

The background of the slide is a blurred image of laboratory glassware, including several test tubes and beakers. In the lower foreground, a beaker containing a red liquid is visible. A white rectangular box with a thin black border is centered on the slide, containing the department name. A solid red rectangular block is positioned at the top center of this white box.

DEPARTMENT OF BIOCHEMISTRY

FACULTY

	Designation	Qualification	Total Experience
Dr Dinesh Puri	Dir. Professor & HOD	M.D. Ph.D.	37 years
Dr. B. D. Banerjee	Professor	M.Sc. Ph.D.	32 years
Dr S B Sharma	Dir. Professor	M.Sc. Ph.D.	35 years
Dr Rafat Ahmad	Dir. Professor	M.Sc. Ph.D.	29 years 7 months
Dr Seema Garg	Professor	M.D.	16 yrs 5 months
Dr Mohit Mehndiratta	Professor	M.D.	18 years
Dr. Rajarshi Kar	Professor	M.D.	16 years 5 months
Dr Puja Jha	Asst Professor	M.D.	6 years 3 months
Dr Ashok Kumar Ahirwar	Asst Professor	M.D. DNB	8 years 5 months

FACULTY



Senior Resident



Junior Resident

1 mths

2019

LIST OF NON-TEACHING STAFF

- **a. Technical Assistant: Mr. Shiv Kumar Hari, Mr. Shyam Bihari Singh, Mr. Jagdish Lal, Mr. Prem Chand**
- **b. Technicians: NA**
- **c. Store-Keeper-cum-Clerk: Nil**
- **d. Laboratory Attendance: Mr. Avdhesh Shrivastava, Ms. Anju Kumari**
- **e. Any other category: NA**



C. BUILDINGS



DEMONSTRATION ROOM

a) Number: **02**

b) Accommodation:

1. Size: **10 mtr. X 5.75 mtr**

2. Capacity: **75 students**

c) Audio-Visual equipment available: **Yes**



PRACTICAL CLASS- ROOM/LABORATORIES:

- **Accommodation**
 - Size: **15 mtr X 10 mtr**
 - Capacity: **75 students**
- **Working arrangement**
 - Seats available: **75 students**
 - Water supply: **Yes (40 points)**
 - Sinks: **20 nos.**
 - Electric points: **64 points**
 - Cupboard for storage of microscopes: **01**
- **Preparation room**
 - Size: **6 mtr X 3 mtr**
 - Capacity: **03 persons**
- Whether laboratory manual kept by students: **Yes**
- Close circuit T.V./Any other teaching aids: **Yes**



DEPARTMENTAL LIBRARY-CUM- SEMINAR ROOM

- **Is there a separate departmental library?**
YES
- **Accommodation**
 - Size 10x5 m²
 - Capacity 15 persons
- **Number of Books in Biochemistry and allied subjects:** 136 (Annexure I)
- **List of Journals**
 - **Foreign Journals-** 02
 - Clinical Biochemistry
 - Clinical Chemistry
 - **Indian Journals-** 01
 - Indian Journal of Clinical Biochemistry

RESEARCH LABORATORIES

Size of Laboratory
20x20ft (2 labs),
20x10ft (2 labs),
10x10ft (2 labs)

LIST OF EQUIPMENT

S. No	Name of the items	No./Available
1	Analytical balance upto 200gm/1gm	2
2	Urinometers calibrated(mercury based replaced with other alternatives)	17
3	Hot air oven (more than 200L)	2
4	Digital colorimeters	5
5	Student microscopes	5
6	Glucometer with strips (POCT)	2
7	Thermometer 0 – 200 degree Celsius	1
8	Semi auto analyzer	1
9	Constant temperature water bath tank capacity (temperature ranges 5 ⁰ C to 80 ⁰ C)	1
10	Laboratory reagent refrigerators, capacity > 200 Lit	3
11	Chromatography Unit	2
12	Centrifuge clinical for >= 8 tubes	2
13	pH meters of wide range digital	5
14	Fixed volume pipettes – 1ml. 0.5ml,0.2ml ,0.1ml and 0.02ml	Available
15	Electrophoresis apparatus with power supply	Available
16	Bottle dispensers	Available
17	Vortex mixer	2
18	Incubator 37 ⁰ C	2
19	Variable and fixed volume auto pipettes	Available
20	Elisa reader with washer	1
21	Multi mode reader	1
22	Ice flaking machine	1

LIST OF EQUIPMENT (Contd)

23	Cell culture cabinet	Available
24	Water purification system	Available
25	Nanodrop Spectrophotometer	1
26	PCR machine	2
27	Real time PCR machine	4
28	Gradient PCR machine	3
29	-20 degree refrigerators	4
30	Densitometer with computer	1
31	Fume Cupboard	1
32	Digital analytical balance	1
33	Balance micro	1
34	Spectrophotometer	1
35	Desktop computer with printer	1
36	Multimedia projector with screen	2

RESEARCH LABORATORIES



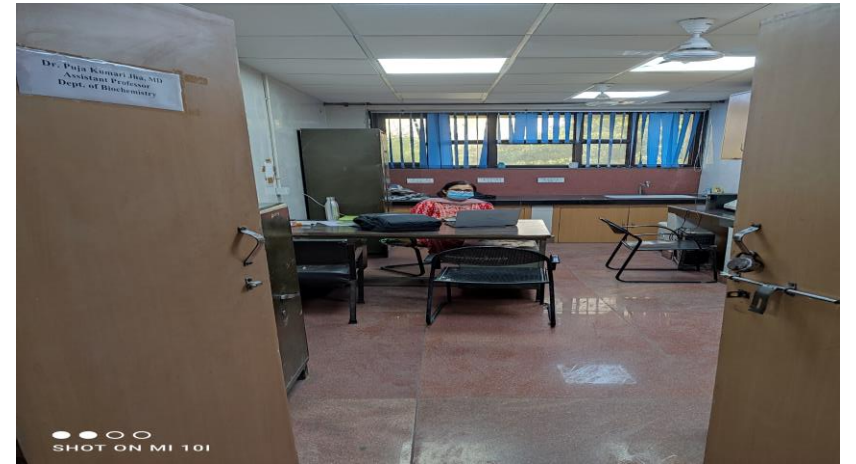
RESEARCH

◦ **Current areas of Research**

- Medical Education (including innovative methods like role play)
- Diabetes (including therapeutic potential of medicinal plants) and cardiovascular disease.
- Drug Metabolism, Phytotherapy research (exploration of potential of medicinal plants), Biochemical Pharmacology, Enzymatic Studies.
- Toxicology and Immunotoxicology of Environmental chemicals and drugs. Immunoassay of Environmental chemicals, Toxicogenomics, Genotoxicity, Neurotoxicity.
- Molecular Biology (expression profile of the markers of inflammation and oxidative stress, Telomere biology etc)
- Cancer (establishment of primary cell culture for ovarian cancer)

RESEARCH

- **Are there any students taken for M.D. or M.Sc. or Ph.D. in Biochemistry? If so, how many per year during the last three years?**
 - PhD 3
 - MD 2/year
- **List of publications by the members of the staff ONLY during the preceding 3years as per MCI/NMC requirements?**
 - Total Number of publications in last 3 years – 52 (Annexure II)
- **Do Undergraduate students participate in research?**
 - Yes, every year many students successfully completes ICMR funded STS project.



TEACHING PROGRAMME

1. Competency Based UG Curriculum implementation

Teaching Methods	No. of sessions
a. Lectures	124
a. Small Group Teaching	Tutorial- 24, SGD- 5
a. DOAP sessions	1
a. Practical	75
a. Bedside teaching	-
a. Group activity	ECE-12, AETCOM-2, SDL-14, *CBD-8
a. Integrated sessions	-
a. Any other (specify)	-

2. Any other /innovations (specify) :

- Role play- glycogen metabolism
- Role play- uncouplers of ETC

3. Assessment Methods used:

- a. Theory:
 - (i) **Essay- 2 long answer structured questions per paper*2 (taken twice)**
 - (ii) **Short answer- 8 small answer questions per paper*2= 16 (one monthly test= 10small answer questions)**
 - (iii) **MCQs- 20 per paper*2= 20**
- b. **OSCE- 10 spots per exam*2= 20**
- c. **Skill assessment- 3 cases per exam= 6**
- d. **Viva- 3 offline, 6 online via Whatsapp = 9**
- e. Any other (specify)
 - (Time-table of teaching schedules attached).

SERVICE LABORATORY IN THE TEACHING HOSPITAL

Size of the laboratory

S. No.	Room No.	Purpose	Size in Sq feet
1	505	Sample receiving centrifugation	20 x 12
2	501	Sample Processing	20 x 20
3	502	Hormone Sample Processing	20 x 12
4	503	ELISA room	20 x 12
5	504	Sugar lab	20 x 12
6	506	BMW and washing	20 x 12
7	537	Store and OPD entry room	25 x 12
8	510	Biochemistry room	8 x 8
9	536 A	Record Room	25 x 10
TOTAL			2214 Sq feet

SERVICE LABORATORY IN THE TEACHING HOSPITAL

Investigative equipment available

- **Beckman Coulter Unicel DXC 800 Synchron Clinical chemistry Auto-analyser**
- **Beckman Coulter Unicel DXC 600 Synchron Clinical chemistry Auto-analyser**
- **Beckman Coulter ACCESS II automated Chemi-luminescence system.**

- **Total Number of Tests done in last year**
 - **1,34,540 (One lac thirty-four thousand five hundred forty) tests**
- **Total Number of Staff:**
 - **Medical: 5**
 - **Non-Medical: 19**

SERVICE LABORATORY IN THE TEACHING HOSPITAL



EMERGENCY HOSPITAL BIOCHEMISTRY SERVICE

- Average no. of tests done in one month (in emergency laboratory)
 - 1.5 Lacs per month (statistics of pre covid - February 2020)
- Total Number of Staff
 - Medical: 5
 - Non-Medical: 25





THANK YOU