books


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5) **Department of General Pathology**

LAB-1-Pathology Laboratory

- Haematology experiments – Hb estimation, TLC, DLC, RBC count, BT, CT, ESR, PBS examination
- Demonstration of histopathology techniques
- Study of histopathology slides
- Urine examination
- Study of instruments used in pathology laboratory

LAB-2-Pathology Museum

- Study of gross specimens

6) **Department of microbiology**

LAB-1-Microbiology lab

- Staining methods (Gram's Stain, Albert's Stain and AFB Staining).
- Culture Methods (Anaerobic, Aerobic and Fungal Cultures).
- Biochemical Tests (for the identification of various microorganism).
- Instruments description and their working principles.

LAB-2-Microbiology Museum

- Museum to show different microbiological specimen.


7) **Department of Pharmacology**

LAB-1-Pharmacology Lab

- Various pharmacy practical's as per the DCI syllabus 2nd year BDS students are performed in the laboratory. Eg. Preparation of toothpaste, tooth powder, gum paint, ORS, prescription writing etc.

8) **Department of Conservative and Endodontics (Pre-clinical)**

- Structured program for training and assessment of students in clinical skills lab/simulation-based learning.
- Phantom Heads
- Preclinical exercises
- Video demonstrations


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9) Department of Prosthodontics (Preclinical)


- Pouring of maxillary and mandibular casts
- Fabrication of Temporary Record Bases using Auto-Polymerizing Resin
- Fabrication of Occlusal Rims
- Articulation
- Teeth Arrangement-1 (Class1)
- Denture Fabrication (Class1)
- Introduction of FPD+Demo on tooth preparation for porcelain fused to metal crown on mandibular molar
- Tooth preparation for porcelain fused to metal crown: Posterior
- Tooth preparation for porcelain fused to metal crown: Anterior
- Tooth preparation for all ceramic crown on anterior

10) Department of Oral Pathology

- Learning pathological oral histology using educational slides under the microscope
- Making Histopathological diagram in the note books
- Conducting/Learning of cytosmear

11) Department of Orthodontics

- Wire bending
- Fabrication of appliances
- Cephalometric Analysis
- Model analysis


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DEPARTMENT OF CONSERVATIVE DENTISTRY & ENDODONTICS

Time Table for 1st year M.D.S w.e.f 1st June, 2018

| Days | 08:30 - 10:00 AM | 10:00 AM - 1:00 PM | | 01:00 - 2:30 PM | | 02:30 - 03:30 PM | | |
|-----------|--|---|--------------------------|---|---------------------------------------|---|--------------------------|--|
| Monday | Seminar | Pre - clinical Month 1-6 | PG Clinics Month 7-12 | Basic Sciences & Biostats Lectures Pre - clinical Month 1-4 | PG Clinics Month 5-6 Month 7-12 | Pre - clinical Month 1-6 | PG Clinics Month 7-12 | |
| Tuesday | Journal Club | Pre - clinical: Month 1-6 PG Clinics: Month 7-12 | | | | | | |
| Wednesday | Clinical Case Presentation/ Table Clinic | Pre - clinical Month 1-6 | PG Clinics Month 7-12 | Basic Sciences & Biostats Lectures Pre - clinical Month 1-4 | PG Clinics Month 5-6 Month 7-12 | Synopsis/Lib. Dis./Thesis Discussion | | |
| Thursday | Seminar (Odd weeks) / Journal club (Even weeks) | Pre - clinical: Month 1-6 PG Clinics: Month 7-12 | | | | | | |
| Friday | Text Review | Pre - clinical Month 1-6 | PG Clinics Month 7-12 | Basic Sciences & Biostats Lectures Pre - clinical Month 1-4 | PG Clinics Month 5-6 Month 7-12 | Pre - clinical Month 1-6 | PG Clinics Month 7-12 | |
| Saturday | Basic Sciences & Biostats Lectures | Pre - clinical: Month 1-6 | | | | | | |
| | Pre - clinical: Month 5-6 | PG Clinics : | | | | | | |
| | PG Clinics : Month 7-12 | Month 7-12 | | | | | | |

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