

CRITERIA-IV

INFRASTRUCTURE AND LEARNING RESOURCES

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 How does the institution plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?

University College of Medical Sciences (a maintained institution of the University of Delhi) was established in the year 1971. The College which was earlier located at North Campus, University of Delhi then shifted to Safdarjung Hospital Complex and finally to its present campus at Dilshad Garden in the year 1986. The Guru Teg Bahadur Hospital (G.T.B.H.) with bedded strength of over 1526, is the associated teaching Hospital. The UCMS & GTB Hospital Complex is spread over an area of 88 acres comprising of College Block, Library & conference block, spacious Out Patient Departments, Indoor Wards, Central Laboratory Services & O.T. Block and many other ancillary facilities.

Separate hostels for undergraduate Boys and Girls and resident doctors are available in the campus. For recreation, well laid-out playgrounds, with outdoor games facilities for tennis, basketball, football, hockey and cricket are available along with the indoor games for the students.

On account of amendments of MCI Regulations, the College has increased its annual intake capacity in various Postgraduate Degree (MD/MS) Courses from 51 to nearly 145 seats in broad specialties and has started Diploma Courses in the Department of Pediatrics and Obstetrics & Gynecology (6 seats) with effect from the academic session 2010-11. Besides this, the College has introduced the postgraduate degree course – M.Sc. (Medical Imaging Technology) Radiography from the academic session 2010-11, MDS programme in Paedodontics and preventive Dentistry (MDS) in 2011-12 and Medical Laboratory Technology in-service training programme.

GTB Hospital is the largest hospital in trans-Yamuna area. A 500-bedded new Maternity-cum-Child Health Block was started in 2011. The eight-storey ward house operation theatres, general wards and private wards especially for gynaecology and paediatrics departments and maternity and child health care. This was the first earthquake resistant multi-storeyed building built using base isolation technology in Delhi.

A new Diabetes, Endocrine and Metabolic Block became operational in 2013 which offers diagnostic services and has a fully equipped endocrine and metabolic laboratory as well as imaging and other specialised facilities. It also has a 30 bedded in-patient facility, with 26 specialty beds and four intensive care beds.

A Committee approved by the Hon'ble Principal Secretary (Health), Government of NCT of Delhi recommended creation of new infrastructure vide No.MC/PO/PS/XII Plan/2011 dated 21 Dec 2011. These proposals have been included in the comprehensive integrated planning of the UCMS-GTB Hospital Complex and stated below:

1000 seater Auditorium; 'L' shaped extension on the western end of the College Block; Academic Block housing 200 Rooms for staff, seminar hall, departmental

libraries, Administrative offices, one lecture theatre and one examination hall; Increase in rooms required for UG Boys hostel, one wing each for single boys and girls, one wing for married couples; Postgraduate Institute of Dental Sciences (10,000 sqm); Renal Block; Increase in number of residential Quarters; 2 Cafeteria; and 2 Electrical Sub-stations.

4.1.2 Does the institution have a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.

(a) Yes, the recent initiatives are given below:

- (i) Auditorium: The Conference Hall of hospital is used for auditorium purpose.
- (ii) Lecture Theatres: There are 4 lecture theatres with seating capacity of 200. All lecture theatres have comfortable seating with computers and LCD projection system. All of them are well lit and have good ventilation. All of them are air conditioned. NKN (National Knowledge Network) has been established along with videoconferencing facility etc. Interactive Boards are available to Teachers for classes. Sony Digital Camera with recorder is available for Microteaching purpose.
- (iii) Seminar Rooms: There are departmental seminar rooms with seating capacities of 20-25. Many are air conditioned with excellent lighting and comfortable seating and equipped with computers with multimedia and LCD projection system.
- (iv) Library Facilities: A well furnished and spacious central library which consist variety of books, reference books, various journals. The library was updated computerized network. The Library Network connects this college with national and international libraries through internet facility. There is a separate reading room and individual departments have their own libraries. Full library details are available in subsection 4.3.
- (v) Deptt. of Bio-statistics and Medical Informatics.
- (vi) Wi-fi Zones : Internet
- (vii) Museums. Many departments have their own museums with have a lot of exhibits and training charts for the benefit of students.
- (viii) Skill Laboratory.
- (ix) Co-curricular activities. A large number of conferences, CMEs & updates and workshops are held in the College in various Deptts. in collaboration with other professional associations and scientific institutes of repute. Students take active part in these activities. MEU conducts 'Primer on Research' workshops for undergraduates to take up ICMR STS and KVPY research projects

4.1.3 Has the institution provided all its departments with facilities like office room, common room and separate rest rooms for women students and staff?

Yes

4.1.4 How does the institution ensure that the infrastructure facilities are barrier free for providing easy access to college and hospital for the differently-abled persons?

- 1) The firsts- UCMS is the first and only medical college in India to have an Enabling Unit as per UGC regulations which ensures affirmative action's concerning persons with disabilities (www.enablingunit.yolasite.com). Dr Satendra Singh, Assistant Professor of Physiology and a faculty with disability is the Coordinator for UCMS.
- 2) The issue of disability and the experiences of disabled people have so far been given scant consideration in strenuous disciplines like the field of medicine. To address the need an expert committee involving faculty members, experts in the field and persons with disabilities themselves has been constituted which is called 'Equality and Diversity Committee (EDC).' In line with the motto Nothing for us, without us, all the members of this committee (faculty, students & non-teaching) are persons with disabilities.
- 3) The members of EDC (students with disabilities) themselves did an access audit in 2012. This access audit questionnaire was taken from National Centre for Promotion of Employment for Disabled People (NCPEDP), New Delhi. It was in line with the directive that access audit at the campus needs to be carried out by a team comprising both subject experts and experiential experts (which means the PwD's) as recommended by Chief Commissioner of Disabilities (CCPD) vide Ref.No.9-2(BFE)/CCD/2005 (Vol.II) dated 24th January, 2012. The report was sent to PWD for implementation.
- 4) Physical Infrastructure- Based on the report, all the hostels are made disabled friendly with construction of ramps at the main entrances. The parking lot has reserved 'accessible parking' for persons with disabilities close to the main entrance. We have also adopted the modified International Symbol of Access which is favoured by the disability community. College has functional lifts with Brailled signages, auditory signals and lower buttons.
- 5) Support system- 15 minute leniency time is given to students with disabilities in reaching lecture halls from hospitals vide MC/Acad/EOC/2011 dated 23 Nov 2011. The College has an honorary counselor (disabled) for students with disability (EU/EOC/UCMS/2 dated 20 June 2011). The Hostel fee is waived off for students with disabilities as per University of Delhi directions. Writers/scribes are provided to students with permanent as well as temporary disabilities.
- 6) It was Dr Singh's initiative through the Court of Chief Commissioner for Persons with Disabilities, Ministry of Social Justice and Empowerment which led Medical Council of India (MCI) to pass directive to all the medical institutions in India to comply with disabled-friendly campus vide MCI-34(1)(UG)(Gen.)/ 2012-Med./167890 dated 29th March 2013 to the Deans/ Principals of all the Medical Colleges/Institutions in India (Copy attached)
- 7) Both the ATMs (Bank of Baroda & Canara Bank) at hospital campus were made disabled friendly after Coordinator, Enabling Unit take the matter with CCPD in 2013.
- 8) Dr Bharat Sagar is the nodal officer for disability for GTB Hospital.
- 9) Proposal for lift for library building has been sent.
- 10) Proposal for lift for Lecture Theatre-IV and New Lecture Theatre has been sent.
- 11) Proposal to shift Post Office at hospital campus on ground floor has been sent
- 12) Proposal to shift Canara bank branch at hospital campus on ground floor has been sent
- 13) Alterations in Toilets (one on each floor) in UCMS going on to make them accessible for disabled.
- 14) Toilets in hospital are made accessible for people with disabilities.

- 15) Website- The College is working on making the official website (www.ucms.ac.in) accessible as per WCAG 2.0 guidelines.
- 16) Rehab services- College has sent proposal to Medical Superintendent for establishment of Department of Physical Medicine and Rehabilitation.

4.1.5 What special facilities are available on campus to promote students' interest in sports and cultural events/activities?

(a) The students have various societies like Literary Society which organizes debates & Quiz etc., Dramatics Club which organizes street theatre, Music, Choreography, Dance and Fashion club etc. The Medical Humanities Group organizes SPIC MACAY (Society for Promotion of Indian Classical Music and Culture Amongst Youth) performances in college. The students take active part in festivals all over the country and have performed creditably. The students of the college also organize their own intercollegiate festival "Avalanche" & "RIPPLE" which are major events in the intercollegiate calendar.

(b) This College, also gives importance to games, sports and physical training.

The sports events which are held in each calendar year:

- (a) Arena: In the Month of March
- (b) UCFL (University College Football League): Held in the month of July.
- (c) Avalanche: Held in the month of September.
- (d) Sports Week: Held in the month of December.

(c) Assistant Professor of Physical Education is designated nodal officer for sports activities in the college.

1. Hostel has a full gymnasium for the students, to promote the daily fitness regime of the students.
2. Each boys' and girls' hostel has two badminton courts.
3. There is a basketball court in the central playground.
4. The two acre central playground is a hub for all the sports activities like cricket, volleyball, football etc.

(d) Students of the college organize Inter college Football, Cricket, volleyball, Table tennis Tournaments etc. Indoor game tournaments are also organized like Carrom & Chess.

4.1.6 What measures does the institution take to ensure campus safety and security?

The college building has CCTV monitoring at five places- entrance, back side, first floor (Principal Office), hospital entry point at second floor and at fifth floor. The Library and reading room are also under continuous CCTV monitoring. Security guards are present at all ingress and egress points including all the hostels. Installation of CCTV cameras in the hostels is under consideration. Both College and Hospital side has separate Security Officers.

4.1.7 Facility of Animal House

- * Is animal house maintained as per CPCSEA guidelines? : Yes
- * Whether records of animal house are maintained for learning and research activities? : Yes
- * Does the animal house have approval for breeding and selling experimental animals as per CPCSEA guidelines?
- * Yes, there is approval for breeding but not for selling.

4.1.8 Provide the following details on the use of laboratories / museums as learning resources:

- * Number
- * All the departments of college have laboratories and museums as per MCI / University guideline
- * Maintenance and up-gradation
- * As per statutory regulations all departments maintain their labs & museums.
- * Descriptive catalogues in museums
- * Available with individual departments.
- * Usage of the above by the UG/PG students
- * All the labs and museums are utilized by all PG & UG students.

4.1.9 Dentistry

- * Total dental chairs – 17
- * Paedodontics & Preventive Dentistry– 09
- * General Dentistry – 08
- * Schedule of chair side teaching in clinics – specialty wise – UG & PG
- * Number of procedures in clinics per month and year
- * Average 1100 Paedo. & 1720 General Dentistry procedures per month and 13200 Paedo & 20640 adult general procedures annually
- * Mobile dental care unit : not Available
- * Facilities for dental and maxillofacial procedures : available partially
- * Dental laboratories : Two one dry and one wet

4.1.10 Pharmacy

- * Pharmaceutical Science Laboratories : Not available
 - * Museum for drug formulations : Not available
 - * Machine room : Not available
 - * Herbarium / crude drug museum : Not available
 - * Balance room : Not available but all medicines for dispensing through Pharmacy are procured /indented from central drug store of the hospital as per Delhi Government policy.
 - * Chemical store : Available
-
- * Instrumentation facilities: Not available but procured drugs/ medicines are tested as per Delhi Government Drug Policy by the manufacturer and through empanelled laboratories at different stages of procurement.

- * Pilot plant : Not available
- * Computer aided laboratory : Not available

4.1.11 Yoga and Naturopathy

The Yoga and lifestyle clinic in the department of Physiology is run by AYUSH, Ministry of Health, Govt. of India and has been catering to increasing number of patients drawn from the Department of Medicine, Neurology, Obstetrics and Gynaecology, Orthopedics and Psychiatry, among others, for both research and therapy.

Staff : One naturopathic & Yoga Physician ,Two instructors & one attendant from CCRYN.

Yoga Classes are held in 6 batches for one hour each per day.

- * Demonstration hall with teaching facility to cater to the needs of the students. Not Available
- * Diet Service Management Department : Available
- * Yoga cum multipurpose hall for meditation and prayer : Available
- * Solarium compatible for multimedia presentation : Not Available
- * Mud Storage Unit : Not Available
- * Outdoor Facilities - Walking track with reflexology segment.
- * Acupressure therapy available indoors. : Not Available
- * Swimming Pool : Not Available
- * Naturopathy blocks : Not Available

4.1.12 Homoeopathy : Not Applicable

- * Museum and demonstration room (Homoeopathic Pharmacy Laboratory, Pathology Laboratory, Community Medicine, Homoeopathic Materia Medica, Organon of Medicine including History of Medicine)
- * Repertory with Computer Laboratory and Demonstration Room

4.1.13 Nursing

Campus has a separate Florence Nightingale School of Nursing.

- * Nursing Foundation Laboratory : One
- * Medical Surgical Laboratory : One
- * Community Health Nursing Laboratory : Combined with MCH laboratory
- * Maternal and Child Health Laboratory : Combined with above
- * Nutrition Laboratory : One
- * Pre clinical Laboratories : Avails use of Microbiology lab of UCMS
- * Specimens, Models and Mannequins : Available

4.1.14 Ayurveda : Not Applicable

- * Herbal Gardens
- * Museum Herbarium
- * Panchakarma Facility
- * Eye Exercises Clinic
- * Kshara Sutra and Agni Karma Setup
- * Ayurveda Pharmacy

4.1.15 Does the institution have the following facilities? If so, indicate its special features, if any.

- * Meditation Hall : Part of Yoga laboratory in department of Physiology.
- * Naturopathy blocks : No

4.1.16 Provide details of sophisticated equipments procured during the last four years.

LIST OF OFFICE EQUIPMENTS

Year	Name of Equipment
2011	Thermo Fisher Scientific UK Shandon Automatic Motorised Rotary Microtome MET with Essential Accessories
	Thermo Shandon Scientific UK Shandon Multi Programme Robotic Load in Delmard Automatic Slide Stainer with Heat without monitor Model Varistain Gemini
	Thermo Fisher Scientific UK Shandon Automatic Tissue Processor Model Celadel 2000 with essential access
	Refrigerator Samsung (RT 35 CDUS)
	Autoclave Make Optics Technology
	Spencer Automatic Rotary Microtome Model 1010 – SMT -006
	Microplate Elisa Reader with Computer
	Spencer Deep freezer 1180 SPR -OSO
	Micro plate Elisa Washer (Caretium)
	Analytic Electronic Balance Model TP 303 DE(Art no)Merck – Denver
	Eppendorf Master – Cycler/Thermal cycler Pro & Control panel 230 V ,50-60 Hz (part no 6325000510)
	Universal microplate Reader (ELX800) GEN 5RC Software & automated microplate /Strip washer (ELX 50/8)
	Liquid Nitrogen Container (BA-23)
	Automatic Blood cell counter with UPS and Printer
	Mac t Anoxomat System ANZCTS with accessories
	Nikon Trinocular Microscope with digital camera Model 80I & Five headed Teaching & Trinocular Light Microscope MODEL 80I
	Block Filling Cabinet Fer 20000 blocks Model Gem-37
	Portable Spirometer RMS Helious 702 with transducer Assembly with cap
	Air sampler with accessories(AESAP1075)
	BOD Incubator 60x60x90
	Antigen retrieval System, Biogenex India, EZ Retriever System V2
	Tissue Embedding Centre with access Model EC 350 -1, EC350-2
	Semi automatic Rotary Microtome with access. Model HM340 E
	Computer system & laser Printer for Spectrophotometer local accessories
Deep freezer Ultra Low Temp -86c	
Deep freezer Up right 130 cubic feet Temp – 40 C with 1 rack and 10 boxes	
Automatic Micro Plate reader	

	Digital Plethysmometer
	Ultrasonic Homogenizer
	Spectrophotometer UV 2300 with UV Analysis software
	Advanced Trinocular Bright field and Fluorescence Microscope with microscope Digital Imaging system.
	Semi automatic Analyser
	Film Densitometer type Unlight Di
	X Ray Sensitometer Type Unlight As
2012	Real Time PCR (Rotor) Gene Q2 plex HRM no PC
	Nanodrop 2000C spectrophotometer with accessories Model : NO-2000C
	Tilt table for Humans Model No MTS-281
	Refrigerated centrifuge with accessories Model –CT-I5RT
	Nikon trinocular Microscope with seven headed teaching microscope with access. Model 80i (anti fungus Type) along with Nikon all in one Digital Camera System DS-Fil-V3 (with Computer Brander & Printer)
	Biological safety Cabinet(Class II type A2 Biological Safety Cabinet)
	A digital data acquisition system. Model no : BIOPACMP36R
	Programme temperature regulated Slide handling system(IQ kinetic Slide stainer) Cat no IQ 1000INTL-NS Model IQ 1000
	Passive Avoidance Apparatus (digital) for Rat & mice
	Phantom head Mounting system
	Multimode Microplate Reader with Fluorescence and Luminiscence with accessories, Model H1M-Synergy Hybrid
	Modular Vertical Gel electrophoresis & blotting Apparatus with programmable dual mode power supply
	Thermo Fisher Scientific UK Shandon Cytology Centrifuge with essential accessories Model Cytospin 4
	Thermo fisher Shandon slide stainer model Varistain 24-4
2012	Stainless Steel Rabbit Breeding Cages(Size 900X600X300mm)
	Ultrathin Semi auto rotary MICROTOME with accessories
	Paraffin dispenser cum tissue Embedder with accessories
	Angil 880 film digitizer scanner Xray & imaging film digitiser system, model Angell-880
	Bone Cutting Machine - Bone saw.
	Dosimeter for Diagnostic X Ray & Computed topography
	Thermal Cycler PCR Cat no FTC4/H02, Model no TC 4000 with 1 KVA UPS Online
	Del Doc System with accessories with computer, compatible software & app. UPS, Model-Fire Reader
	Microwave /vacuum Tissue processor
	Automated Tissue Processor, Cryostat Article no 10150000, Tissue Embedding Centre Article No 10185000
	Micro controller Electro Surgical Unit ACE 300
	Micro Plate Elisa Washer

	Autoclave, Magnification Loupe, Ultrasonic Cleaner
	Deep Freezer -80 C with stabiliser
	DNA Sequencer (GeXP, Beckman Coulter)
	HPLC (Ultimate3000, Dionex, Thermo)
	Gradient PCR with 96 well (Biorad)
	Refrigerated Micro centrifuge (Eppendorf)
2013	Inverted Microscope with camera with accessories
	Rotary Microtome (Manual) with accessories
	Rotary Microtome (semi automatic) with access.
	2 Real time PCR Machine with accessories
	Nikon Inverted Research Microscope with Computer system
	Morris Water Maze
	Hydro solder
2014	Deep Freezer upright -86C 388 litres
	Elisa Micro Plate Reader With attached laptop
	Olympus Trinocular Microscope
	Binocular Microscope
	Electromyography with accessories
	General purpose Microprocessor Based Refrigerated centrifuge
	Electronic Weighing Balance
	Quantitative Gene expression analysis & DNA sequencing system with accessories.
	High performance with liquid chromatography with accessories
	Monocular microscope, Model : RXL-4
	Electromyography, Model : Octopus 4 Channel
	Binocular microscope ,Model :PZB -22
	Electronic weighing Balance, Model : CA124
	Autoclave, Model : IK -102 A
	Gradient PCR with 96 wells with 1 KVA online UPS
	Vertical Autoclave, Model: MES -101
	Hot Air Incubator, Model: MES-125
	Micro Plate Elisa Reader
	Micro Plate Elisa washer
	Whirlpool Refrigerator
	Ice Matic Machine
	Deep Freezer -80 C
	Phantom head simulator with all accessories
	Dental lab – X ray film
	Bio-safety Cabinet Class II B2 with Servo voltage stabilizer
	CO2 incubator Air jacketed with accessories
	Sony Pro Camera HXR –MC 1500P
	Digital Multifunctional Copier machines
	Transilluminator
	Ultra pure type – 1 water purification system
	Ten headed microscope with digital camera attachment

	Bench Top Flow cytometer
	Refrigerated Micro Centrifuge
	Micro-centrifuge
	Vertical laminar air flow
	Refrigerated micro centrifuge
	Ultra Sonicator
	Vertical Gel Electrophoresis Apparatus
2014	Bench Top Flowcytometer (FACS Arialll, BD)
	Gel Documentation system (UVP system)
	Ultrapure Water purification system (Thermo)
	Microprocessor controlled class II, Type A 2 Biosafety Cabinet (ESCO)
	CO ₂ incubator Air jacketed (Eppendorf)
	Flash chromatography apparatus (Bona Agela)
2015	Portable EMG /NCS/EP System
	Monocular Microscope
	Bead Beater
	Hybridization chamber for 12 slides for IHC & CISH/FISH
	Deep freezer -80 C
	Deep Freezer - 40 C
	Bone and Meat Cutting Machine
	Nano Spectrophotometer
	Magnetic Stirrer Hot Plate
	Refrigerated Biosafe Bench Top centrifuge
	Computerised Cardiovascular function testing system
	Non Refrigerated Biosafe Bench Top centrifuge
	Elisa plate washer and Electrophoresis system
	Nano drop

4.2 Clinical Learning Resources

4.2.1 Teaching Hospital

- * Year of establishment : 1971
- * Hospital institution distance: Both Hospital and medical college are within the same compound
- * Whether owned by the college or affiliated to any other institution? : University College of Medical Sciences (UCMS) is a affiliated College of University of Delhi and Guru Tag Bahadur Hospital (GTBH) is under Delhi Administration.
- * Are the teaching hospitals and laboratories accredited by NABH, NABL or any other national or international accrediting agency? : NO
- * Number of beds: 1526
- * Number of specialty services: Following specialty services exist;
 - Medicine
 - Surgery
 - Anesthesia
 - Obstetrics and Gynaecology
 - Orthopaedics
 - Ophthalmology

- Oto-rhino-laryngology
 - Dermatology & STD
 - Psychiatry
 - Chest & TB
 - Dentistry
- * Number of super-specialty services: Following super-speciality services exist;
- Endocrinology
 - Nephrology
 - Neurology
 - HIV nodal centre
 - Neurosurgery
 - Burns and plastic surgery
- * Number of beds in ICU / ICCU / PICU / NICU, etc.
- MICU - 8
 - TICU - 5
 - DEM ICU - 4
 - Neuro ICU - 36
 - PICU – 8
 - CCU - 11
- * Number of operation theatres: OT are 20 (Emergency-5, Gynae-2, Surgery-5, Ortho-2, Neurosurgery-2, Eye-2, ENT-2)
- * Number of Diagnostic Service Departments: 6 (Biochemistry, Physiology, Microbiology, Pathology, Hematology, Radiology)
- * Clinical Laboratories:
1. Central Clinical Lab: Including
 - Biochemistry
 - Microbiology
 - Serology
 - Hematology
 - Histopathology
 - Cytopathology
 2. Emergency Lab: 24 hours emergency lab is functional
- * Service areas viz. laundry, kitchen, CSSD, Backup power supply, AC plant, Manifold Rooms, pharmacy services
- Laundry: Mechanized in house laundry as well as part outsourced.
 - Number of staff- 12
 - Kitchen: Kitchen facility available for all general ward patients
 - 6 meals per day
 - Fulltime qualified dietician present and helping staff
 - CSSD: works 24 hours in shifts with facility of steam sterilizer and EO (ethylene oxide) sterilizer with a daily load of 220kg/day
 - Backup power supply: Generator available with a load of 3,000 KVA
 - AC plant: YES. Central AC plant present
 - Manifold rooms: Available with the facility of Oxygen, pressure air, vacuum and N₂O.
 - Pharmacy: Three (3) pharmacy sub-stores present catering to 2300 indoor and 5300 outdoor patients.

- Total staff- 41

- a. Blood Bank services:
Blood bank services present.
 - 80 units of blood dispensed daily
 - 450 per day units stored on an average /day
 - Facility of component separation present
- b. Ambulance services: YES
 - Fully equipped ambulances present for shifting of patients with accompanying doctors
- c. Hospital Pharmacy services: Present for dispensing of drugs round the clock for casualty patients and for indoor patients free of cost
- d. Drug poison information service: No
- e. Pharmaco-vigilance: YES
- f. Mortuary, cold storage facility: Present
 - i. Two (2) cold storage present with facility to keep 18 dead bodies
 - * Does the teaching hospital display the services provided free of cost: YES
 - * What is the mechanism for effective redressal of complaints made by patients?
There is a redressal committee present in the hospital that is headed by the Medical Superintendent (MS), GTB Hospital.
 - * Give four years statistics of inpatient and outpatient services provided.

Year	Outpatient	Inpatient
2015 -2016	1629144	92798
2013 - 2014	1448607	77021
2012 - 2013	1134073	77844
2011 - 2012	1451847	75763
2010 - 2011	1557692	77021

- * Does the hospital display charges levied for the paid services for private ward patients: YES
- * Are the names of the faculty and their field of specialization displayed prominently in the hospital? YES.
List of the head of the institutions (Principal, Medical Superintendent and Head of the departments is displayed
- * Is pictorial representation of the various areas of the hospital displayed in a manner to be understood by illiterate patients? YES
Adequate signage present throughout the hospital and college building
- * Is there a prominent display of ante-natal, mother and child health care facilities? YES
- * How does the hospital ensure dissemination of factual information regarding rights, responsibilities and the health care costs to patient and the relatives/attendants?
Yes through Citizen Charter displayed in hospital and available on internet.
- * How does the hospital ensure that proper informed consent is obtained?
Pre designed consent forms are present for all service areas including medication, diagnostic and therapeutic interventions, minor and major surgeries

- * Does the hospital have well-defined policies for prevention of hospital-acquired infections?
Infection control committee present which monitors hospital infections regularly. Pattern of infection with antibiotic susceptibility pattern performed and distributed to all clinical departments on regular basis.
- * Does the hospital have good clinical practice guidelines and standard operating procedures? YES
- * Does the hospital have effective systems for disposal of bio-hazardous waste?
YES. The facility has been outsourced to state approved authorized agency.
- * How does the hospital ensure the safety of the patients, students, doctors and other health care workers especially in emergency department, critical care unit and operation theatres? Are the safety measures displayed in the relevant areas?
 - Regular injury prevention program are being held for students, interns and residents.
 - Preventive and Post Exposure Prophylaxis (PEP) facility available round the clock.
- * How are the Casualty services/Accident and Emergency Services organized and effectively managed?
 - 24 hours Accident and Emergency room with 76 beds, 4 CMO's and 20 doctors and staff in each shift
 - Separate facility for disaster and mass casualty present. There is a disaster committee to make a protocol and supervise the functioning in case of such emergency.
 - Isolation ward for infective diseases like Swine Flu present with diagnostic facility and to provide medication to the patient and close contacts at risk
- * Whether the hospital provides patient friendly help-desks at various places.
PRO (Public Relation Officer) facility available in Accident and Emergency as well as OPD block.
- * Does the hospital have medical insurance help desk? NO
- * What are the other measures taken to make the hospital patient friendly?
Availability of social workers to help the needy patients.
- * How does the hospital achieve continuous quality improvement in patient care and safety?
Regular orientation of resident doctors, standing committee, OT committee and hospital pharmacy staff is undertaken to improve.
- * What are the measures available for collecting feedback information from patients and for remedial actions based on such information?
Suggestion and complaint boxes are available at various locations in the hospital. These are brought on record and suitable action taken.
- * How does the institution ensure uniformity in treatment administered by the therapists?
 - Standard Treatment Guidelines (STG's) are being followed by individuals and protocols designed by various departments for diff diseases
 - Use of generic medicine is encouraged and implemented

- * Does the institution conduct any orientation training program for AYUSH-based para-medical staff? NO.

4.2.2 What specific features have been included for clinical learning in the out-patient, bedside, community and other clinical teaching sites?

- Each department has a designated space in the OPD to discuss classical and difficult patient
- Each ward has a seminar room where various teaching activities are undertaken (including bedside case presentation, seminars, journal clubs, CPC) by consultants for undergraduates and postgraduate students.
- Department of preventive and social medicine (PSM) have regular centres in the suburban and rural areas

4.3 Library as a Learning Resources

4.3.1 Does the library have an Advisory Committee? Specify the composition of the committee. What significant initiatives have been implemented by the committee to render the library student/user friendly?

- Yes the library has an Advisory Committee. The composition of the committee is as follows:-

1. Prof. Navjeevan Singh, Deptt. of Pathology, UCMS & GTBH. Chairman
2. Prof. Arun Sharma, Head, DBMI, UCMS & GTBH. Member
3. Prof. Piyush Gupta, Deptt. of Paediatrics, UCMS & GTBH. Member
4. Dr. Dheeraj Shah, Associate Professor, Deptt. of Paediatrics, UCMS & GTBH. Member
5. Dr. Khan Amir Maroof, Assistant Professor, Deptt. of Community Medicine, UCMS & GTBH. Member
6. Dr. Ajay Kumar Gupta, Director, Computer Centre, University of Delhi. Member
7. Sh. Saleem Anwar, Dy. Librarian, Delhi University Library System, University of Delhi. Member
8. Mrs. Geeta Paliwal, In-Charge Library, UCMS. Member Secretary
9. The significant initiatives have been implemented by the committee to render the library student/user friendly are as follows:-

1. To access e-resources library committee recommended Wi-Fi facility in library.
2. DELNET membership is already initiative by the efforts of library committee to provide Inter Library Loan facility.
3. Library Committee also recommend the appropriate air-conditioner facility in library and proposed for Central A.C./Cassette A.C's.
4. Library Committee recommend the wooden laminated flooring in library and the work is already in progress.
5. For sanitation/cleaning services library committee has demanded for additional Sulabh Karamachari.
6. The Library Committee recommended the renovation of toilets and the proposal has already approved and work will start soon.
7. Library Committee also recommended for synthetic enamel wall paint and the work was completed.
8. Library Committee put the matter of providing a 10 passenger lift in the library.

9. The Library Committee recommended extension of reading room to increase the seating capacity for readers.

4.3.2 Provide details of the following:

- * Total area of the library (in Sq. Mts.) -1592 = 66 sqm.
- * Total seating capacity For Readers- 275 for readers, 25 for staff
- * Working hours (on working days, on holidays, before examination, during examination, during vacation)
 - Monday – Friday: 9:00 AM to 12:00 Midnight
 - Saturday: 9:00 AM to 04:00 PM
 - The reading room is kept open for 24 hours on all days (except holidays)
- * Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)
 - For browsing and relaxed reading there is a lounge area and for accessing e-resources we have Internet section one for faculty having 8 computer systems and one for students having 9 computer systems.
- * Clear and prominent display of floor plan; adequate sign boards; fire alarm; access to differently-abled users and mode of access to collection
 - First Floor: Librarian’s Office, Technical Section, Property Counter, Check Post, Circulation Counter (Issue & Return), Computer Room for Students & Faculty Members, Current Periodical Section, Reference Book Section, Text Book Section, Thesis, WHO Publication, Reading Hall.
 - Second Floor: Back volumes of journals, Reading Hall for consulting back volumes of journals, Reading Room, Old Text Book section, Book Bank section and Medical Education Unit.
 - In library there is adequate signage boards placed for directing the readers.
 - Fire alarm already installed in library.
 - The proposal of 10 passenger lift in the library has already approved.
- * List of library staff with their qualifications

Staff with Qualifications

<u>Categories</u>	<u>Names</u>	<u>Qualifications</u>
<u>(In-Charge Library)</u> Professional Assistant	Mrs. Geeta Paliwal	NET Qualified, M.Phil in Library Science, PGDLAN, M.Lib Science, B.Lib., B.A.
Professional Assistant	Mrs. Manpreet Kaur	SRF, JRF/NET qualified, M.Phil in Library Science, M.Lib Science, B.Lib, MA (Political Science)
Semi Professional Assistant	Mr. Kamala Upadhyay	B.A., B.Lib.,C.Lib.Sc.
Semi Professional	Mr. Manoj Kumar	MA (Political Science), M.Lib

Assistant		Science, M.Phil in Library Science, Diploma in Computer Application
Semi Professional Assistant	Mr. Pradeep Kumar	MA (Political Science), M.Lib Science, PGDLAN, NET Qualified

Junior Library & Information Assistant

Mr. Surinder Singh Rawat	12th Pass, C.Lib.Sc
Miss Sandhya Kumari	JRF/NET qualified, MLISc., BLISc., DLISc. PGDLAN, B.com

Library Attendants

Mr. Naresh Chand	B.A., Diploma in Library Science
Mr. Govind	12 th Pass, C.Lib.Sc.
Mr. Manish	12 th Pass, C.Lib.Sc.
Mr. Vineet Kumar	B.Sc., B.Lib Sc.
Mr. Umesh Kumar	B.A., MLISc., B.Lib.Sc
Mr. Harender Singh	B.A., C.Lib Sc.
Ms. Seema Devi	B.A., B.Lib Sc.
Mr. Satya Dev Sah	12th Pass

MTS

Mr. Om Prakash	10 th pass
Mr. Rishi Pal	9 th pass

Employees on Contract Basis

Library Attendant	Mr. Karnail Singh	12 th Pass, C.Lib.Sc.
Library Attendant	Mrs. Veena Saxena	B.A. Pass

4.3.3 Give details of the library holdings:

- * Print (books, back volumes, theses, journals)

Total no. of Book (Text+Reference) as on 31/03/2014	19,144
Total no. of Back Volumes as on 31/03/2014	22,135
Total no. of These as on 31/03/2014	755
- No. of Journals subscribed annually:

(i) Indian –	52
(ii) Foreign –	<u>134</u>
Total:	<u>186</u>
- * Average number of books added during the last three years

Year	2012	2013	2014
Books	324	474	516
- * Non Print (Microfiche, AV) - No
- * Electronic (e-books, e-journals)

E-books	729
E-journals	16 + (289 E-journal through ERMED consortium)
- * Special collections (e.g. text books, reference books, standards, patents)
- * Book Bank

1315 Books (started on 24/04/1944 and stopped on 13/12/2004)

- * Question Bank - Started from the year 1967

4.3.4 To what extent is ICT deployed in the library? Give details with regard to

- * Library automation
 - No
- * Total number of computers for general access - 17
- * Total number of printers for general access - No
- * Internet band width speed - 1 Gbps
- * Institutional Repository - No
- * Content management system for e-learning - No
- * Participation in resource sharing networks/consortia (like INFLIBNET)
 - Membership of DELNET and N-List

4.3.5 Give details of the specialized services provided by the library with regard to

- * Manuscripts - No
- * Reference

Assistance and instruction for the use of the library including location of materials, use of the catalogue, use of computer to access information and the basic reference resources.

- * Reprography/ Scanning – Yes
- * Inter Library Loan Service – Membership of DELNET
- * Information Deployment and Notification - No
- * OPAC - No
- * Internet Access – Internet access is available for accessing e-journals, e-books and e-databases.
- * Downloads- Users can download the articles and related information through library computer facility.
- * Printouts - No
- * Reading list/ Bibliography compilation - No
- * In-house/remote access to e-resources
 - In house access to e-resources
- * User Orientation – At the time of admission and whenever required.
- * Assistance in searching Databases – Yes, we are providing assistance in searching databases.
- * INFLIBNET/HELNET – Membership of N-List through INFLIBNET

4.3.6 Provide details of the annual library budget and the amount spent for purchasing new books and journals.

Annual Library Budget

Books : Rs 20, 00,000/- (Rupees Twenty Lacs) (Non- Plan Grant)

Journals : Rs 65.15 Lacs (Rupees Sixty Five Lacs Fifteen Thousand) (Plan Grant)
 : Rs 65.15 Lacs (Rupees Sixty Five Lacs Fifteen Thousand) (OBC Grant)

Total Amount spent on Books		Rs 20, 00,000/-
Total Amount spent on Journals		
Plan Grant-	Foreign journals	50, 63,661=00
	WHO	75,000=00
	Indian journals	1, 71,085=00
	Up-to-date	<u>9, 03,444=00</u>
	Total	Rs. 6,213,190=00
OBC Grant-		<u>Rs. 65, 09,411=54</u>
Grand Total		Rs. 1,27,22,602=00

4.3.7 What are the strategies used by the library to collect feedback form its users? How is the feedback analysed and used for the improvement of the library services?

- Feedback form is introduced and we are in process to collect the valuable feedbacks of users and proper action will be taken.

4.3.8 List the efforts made towards the infrastructural development of the library in the last four years.

- The following steps are taken for improvement of infrastructural development of the library:-

1. Installation of proper wiring in library for smooth and efficient working of computer systems has already approved.
2. 10 split ACs are installed in the month of July 2014.
3. Installation of wall tiles in corridor and stairs area up to 3 feet height in UCMS library has already approved.
4. Proper signage system is installed in UCMS library for find their way for getting the library resources by readers.
5. The vertical blinds are also replaced and repaired in library.
6. 10 seater Sofa is also placed in lounge area for comfortable reading in library.
7. To improve the ambiance of the library potted shade plants is placed in library.
9. To access e-resources Wi-Fi facility recommended for library.
10. Appropriate air-conditioner facility in library and proposal for Central A.C./Cassette A.C's is also proposed.
11. The work of wooden laminated flooring in library is in progress.
12. The proposal for renovation of toilets has already approved and work will start soon.
13. White wash work was completed with Synthetic enamel wall paint.
14. The proposal of 10 passenger lift in the library is also proposed.
15. Extension of reading room to increase the seating capacity for readers is approved.

IT Infrastructure

4.4.1 Does the Institution have a comprehensive IT policy with regard to:

College: The college has its own IT Department (DBMI), whose policies are governed by an internal Computer Committee. This facility is a central facility which caters almost all the needs of computerization and its maintenance.

Hospital: The Hospitals IT policy is determined by the IT policy of the Health Department of GNCT of Delhi. Initial Software development was through CDAC, however, presently software, network and applications development are through NIC. The hospital network and computerization has followed the policy and procedures of GNCT of Delhi with respect to e-governance initiatives. This allows orders and inventory supervision of essential drugs and consumables through the Central Procurement Authority (CPA) of the Directorate of Health Services (DHS) of GNCT of Delhi. Further, the accounts and salaries are centrally monitored and processed through accounting software of GNCT of Delhi. Other real time patient data monitored by the Govt. in the state as well as in the centre are uploaded continually through MRD and concerned departments of the hospital.

IT Service Management

The structure of the IT service department is

College:

Head of the Department	-1
Sr Programmer-cum-Statistician	-1
Programmer-cum-Statistician, Sr Scale	-1
Sr Technical Assistant (Computer)	-5
Technical Assistant (Network)	-1
Statistical Assistant	-1
Other ministerial Staff	-2

Hospital:

Professor In-charge	-1
Assistant Programmer	-1
Hardware engineer	-1
Peon	-1

Partly through IT professionals (Asstt Programmers/Programmers) posted through IT Deptt. of, GNCT of Delhi, partly through Contractual Maintenance outsourced by Tender, Supervised by Medical Consultant assigned the task.

Information Security

College:Managed by the heads of respective departments

Hospital:Data Security is through Software and Hardware fire walls as well as through strict access control.Patient's data access is strictly limited by locational access settings and access control through software that is also regulated on a need to know basis in the Medical records department. Records of changes in access are maintained.

Network Security

Hardware firewalls and Antivirus is installed
Password protection
Layer2 & Layer3 level network switch security

Risk Management

Regular Backup by the respective departments
Team of hardware and software experts recruited

Software Asset Management

College: Under the control of HOD
Hospital: As per GNCT of Delhi guidelines

Open Source Resources

World Wide Web

Green computing

- Keep the hardware, electrical gadgets, accessories, cooling units, etc. on, only when required, to reduce the electric power consumption
- Reuse of one sided printed papers
- Replaced CRT monitors with energy efficient TFT monitors
- Stored condemned hardware in an isolated room

4.4.2

Hospital Management Information System

Hospital:The GTB Hospital attached to this institution has a computer Network and a Hospital Information Management system, based on Client Server Architecture and the HIMS implementation was by M/s CDAC, NOIDA, of which the entire project that was envisaged was only partly implemented. The hospital HIMS is expected to be upgraded soon by a modular HIMS software that has been implemented elsewhere (AIIMS, NIMHANS, etc) by NIC. The Indian standards for EMR of patients was recently notified. When the HIMS up-gradation occurs these will also be implemented.

Electronic Medical record System

Hospital: An extensive fibre-optic network connecting all clinical departments and administrative sections of the hospital. The Database is stored and queried through ORACLE.

Digital diagnostic and Imaging systems

Not Applicable

4.4.3

Number of Systems with configuration

College:Computers (P4/Dual core/Core2 duo/i5/i7)	-400	
Printers (DMP/Desk Jet/Laser jet/Colour/Plotter)	-280	
Scanners		-7
Offline UPS	-397	
Online UPS	-2	
Network Switches	- 52	
Firewall		- 2

Hospital: The network consists of around 100 desktops and their peripherals connected by routers and switches (8-24 ports) connected to each other and to the server room through optical fibre cable. This network is connected to the internet by a separate 10 MBPS leased line connection through MTNL.

Computer Student Ratio

50 dedicated Computers/1000 students

Dedicated computing facility

An independent Department of Biostatistics and Medical Informatics.
A team of Statisticians with more than 20 years of experience
Licenced softwares like SPSSv20.0, Systat&Matlab

LAN facility

All the computers are connected through LAN via a set of firewalls and a Server

Wi-Fi facility

No facility

Proprietary software

All the machines are having Licenced windows platform & MS-Office

Number of nodes with internet facility

- 450

Any other

LAN Compliant FAX and Photostat Machines.

4.4.4 Institutional plans & strategies to for deploying & upgrading the IT Infrastructure and associated facilities

To replace the old machines with the latest machines
To enable the campus with wi-fi facility

4.4.5 Give details on access to on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching-learning and research.

Pertains to Medical Education Unit

4.4.6 New technologies deployed by the institution in enhancing student learning and evaluation during the last four years and how do they meet new / future challenges?

-Library and reading rooms are equipped with computers, printers and internet connections
-Respective departments have computer with printer and internet connection for the UG/PG students and residents

4.4.7 IT facilities available to individual teachers for effective teaching and quality research

Necessary hardware & software facility with internet connectivity (LAN)

4.4.8 Give details of ICT-enabled classrooms/learning spaces available within the institution. How are they utilized for enhancing the quality of teaching and learning?

All Lecture theatres are equipped with Laptop and LCD projectors. They are used for Power point slides and multimedia presentations.

4.4.9 How are the faculty assisted in preparing computer-aided teaching-learning materials? What are the facilities available in the institution for such initiatives?

Self assisted and are provided Licensed MS-Office

4.4.10 Does the institution have annual maintenance contract for the computers and its accessories?

Primarily in-house maintenance
Contract on six monthly basis for hardware repairing

4.4.11 Does the institution avail of the National Knowledge Network (NKN) connectivity? If so, what are the services availed of?

Yes, for telemedicine, video conferencing, research and academic activities.

4.4.12 Does the institution avail of web resources such as Wikipedia, dictionary and other education enhancing resources? What are its policies in this regard?

Yes, Faculty, students and staff are free to use as per their requirements.

4.4.13 Provide details on the provision made in the annual budget for the update, deployment and maintenance of computers in the institution.

Allocation of funds, on requirement basis

4.4.14 What plans have been envisioned for the transfer of teaching and learning from closed institution information network to open environment?

Planning to have Wi-Fi enabled campus, so that teachers and students remain connected 24X7 to outside resources and open environment.

4.4 Maintenance of Campus Facilities

4.5.1 Does the institution have an estate office / designated officer for overseeing the maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.

All the maintenance of buildings, class room and laboratories is responsibility of PWD Services. All major budgetary allocations are as per projected requirements under University College of Medical Sciences & GTB Hospital. The college has mechanisms to monitor expenditure of budget allotted for various activities. All the agencies have to submit the progress reports for various expenditures which are verified. All expenditures are planned and approved at different levels.

- (a) Land: All land in the campus is Govt. Of NCT of Delhi, Delhi land and all gardens, landscaping and vacant land is maintained by designated personnel under PWD, GTB Hospital and College.
- (b) Building: Regular day to day maintenance is carried out by PWD with the budget allotted to PWD College. Major maintenance including additions and alterations are carried out by College and GTB Hospital but budget is allotted to the college.
- (c) Furniture: Repair and maintenance of furniture is by MES with their own budget. Special furniture is procured and repaired from infrastructure development Grant.
- (d) Computers: Computers and accessories are procured out of IT funds allotted to the college. Last year the quantum of IT fund allotted for this purpose.
- (e) The maintenance of computers is also the responsibility of Station Workshop, UCMS.
- (f) Vehicles: The College procures vehicles as per Govt. of India rules and vehicles are centrally procured by store and budgetary allocation are made for vehicles to the college. The vehicles are maintained by Workshop on outsource basis.

The budgetary allocation with the details of which will be provided to the peer review team.

4.5.2 How are the infrastructure facilities, services and equipments maintained? Give details.

Annual Maintenance Contract (AMC) for Intercom Exchange exists. College Workshop, maintained all the IT equipment bought out of IT funds. The PWD Services are fully dedicated to the task of repair and maintenance of buildings, furniture, electrical fittings, air conditioners and generators. The college/hospital has a full time department which monitors

and supervises the maintenance programme. There is an electro medical repair cell for immediate and emergency repairs. The College & Hospital workshop and services available for the repair and maintenance of the various electro-medical equipment. All major and sophisticated medical equipment are directly maintained by manufactures and suppliers through CMCs/AMCs.

4.5.3 Has the institution insured its equipments and buildings?

The building infrastructure, repair and maintenance are funded by the NCT under the Annual Major Works Programme and maintenance programme.

Any other information regarding Infrastructure and Learning Resources which the institution would like to include –

TEM CELL

College has initiated first time the setting up and standardization of TEM cell (microwave exposure) system. Very few medical colleges in our country have experimental microwave exposure system and it is unique system used for microwave exposure for experimental animals. The complete system has been set up with the help of IIT Delhi in our Institution with the support of ICMR and now this set up can be utilized for various ongoing MD and PhD programs. We have arranged this instrument at very low cost than importing the whole prefabricated system.

COMET ASSAY AND ANALYSIS WORK STATION

Comet assay is very unique system used for genotoxicity studies. College has established this set up with the help of ICMR. Very few labs in our country have this type of facility to measure DNA damage. Institute is using this facilities in combination with Microwave exposure system i.e. Transverse Electromagnetic (TEM) cell for the study of biochemical, immunological & behavioral effects on animals models (In collaboration with IIT, Delhi with ICMR support) following exposure to microwave radiation at different frequency for different exposure intervals along with Comet assay for assessment of DNA damage. This facility is not available in any medical college and extensively used for PG research work.