

Evaluative Report of the Department

3. Evaluative Report of the Department

1. Name of the Department : Microbiology
2. Year of establishment : 1971
3. Is the Department part of a college/Faculty of the university? : Yes
4. Names of programs offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D.,D.Sc., D.Litt., etc.) : MBBS, MD (Microbiology)
5. Interdisciplinary programs and departments involved: Yes
6. Courses in collaboration with other universities, industries, foreign institutions, etc. : Not Applicable
7. Details of programs discontinued, if any, with reasons : Not Applicable
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System : Annual
9. Participation of the department in the courses offered by other departments: Yes
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others) :

	Sanctioned	Filled	Actual (including CAS & MPS)
Director-Professor	-	-	04
Professor	01	01	02
Associate Professor/Reader	04	-	01
Assistant Professor	04	-	-
Lecturer	-	-	-
Tutor / Clinical Instructor	-	-	-
Senior Resident	06	05	05

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience
Dr. VG Ramachandran	MSc., Ph.D	Professor	Microbiology	36 Yrs. & 10 mths
Dr. IR Kaur	MBBS,MD (Microbiology)	Director-Professor & HOD	Microbiology	38 Yrs. & 02 mths
Dr. Ashwani Kumar	MBBS,MD (Microbiology)	Director-Professor	Microbiology	36 Yrs. & 10 mths
Dr. NP Singh	MBBS,MD (Microbiology)	Director-Professor	Microbiology	28 Yrs. & 11 mths
Dr. Shukla Das	MBBS,MD (Microbiology), DNB	Director-Professor	Microbiology	21 Yrs. & 02 mths

Dr. RumpaSaha	MBBS,MD (Microbiology)	Professor	Microbiology	13 Yrs. & 06 mths
Dr. BineetaKashyap	MBBS, MD (Microbiology)	Assoc. Professor	Microbiology	08 Yrs.

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors: Not Applicable
13. Percentage of classes taken by temporary faculty – program-wise information : Not Applicable
14. Program-wise Student Teacher Ratio: 15:01
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

Staff	Sanctioned	Filled	Actual
Academic support staff (technical)	-	27	27
Administrative staff	-	01	01

16. Research thrust areas as recognized by major funding agencies:

Immunology and Molecular biology Studies in Autoimmune Diseases & Fungal infections and Genetics of ESBLs & Carbapenemases. Genetic characterization of HIV subtypes in India, Molecular profile of dengue virus, North India, diarrhoeagenic E coli & transcriptomes

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

S. No.	Name of Faculty	a) Name of Project (National)	Funding Agency	Total Fund
1.	Dr. VG Ramachandran	Transcriptome analysis for identification of novel biomarker for disease progression	Department of Biotechnology, Govt. of India	1 Crore 39 lacs
		In Dengue patients. 2. National Aids Control Program – Phase – III – Renewed Annually	National Aids Control Organization, Govt. Of India	3.20 lacs for the year, 2015-16
		3. Nucleic acid Testing in Dengue Fever and its epidemiological utility (Batch: April, 2014): <i>PG Dissertation</i>	IMRG	Rs. 25,000/-
2.	Dr. Shukla Das	1. Epidemiology, pathogenomics, and system biology of A. flavus infections in India - an integrative approach	DBT	37.8 Lac
		2. Antifungal susceptibility testing and genotyping of	DBT	11 Lac

		clinically isolated cryptococcus strains from delhi and other parts of india		
		3.Th17 and Treg cell differentiation and their in-vitro functional responses in Pemphigus vulgaris”	DST	50L
		4.Study of Expression profile of miRNA in progressive autoimmune skin disease & its role in modulating host –immune response	<u>DHR-ICMR</u>	<u>2L</u>
		5. Collaborative studies on developing new topical formulation against Trichophyton species	VyommeBioSciences, Delhi	2L
3.	Dr.RumpaSaha	Prevalence of ESBL producing E. coli from fecal isolates and its correlation with putative virulence determinants.	UGC	12,31,800

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration b) International collaboration

S. No.	Name	National	Funding Agency	Fund
1.	Dr. Shukla Das	1.Antifungal susceptibility testing and genotyping of clinically isolated cryptococcus strains from delhi and other parts of india	DBT	11 Lac
		2.Collaborative studies on developing new topical formulation against Trichophyton species	VyommeBioSciences, Delhi	2L

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. : As mentioned in point no.17

20. Research facility / center with

- state recognition: State Reference Laboratory for HIV, DSACS, UCMS & GTBH, Delhi
- national recognition : Not Applicable
- international recognition : Not Applicable

21. Special research laboratories sponsored by / created by industry or corporate bodies : Central Research Laboratory of the Institution

22. Publications:

- * Number of papers published in peer reviewed journals (national / international) : 32
- * Monographs: Nil
- * Chapters in Books : 08
- * Books edited : Nil
- * Books with ISBN with details of publishers : Nil
- * Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, Medline, etc.) : Nil
- * Citation Index – range / average : Nil
- * SNIP : Nil
- * SJR : Nil
- * Impact Factor – range / average : 0.75 – 4.946
- * h-index : 10

S. No.	Name	No. of papers published in peer reviewed journals (national / international)	Monographs	Chapters in books	Books edited	Books with ISBN with details of publishers	No. listed in international database	Citation Index – range / average	SNI P	SJ R	Impact Factor – range / average	h-index
1.	Dr. VG Ramachandran	National-06 Inter-National-02	-	08 chap. in 01 book	-	-	-	-	-	-	0.75-3.53/Average-1/Total-81.82	-
2.	Dr. I.R. Kaur	National-05 Inter-National-1	-	-	-	-	-	-	-	-	0.75-3.5	-
3.	Dr. N.P. Singh	National-4 Inter-National-1	-	-	-	-	-	-	-	-	.88-2.14	-
4.	Dr. Shukla Das	National-04 Inter-	-	02 Chapters	-	-	-	-	-	-	0.75 - 3.53	-

		National-07		in 2 books each								
5.	Dr. RumpaSaha	National-09 Inter-National-05	-	2 chapters in 1 book & 1 chapter in 1 book	-	-	-	-	-	-	0.75-3	-

23. Details of patents and income generated : Not Applicable

24. Areas of consultancy and income generated : Not Applicable

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad : Not Applicable

26. Faculty serving in

a) National committees b) International committees c) Editorial Boards d) any other (specify)

S. No.	Name	National Committee	International Committee	Editorial Boards
1.	Dr. VG Ramachandran	<p>1. Consultant – IAP Advisory Committee on vaccination and Immunization</p> <p>Practices (ACVIP) of Indian Academy of Pediatrics</p> <p>2Member, Technical Resource Group, Department of AIDS Control, Ministry of Health & Family Welfare, Govt. of India,</p> <p>3. Expert – Area Advisory Board, Amity University, Noida, U.P.</p> <p>4. REVIEWER for</p> <p>1. Indian Pediatrics.</p> <p>2. Delhi Journal of Orthopaedics.</p> <p>3. Clinical Orthopaedics and Related Research (CORR)</p> <p>4. Indian Journal of Orthopaedics</p>	-	-
	Dr. IR Kaur	<p>1. Expert member of New Drug Advisory Committee, DCGI.</p> <p>2. Member of Board of</p>	-	-

		<p>Studies, Department of Microbiology, IMS Banaras Hindu University, Varanasi</p> <p>3. Member of Board of Studies, Paramedical courses, HIMSAR, JamiaMiliaHamdard</p> <p>4. Certified internal auditor of ISO-15189</p>		
	Dr. Ashwani Kumar	<p>a. Elected as Delhi University representative on the Medical Council of India by the members of University Court at the 84th Annual Meeting of the University Court held on 03/4/2014.</p> <p>b. Appointed as member of Curriculum and course content approval committee (CCCAC) of Healthcare sector skill council (HSSC) for the job roles of Medical Laboratory Technician, Histo-Technician, Phlebotomy Technician and Blood Bank Technician.</p> <p>c. Member of committee constituted by Medical Council of India regarding e-governance and digitalization of office workflow to create a "Digital India".</p>	-	-
	Dr. N.P. Singh	<p>a. Chairman Equipment maintenance committee</p> <p>b. Member Board of Research Studies, Microbiology Deptt., AMU, Aligarh</p> <p>c. Executive member IAMM Delhi Chapter</p> <p>d. Executive member IAMM, National Body</p>		

5.	Dr. Shukla Das	<ol style="list-style-type: none"> 1. Member of Institute Ethical Committee, NCDC, Delhi. 2. Executive member of SIHAM National Body. 3. Certified Internal auditor of 150-15189 4. Member of Editorial Board for Journal of Communicable Diseases, NCDC, Delhi 5. Member of IBSC, UCMS & GTB Hospital Delhi, appointed by DBT, Govt. of India. 6. Member of advisory committee for clinical and laboratory medicine MEU. 7. Member of Medical Mycology Consortium DBT. 8. Advisory Board: Indian Journal of Medical Specialty 9. Chairperson of Internal Complaint Committee for Sexual Harassment of Women at Workplace. 10. Co-ordinator for guest lecturers for MA./ MSc course of Environmental Studies at Deptt. Environmental Studies, Delhi University. 	-	<p style="color: red;">Editorial member of Indian Journal of Med. Speciality</p>
7.	Dr. Rumpa Saha	<ol style="list-style-type: none"> 1. Member of Rapid Response Team, State Surveillance Unit for Integrated surveillance Project, DHS, Delhi. 2. Member of District Level Adverse Event Following Immunization (AEFI) Committee for Shahdara District. 3. Member of SC/ST Cell in UCMS 4. Certified internal auditor 		<ol style="list-style-type: none"> 1. Joint Editor & contributor of Chapters of the book "Rational use of Antimicrobial: Indian Perspective" released on 24th Dec.2014 2. Joint Editor & contributor of Chapters of the book "Diploma in Medical Laboratory

		<p>of ISO-15189</p> <p>5. Member of counseling committee for admission to B.Sc&M.Sc (MIT) Radiography in UCMS.</p>		<p>Technology – Microbiology” for National Institute of Open Schooling.</p> <p>3. Member of editorial board for Journal of GastroIntestinal Infections, Journal of Advances in Medical and Pharmaceutical Sciences.</p>
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27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs) :

S. No.	Name of Faculty	Year	Faculty recharging strategy	Dates
	Dr. VG Ramachandran	2015-16	Indian Association of Medical Microbiologists, Jipmer, Puducherry, Microcon - 2015	25-29 Nov. 2015
	Dr. IR Kaur	2015-16	Indian Association of Medical Microbiologists, Jipmer, Puducherry, Microcon - 2015	25-29 Nov. 2015
	Dr. NP Singh	2015-16	MICROCON 2015, XXXVII National Conference of Indian Association of Medical Microbiologists, at Pondicherry	25-29 Nov. 2015
			First quarterly chapter meet of the IAMM Delhi and NCR Chapter for the year 2015 held at VMMC & Safdarjung Hospital, New Delhi on	26 th April, 2015
			Second quarterly chapter meet of the IAMM Delhi and NCR Chapter for the year 2015 held at Max Balaji Hospital, New Delhi.	25 th July 2015.
			7 th Annual Conference MICRO-D-CON (IAMM, Delhi Chapter)	10-12 Dec.2015
	Dr. Shukla Das	2015-16	International Society of Indian Human & Animal Mycologists, 2016, Melbourne, Australia	4-8 th May 2015
			Society of Indian Human & Animal Mycologists, 2016	18-20 Mar. 2016
			Annual Conference of Indian Association of Medical Microbiologists	27-29 Nov. 2015
			Annual Delhi Chapter, IHC	Dec. 2015
			Clinical Infectious Disease Society, International	21-23 Aug. 2015

			Dermatology & Allied specialties summit	3-5 July, 2015
			Nail Society of India	Nov. 2015
			Indian Association of Medical Microbiologists, Jipmer, Puducherry, Microcon - 2015	25 - 29 Nov.2015
			First quarterly chapter meet of the IAMM Delhi and NCR Chapter for the year 2015 held at VMMC & Safdarjung Hospital, New Delhi on	26 th April, 2015
			CME on Current Issues in Antimicrobial susceptibility Testing at IHC on organized by IAMM –DC.	20 th 21 st Feb.2015
			Faculty development workshop on implementation of competency based curriculum for medical Undergraduate by MEU	27-28 July,2015
	Dr. Rumpa Saha	2015-16	15 th International Congress of the IFIC & XIII National Conference of HISI at New Delhi	22 nd - 24 th March 2015
			MICROCON 2015, XXXVII National Conference of Indian Association of Medical Microbiologists, at Pondicherry	20 th -22 nd Sept 2015.
			Second quarterly chapter meet of the IAMM Delhi and NCR Chapter for the year 2015 held at Max Balaji Hospital, New Delhi.	25 th July 2015.
			First quarterly chapter meet of the IAMM Delhi and NCR Chapter for the year 2015 held at VMMC & Safdarjung Hospital, New Delhi on	26 th April, 2015
			CME on Current Issues in Antimicrobial susceptibility Testing at IHC on organized by IAMM –DC.	20 th & 21 st Feb, 2015
			Faculty development workshop on implementation of competency based curriculum for medical Undergraduate by MEU	27-28 July,2015
			Capacity building training programme on diagnosis of STI/RTI at Delhi	19-20 Jan.2016
			NTTW at MAMC, Delhi	12-21 March,2015

28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects
- percentage of students doing projects in collaboration with other universities / industry / institute

S. No.	Name	No. of students who have done	% of students doing project in collaboration with other
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		in- house project including inter-departmental projects	universities/industry/institute
1.	Dr. IR Kaur	02	-
2.	Dr. VGRamachandran	01	-
3.	Dr. Ashwani Kumar	01	-
4.	Dr. NP Singh	01	-
5.	Dr. Shukla	01	-
6.	Dr. RumpaSaha	03	-

29. Awards / recognitions received at the national and international level by

- Faculty : Nil
- Doctoral / post-doctoral fellows : Nil
- Students : Nil

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

S. No.	Name	Conference/Workshops organized & source of funding
1.	Department of Microbiology	Conducted satellite workshop on Applications of Flow Cytometry in Microbiology at CRL, UCMS under the aegis of Annual Delhi chapter IAMM on 10/12/2015

31. Code of ethics for research followed by the departments : All research projects are sent through Institutional Ethical Committee

32. Student profile program-wise: Not Applicable

Name of the Program (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female

33. Diversity of students: Not Applicable

Name of the Program (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET,

GATE and other competitive examinations? Give details category-wise. :

NET	GATE	JRF	SRF
2	-	2	4

35. Student progression:

Student progression	Percentage against enrolled
UG to PG	: Not Applicable
PG to M.Phil	: Not Applicable
PG to Ph.D.	: 06
Ph.D. to Post-Doctoral	: 03
Employed	: Not Applicable
<ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	
Entrepreneurs	: Not Applicable

36. Diversity of staff:

Percentage of faculty who are graduates	
of the same university	50%
from other universities within the State	Nil
from universities from other States from	50%
universities outside the country	NIL

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period
: Nil

38. Present details of departmental infrastructural facilities with regard to

- a) Library: Facility available with 125 books in the department
- b) Internet facilities for staff and students: Available for staff, PG students and Office
- c) Total number of class rooms: Not Applicable
- d) Class rooms with ICT facility: Not Applicable
- e) Students' laboratories: 01
- f) Research laboratories: 11 Diagnostics and Research Laboratories

39. List of doctoral, post-doctoral students and Research Associates

a) from the host institution/university

1	Ms. Taru Singh
2	Ms. Shweta Sharma
3	Ms. Jyotsna Singh

4	Mr. Pankaj Kumar
5	Ms. Monika Malik
6	Ms. Gargi
7	Ms. ShyamaDatt
8	Mr. Praveen

b) From other institutions/universities

1	Dr. Md. Ahmad Ansari
2	Mr. Sajad Ahmed
3	Ms. Snehlata
4	Mr. VikasSood

40. Number of post graduate students getting financial assistance from the university. : 15

41. Was any need assessment exercise undertaken before the development of new program(s)? If so, highlight the methodology. : Not Applicable

42. Does the department obtain feedback from

- a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? : Yes. Necessary changes for better teaching – learning-evaluation are incorporated in the day-to-day teaching programme
- b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? : No
- c. alumni and employers on the programs offered and how does the department utilize the feedback? : No

43. List the distinguished alumni of the department (maximum 10):

1. Dr. V. Talwar
2. Dr. M. Mathur
3. Dr. SudhaRawat
4. Dr. DeepaGadre
5. Dr. Poonam Sharma
6. Dr. G. Revathy
7. Dr. Uma Banerjee
8. Dr. Manorma Deb

9. Dr. Rama Chowdhary

10. Dr. Anita Chakraborty

44. Give details of student enrichment programs (special lectures / workshops / seminar) involving external experts. :

Conducted satellite workshop on Applications of Flow Cytometry in Microbiology at CRL, UCMS under the aegis of Annual Delhi chapter IAMM on 10/12/2015

45. List the teaching methods adopted by the faculty for different programs.

1. Lectures

2. Practicals

3. Tutorials

4. Seminars

5. Case study

6. Evaluation by conducting Terminal and Sent up examinations

7. Research presentation

46. How does the department ensure that program objectives are constantly met and learning outcomes are monitored? : 1.By holding regular teaching staff meetings & discussion on topics

Preceding an undergraduate teaching class by all the teachers.

2.Interdepartmental (Para & Clinical) meetings of Faculty members for better implementation& coordination of teaching programme.

47. Highlight the participation of students and faculty in extension activities. : STS-ICMR, Student seminars, Sports & Cultural Activities

48. Give details of “beyond syllabus scholarly activities” of the department.: Gender Sensitization (internal complaint committee for sexual harassment), Student Seminars

49. State whether the program/ department is accredited/ graded by other agencies? If yes, give details.
: No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

:

Participation in interdisciplinary research presentations.Ph.D course work and seminars, invited guest lectures by eminent scientists

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
Strength:

1. Diagnostic facility for 1500 bedded tertiary care Hospital

2. Regular PG & UG teaching programme

3. Molecular biology laboratory facility developed for diagnostic and research activities.

4. Flow cytometry analysis of T cell subsets in autoimmune skin disease and fungal infections

5. Ongoing EQAS for HIV & VDRL testing, Mycology and Gonococci

Weakness :

1. Lack of infrastructure for advance high throughput instrument facility for diagnostics
2. Lack of Hospital information system
3. Shortage of staff both teaching and non-teaching
4. Lack of emergency power backup for continuous running of all the equipments
5. Irregular supply of diagnostic kits and reagents

Opportunities

1. Sufficient clinical material for diagnostic and research purposes
2. Attending conferences, workshops & other Faculty recharging strategies
3. Facilities for conducting Undergraduate, Postgraduate & Ph.D programmes
4. Imparting training programme for Medical Laboratory Technology students from other Institution.

Challenges :

1. Generating quality reports in the existing facilities
2. Maintaining day--to-day records in WHONET
3. Implementation of Hospital Infection Control programme
4. Formulation of Hospital antibiotic policy
5. Attending international conferences

52. Future plans of the department:

1. Molecular biology diagnostic facility
2. To monitor antifungal susceptibility testing of dermatophytes in clinical failure cases.
3. Molecular identification of invasive fungal infections.
4. Immune response study in Pemphigus patients with disease progression and relapse.
5. Monitoring antibiotic susceptibility pattern & maintaining antibiotic stewardship programme in the Hospital.
6. Strengthen Hospital Infection Control
7. Orientation programmes to educate Health care workers
8. NABL accreditation of the diagnostic laboratories