MALLA REDDY VISHWAVIDYAPEETH
(Deemed to be University)
Hyderabad

School of Nursing Science and Technology

FELLOWSHIP IN
INFECTION PREVENTION AND CONTROL NURSING

Curriculum 2026

Programme particulars	
Level	Post-registration fellowship (nursing)
Duration	26 weeks (6 months) – 1,000 hours
Structure	Theory 100 h · Simulation laboratory 60 h · Clinical practice 840 h
Eligibility	Registered B.Sc. Nursing / M.Sc. Nursing in India, or equivalent
Award	Fellowship certificate of Malla Reddy Vishwavidyapeeth

Approved Curriculum by the Board of Studies, Academic Council and Executive Council

Stage	Body	Date of approval / resolution no.
1	Board of Studies Nursing – School of Nursing Sciences & Technology	
2	Academic Council	
3	Executive Council	

Contents

1. Preamble and Need for the Programme .....
2. Vision, Mission and Programme Objectives .....
3. Programme at a Glance .....
4. Eligibility, Selection and Governance .....
5. Programme Outcomes .....
6. Curriculum Framework .....
7. Detailed Syllabus: Infection Prevention and Control Nursing .....
8. Clinical Practice: Postings (840 hours) .....
9. Essential Infection Prevention and Control Nursing Skills and Logbook .....
10. Scheme of Assessment .....
11. Infrastructure, Faculty and Quality Assurance .....
12. Suggested References .....
Annexure A: Final Assessment Sheet – MRV Fellowship .....
Annexure B: Logbook Formats .....
Annexure C: Certificate of Completion (format) .....

1. Preamble and Need for the Programme

Malla Reddy School of Nursing Science and Technology recognizes the critical need to empower registered nurses with the knowledge and skills essential for infection prevention and control practices across healthcare settings. With emerging diseases and hospital-acquired infections posing serious threats, trained nurses serve as the front line in safeguarding patient safety and ensuring high standards of hygiene and infection prevention.

This Fellowship program is designed to equip nurses with a deep understanding of infection transmission, sterilization, disinfection, epidemiological surveillance, outbreak management, and strategies to promote community and hospital infection prevention. It enhances the nurse's ability to implement protocols, conduct infection audits, and participate in quality improvement and research related to infection control.

1.1 Need

- Healthcare-associated infections (HAIs), antimicrobial resistance, and the spread of infectious diseases pose major challenges to patient safety and quality of healthcare services.
- Basic nursing programmes provide limited specialized training in infection surveillance, prevention practices, sterilization, disinfection, and outbreak management; a structured, competency-based post-registration fellowship helps bridge this gap.
- Hospitals and healthcare institutions require trained nurses who can implement infection control policies, monitor compliance with standard precautions, educate healthcare workers and patients, and lead infection prevention and control activities.

2. Vision, Mission and Programme Objectives

2.1 Vision

To prepare competent infection prevention and control nurses who promote safe, evidence-based nursing practice and lead initiatives to prevent healthcare-associated infections and improve patient safety.

2.2 Mission

- Provide competency-based training in infection prevention, surveillance, standard precautions, sterilization, disinfection and outbreak management.
- Promote ethical, evidence-based and patient-centered practices to prevent the spread of infections and ensure a safe healthcare environment.
- Develop clinical expertise, leadership and teamwork in implementing infection control policies, monitoring compliance and educating healthcare professionals, patients and communities.

2.3 Programme objectives

At the end of the Fellowship in Infection Prevention and Control Nursing, the learner will be able to:

1. Demonstrate knowledge and skills in infection prevention and control practices, including standard precautions, transmission-based precautions, sterilization and disinfection.
2. Apply evidence-based guidelines for the prevention, identification, surveillance and management of healthcare-associated infections.
3. Implement infection control policies and protocols to promote patient safety and maintain a safe healthcare environment.
4. Demonstrate appropriate practices in hand hygiene, personal protective equipment (PPE), biomedical waste management and safe handling of healthcare equipment.
5. Identify infection risks, monitor infection control compliance and participate in outbreak investigation and management.

6. Educate healthcare professionals, patients and caregivers on infection prevention practices and antimicrobial resistance.
7. Develop leadership, communication and teamwork skills to coordinate infection prevention and control activities across healthcare settings.
8. Promote quality improvement, ethical practice and continuous professional development in infection prevention and control nursing.

3. Programme at a Glance

Item	Details
Name of the programme	Fellowship in Infection Prevention and Control Nursing
Offered by	School of Nursing Science and Technology, Malla Reddy Vishwavidyapeeth (Deemed to be University)
Duration	26 weeks (6 months), full time
Total hours	Total-1,000 Hrs: Theory-100 Hrs, Simulation laboratory-60 Hrs, Clinical practice-840 Hrs
Credits	33 (at 30 notional hours per credit; 1,000 h ÷ 30 = 33.3, rounded down)
Eligibility	Registered B.Sc. Nursing / M.Sc. Nursing in India, or equivalent
Mode	Contact classes, simulation, supervised clinical postings in a teaching hospital, logbook
Assessment	MCQ 25 + practical skills (three case scenarios) 60 + logbook 15 = 100 marks; minimum 50% in each component and 50% aggregate
Award	Fellowship certificate by Malla Reddy Vishwavidyapeeth (Deemed to be University)
Medium of instruction	English

4. Eligibility, Selection and Governance

4.1 Eligibility

- Registered B.Sc. Nursing or M.Sc. Nursing in India, or equivalent qualification.
- Current registration with a State Nursing Council (certificate to be produced at admission).
- Medical fitness certificate and immunization record (hepatitis B at minimum).

4.2 Selection and commencement

The fellowship is established to uphold transparency, fairness and meritocracy in the selection process for the MRV Fellowship Programme. Selection is made by the Fellowship Committee on the basis of academic records, a short interview and document verification. A batch commences once the committee has approved the list of fellows and allotted a guide to each fellow.

4.3 Fellowship Committee

Sl. No.	Role / position	Description / designation
1	Chairperson	The Dean, SNST
2	Subject expert	Dean MRCON, Professor or Associate Professor of SNST
3	Guide / co-guide	Professor, Associate Professor or Assistant Professor from SNST
4	Convener	The Fellowship Coordinator of MRV
5	Ex officio members	The Registrar and the Controller of Examinations, MRV

Functions of the committee: approval of the curriculum and of any additional output or deliverable (written approval is needed beforehand); selection of fellows; allotment of guides; monitoring of attendance, logbooks and clinical postings; conduct of the final assessment; handling of grievances; recommendation of award of the certificate.

4.4 Guides

- Guide / co-guide: Professor, Associate Professor or Assistant Professor from SNST with a postgraduate qualification in nursing and experience in Infection prevention and control nursing.

- Clinical preceptors: nurses with at least two years of Infection prevention and control experience and a valid certificate.
- Guide-to-fellow ratio not more than 1:1

5. Programme Outcomes

5.1 Programme outcomes (POs)

At the end of the fellowship the fellow demonstrates the following programme outcomes.

PO	Domain	Programme outcome
PO1	Knowledge	Explains the principles of microbiology, modes of transmission, chain of infection, healthcare-associated infections (HAIs) and antimicrobial resistance.
PO2	Infection Prevention Practices	Applies standard precautions, transmission-based precautions, hand hygiene, and appropriate use of personal protective equipment (PPE) to prevent the spread of infections.
PO3	Infection Surveillance and Management	Performs infection surveillance, identifies infection risks, analyses infection data and participates in outbreak investigation and management.
PO4	Sterilization and Disinfection	Demonstrates appropriate practices in cleaning, disinfection, sterilization, aseptic techniques and safe handling of medical equipment.
PO5	Safety, Communication and Ethics	Implements biomedical waste management, occupational safety, safe injection practices, accurate documentation, confidentiality and ethical decision-making.
PO6	Leadership and Evidence-Based Practice	Coordinates infection prevention activities, monitors compliance with infection control policies, educates healthcare personnel and applies evidence-based guidelines to improve patient safety.

6. Curriculum Framework

6.1 Distribution of hours

Unit	Title	Theory (h)	Simulation lab (h)
1	Introduction to Infection Control and Microbiology Basics	14	6
2	Standard Precautions and Hand Hygiene	14	6
3	Transmission-Based Precautions and Isolation Practices	14	10
4	Healthcare-Associated Infections (HAIs)	14	8
5	Environmental Cleaning and Equipment Disinfection	14	12
6	Antimicrobial Stewardship and Multidrug-Resistant Organisms (MDROs)	14	10
7	Patient and Family Education in Infection Prevention	16	8
Total		**100**	**60**

Component	Hours	Share
Theory (8 units)	100	10%
Simulation laboratory	60	6%
Clinical practice (postings)	840	84%
Total	**1,000**	**100%**

Average weekly load over 26 weeks: about 4 hours of theory, 2 hours of simulation and 32 hours of clinical practice (about 38 hours a week).

6.2 Schedule of the 26 weeks

Weeks	Activity
1–2	Orientation, introduction to infection prevention and control, hand hygiene training, PPE demonstration, standard precautions, biomedical waste management and familiarization with hospital infection control policies.

Weeks	Activity
3–20	Clinical postings in infection control, medical and surgical wards, intensive care units, operation theatres, microbiology laboratory, central sterile supply department (CSSD) and other relevant clinical areas, with scheduled theory and skills training.
21–25	Advanced clinical practice, infection surveillance activities, infection control audits, outbreak investigation exercises, case presentations, logbook completion and revision.
26	Final competency assessment, practical examination, case presentation, logbook verification and exit examination.

6.3 Teaching–learning methods

- Interactive lectures, presentations, videos and case-based learning on infection prevention and control.
- Skills laboratory demonstrations on hand hygiene, PPE donning and doffing, aseptic techniques, specimen handling and spill management.
- Bedside teaching and supervised clinical practice in wards, ICUs, operation theatres and other relevant clinical areas.
- Demonstrations and supervised practice in cleaning, disinfection, sterilization and CSSD procedures.
- Infection surveillance exercises, data collection, case reviews and healthcare-associated infection audits.
- Role play and simulation exercises on needle-stick injuries, occupational exposure, isolation precautions and outbreak management.
- Group discussions, seminars, assignments and peer-led presentations on antimicrobial resistance and infection control guidelines.
- Preparation of infection control checklists, audit reports, educational materials and patient awareness sessions.
- Maintenance of a clinical logbook, reflective practice, mentor feedback and competency-based assessments.

7. Detailed Syllabus: Emergency and Trauma Care Nursing

Theory 100 hours · Simulation laboratory 60 hours · Clinical practice 840 hours

For every unit the syllabus gives the learning objectives, content, teaching–learning activities, assessment methods and course outcomes (CO).

Unit I: Introduction to Infection Control and Microbiology Basics

Theory: 16 hours · Simulation/Skills Laboratory: 6 hours

Learning objectives

- Explain the principles, scope and importance of infection prevention and control in healthcare settings.
- Identify common microorganisms and describe their role in causing infections.
- Explain the chain of infection and the modes of transmission of infectious diseases.

Content

Introduction to infection prevention and control

- Definition, concepts, objectives and importance of infection prevention and control.
- Role and responsibilities of the infection control nurse.
- Infection Control Committee and Infection Control Team.
- Hospital infection control policies, guidelines and protocols.

Microbiology basics

- Types of microorganisms: bacteria, viruses, fungi and parasites.
- Pathogenic and non-pathogenic microorganisms.

- Normal flora, colonization and infection.
- Routes of transmission and factors influencing infection.

Chain of infection

- Infectious agent, reservoir, portal of exit, mode of transmission, portal of entry and susceptible host.
- Breaking the chain of infection.
- Principles of infection prevention in healthcare settings.

Teaching–learning activities

Interactive lectures; microbiology charts and videos; group discussions; case-based learning; demonstration of the chain of infection; group quizzes.

Assessment methods

MCQ test; oral questions; microorganism identification exercise; short-answer test.

Course outcomes (CO)

CO	Course outcome: the fellow will be able to
CO1	Explain the principles, scope and importance of infection prevention and control in healthcare settings.
CO2	Identify common microorganisms and differentiate between colonization and infection.
CO3	Describe the chain of infections and identify appropriate measures to interrupt the transmission of infections.
CO4	Explain the roles and responsibilities of the infection control nurse and the Infection Control Team.

Unit II: Standard Precautions and Hand Hygiene

Theory: 14 hours · Simulation/Skills Laboratory: 10 hours

Learning objectives

- Explain and apply standard precautions in all healthcare settings.
- Demonstrate correct hand hygiene techniques according to recommended guidelines.
- Select and use appropriate personal protective equipment (PPE) based on exposure risk.
- Promote compliance with infection prevention practices among healthcare workers.

Content

Standard precautions

- Principles and components of standard precautions.
- Hand hygiene, respiratory hygiene and cough etiquette.
- Risk assessment before patient care.
- Safe injection practices and sharps safety.
- Safe handling of blood, body fluids, specimens and contaminated materials.

Hand hygiene

- Five Moments for Hand Hygiene.
- Hand washing with soap and water.
- Alcohol-based hand rub: indications and correct technique.
- Hand hygiene before and after patient contact and aseptic procedures.
- Common errors and barriers to hand hygiene compliance.

Personal protective equipment

- Types of PPE: gloves, masks, gowns, aprons, goggles and face shields.
- Selection of PPE according to exposure risk.
- Correct donning and doffing procedures.
- Safe disposal of used PPE.

Teaching–learning activities

Interactive lectures; hand hygiene demonstrations; return demonstrations; video tutorials; PPE donning and doffing practice; hand hygiene compliance audits; case scenarios.

Assessment methods

MCQ test; hand hygiene skill checklist; PPE competency assessment; direct observation; practical examination; peer audit report.

Course outcomes (CO)

CO	Course outcome: the fellow will be able to
CO1	Apply standard precautions during routine nursing care and clinical procedures.
CO2	Demonstrate correct hand hygiene techniques and identify opportunities for hand hygiene.
CO3	Select, wear, remove and dispose of PPE safely according to the anticipated exposure risk.
CO4	Conduct basic hand hygiene compliance audits and recommend appropriate corrective measures.

Unit III: Transmission-Based Precautions and Isolation Practices

Theory: 14 hours · Simulation/Skills Laboratory: 6 hours

Learning objectives

- Differentiate contact, droplet and airborne transmission.
- Apply appropriate transmission-based precautions according to the suspected or confirmed infection.
- Demonstrate safe patient placement, isolation practices and use of appropriate PPE.
- Prevent cross-transmission of infections in healthcare settings.

Content

Transmission-based precautions

- Contact precautions: indications and implementation.
- Droplet precautions: indications and implementation.
- Airborne precautions: indications and implementation.
- Combination of standard and transmission-based precautions.
- Selection of PPE according to transmission risk.

Isolation practices

- Types and indications of isolation.
- Patient placement and cohorting.
- Isolation room requirements, ventilation and signage.
- Dedicated equipment and environmental cleaning.
- Safe transport of patients requires isolation precautions.

Nursing care in isolation

- Patient assessment and monitoring.
- Prevention of cross-contamination.
- Communication with patients and families.
- Documentation and discontinuation of precautions according to institutional policy and applicable guidelines.

Teaching–learning activities

Interactive lectures; isolation room simulation; PPE demonstrations; role play; case-based discussions; preparation of isolation signage and educational posters.

Assessment methods

Objective Structured Clinical Examination (OSCE); scenario-based evaluation; PPE competency checklist; viva voce; poster presentation.

Course outcomes (CO)

CO	Course outcome: the fellow will be able to
CO1	Differentiate contact, droplet and airborne precautions based on the mode of transmission.
CO2	Implement appropriate isolation precautions and patient placement according to infection control guidelines.

CO	Course outcome: the fellow will be able to
CO3	Demonstrate safe patient care, equipment handling and transport practices for patients requiring isolation.

Unit IV: Healthcare-Associated Infections (HAIs)

Theory 14 hours · Simulation laboratory 8 hours

Learning objectives

- Explain the types, causes and risk factors of healthcare-associated infections.
- Identify patients at risk of developing HAIs and recognize common signs of infection.
- Apply evidence-based infection prevention bundles to reduce the incidence of HAIs.
- Participate in infection surveillance, documentation and reporting.

Content

Introduction to healthcare-associated infections

- Definition, classification, causes and risk factors of HAIs.
- Common HAIs and their impact on patient safety.
- Role of the infection control nurse in HAI prevention.

Types of healthcare-associated infections

- Catheter-associated urinary tract infection (CAUTI).
- Central line-associated bloodstream infection (CLABSI).
- Ventilator-associated pneumonia (VAP).
- Surgical site infections (SSIs).
- Hospital-acquired pneumonia and other healthcare-associated infections.

Prevention and management of HAIs

- Aseptic technique and prevention of contamination.
- Insertion and maintenance bundles for urinary catheters and central lines.
- Ventilator-associated pneumonia prevention measures.
- Surgical site infection prevention.
- Device necessity review and timely removal.
- HAI surveillance, documentation and reporting.

Teaching–learning activities

Interactive lectures; clinical case discussions; skill stations; demonstration of aseptic procedures; infection prevention bundle practice; supervised clinical observation; review of HAI surveillance records.

Assessment methods

MCQ test; practical examination; aseptic technique competency checklist; case presentation; clinical logbook assessment; written assignment.

Course outcomes (CO)

CO	Course outcome: the fellow will be able to
CO1	Explain the causes, risk factors and common types of healthcare-associated infections.
CO2	Identify patients at risk of HAIs and recognize signs that require prompt clinical evaluation.
CO3	Apply evidence-based prevention bundles for CAUTI, CLABSI, VAP and surgical site infections.

Unit V: Environmental Cleaning and Equipment Disinfection

Theory: 14 hours · Simulation/Skills Laboratory: 12 hours

Learning objectives

- Explain the principles of environmental cleaning, disinfection and sterilization.
- Differentiate cleaning, disinfection and sterilization according to their purposes.
- Demonstrate safe handling and decontamination of reusable medical equipment.
- Monitor environmental hygiene and compliance with cleaning protocols.

Content

Environmental cleaning

- Importance of environmental hygiene in infection prevention.
- Cleaning of patient-care areas and high-touch surfaces.
- Routine, terminal and specialized cleaning procedures.
- Cleaning schedules, responsibilities and documentation.
- Cleaning of isolation rooms and contaminated areas.
- Monitoring the effectiveness of environmental cleaning.

Disinfection and sterilization

- Definitions and principles of cleaning, disinfection and sterilization.
- Levels of disinfection: low, intermediate and high.
- Selection and safe use of disinfectants.
- Principles and methods of sterilization.
- Autoclaving and other approved sterilization methods.
- Monitoring sterilization processes and maintaining records.

Medical equipment and CSSD

- Decontamination of reusable medical equipment.
- Classification of medical devices according to infection risk.
- Processing, packaging, storage and distribution of sterile supplies.
- Handling of single-use and reusable devices.
- Safe storage and checking of sterile packs.
- Prevention of cross-contamination during equipment handling.

Teaching–learning activities

Interactive lectures; demonstrations using cleaning kits; return demonstrations; supervised facility rounds; CSSD visits; case scenarios; practice with cleaning and sterilization checklists.

Assessment methods

Direct observation checklist; practical examination; equipment identification; viva voce; written test; clinical logbook assessment.

Course outcomes (CO)

CO	Course outcome: the fellow will be able to
CO1	Differentiate cleaning, disinfection and sterilization and explain their appropriate applications.
CO2	Demonstrate safe environmental cleaning and decontamination of medical equipment.
CO3	Explain and participate in approved sterilization, packaging, storage and distribution procedures.
CO4	Monitor environmental hygiene and identify deficiencies requiring corrective action.

Unit VI: Antimicrobial Stewardship and Multidrug-Resistant Organisms (MDROs)

Theory: 14 hours · Simulation/Skills Laboratory: 6 hours

Learning objectives

- Explain antimicrobial resistance and its implications for patient safety.
- Identify common multidrug-resistant organisms and their transmission routes.
- Describe the principles of antimicrobial stewardship and the appropriate use of antimicrobials.
- Apply infection prevention measures to reduce the spread of resistant organisms.

Content

Antimicrobial resistance

- Definition, causes and mechanisms of antimicrobial resistance.
- Factors contributing to inappropriate antimicrobial use.
- Impact of antimicrobial resistance on healthcare outcomes.

- Role of nurses in antimicrobial stewardship.

Multidrug-resistant organisms

- Methicillin-resistant Staphylococcus aureus (MRSA).
- Carbapenem-resistant Enterobacterales (CRE).
- Extended-spectrum beta-lactamase (ESBL)-producing organisms.
- Other locally relevant multidrug-resistant organisms.
- Routes of transmission and risk factors.

Prevention and control

- Standard and transmission-based precautions for MDROs.
- Specimen collection and transport according to protocol.
- Microbiology reports and antimicrobial susceptibility testing.
- Isolation, cohorting and environmental cleaning as indicated.
- Surveillance and reporting of resistant organisms.
- Collaboration with microbiology and antimicrobial stewardship teams.

Teaching–learning activities

Interactive lectures; case-based discussions; seminars by microbiology experts; review of culture and sensitivity reports; antimicrobial case studies; supervised audit activities.

Assessment methods

Case-based MCQs; interpretation of microbiology reports; written test; audit report; seminar presentation; reflective assignment.

Course outcomes (CO)

CO	Course outcome: the fellow will be able to
CO1	Explain the causes, mechanisms and consequences of antimicrobial resistance.
CO2	Identify common MDROs and describe appropriate infection prevention and control measures.
CO3	Explain the nurse's role in antimicrobial stewardship, specimen handling and surveillance of resistant organisms.
CO4	Participate in antimicrobial stewardship and infection control initiatives under appropriate supervision.

Unit VII: Patient and Family Education in Infection Prevention

Theory: 14 hours · Simulation/Skills Laboratory: 4 hours

Learning objectives

- Educate patients, families and caregivers on infection prevention practices.
- Develop appropriate educational materials for different patient populations.
- Promote adherence to hand hygiene, respiratory hygiene and safe care practices.
- Evaluate the effectiveness of infection prevention education.

Content

Patient and family education

- Principles of effective health education and communication.
- Hand hygiene and respiratory hygiene.
- Safe handling of dressings, devices and medical equipment at home.
- Wound care and prevention of surgical site infections.
- Safe medication practices and adherence to prescribed treatment.
- Infection prevention during discharge and follow-up care.

Community and occupational infection prevention

- Prevention of communicable diseases in healthcare and community settings.
- Immunization and occupational health education for healthcare workers.
- Prevention and reporting of needle-stick injuries and occupational exposures.
- Health education for vulnerable populations.

- Cultural sensitivity, health literacy and barriers to infection prevention.

Education and quality improvement

- Preparation of posters, brochures, checklists and patient information leaflets.
- Conduct awareness sessions for patients, families and healthcare workers.
- Assessment of knowledge and compliance.
- Feedback collection and evaluation of educational interventions.
- Documentation of education activities and quality improvement initiatives.

Teaching–learning activities

Role play; patient counseling demonstrations; brochure and poster development; mock patient education sessions; group discussions; community awareness activities; peer teaching and feedback.

Assessment methods

Patient education checklist; evaluation of educational materials; role-play assessment; peer feedback; oral presentation; reflective assignment; logbook review.

Course outcomes (CO)

CO	Course outcome: the fellow will be able to
CO1	Educate patients, families and caregivers on infection prevention and safe healthcare practices.
CO2	Develop culturally appropriate educational materials on infection prevention and control.
CO3	Promote occupational and community infection prevention, including appropriate reporting of exposure incidents.
CO4	Evaluate the effectiveness of infection prevention education and participate in quality improvement activities.

8. Clinical Practice: Postings (840 hours)

Clinical area	Weeks	Hours
Infection Control Department / Hospital Infection Control Team	4	140
Medical and Surgical Wards	4	140
Intensive Care Units (Medical, Surgical and Cardiac ICUs)	4	140
Operation Theatre and Postoperative Recovery Unit	3	100
Central Sterile Supply Department (CSSD)	3	100
Microbiology Laboratory	2	60
Dialysis Unit, Oncology Unit and Isolation Wards	2	60
Environmental Services, Biomedical Waste Management and Occupational Health	2	60
Infection Surveillance, Audit and Quality Improvement	2	40
Total	**26**	**840**

Postings may be arranged according to the hospital roster and availability of clinical learning opportunities. The infection control department orientation should begin in Week 1. The sequence of subsequent postings may be adjusted to support the progressive development of competencies.

Postings account for the 840 clinical practice hours. Theory and simulation/skills laboratory hours are additional, bringing the proposed total programme duration to 1,000 hours. Each posting must conclude with a guide-verified competency assessment and sign-off in the clinical logbook.

8.1 Expected learning in each posting

Posting	Focus
Infection Control Department / Hospital Infection Control Team	Understand infection control policies, committee functions, surveillance procedures, infection control rounds, audit tools and reporting systems.
Medical and Surgical Wards	Apply standard precautions, perform hand hygiene, use PPE correctly, maintain aseptic technique and identify potential infection risks.
Intensive Care Units	Prevent device-associated infections, including CAUTI, CLABSI and VAP; monitor compliance with prevention bundles and implement isolation precautions.

Posting	Focus
Operation Theatre and Postoperative Recovery Unit	Apply surgical asepsis, monitor surgical site infection prevention practices, observe sterile field maintenance and participate in operating theatre infection control audits.
Central Sterile Supply Department (CSSD)	Understand instrument decontamination, cleaning, packaging, sterilization, sterilization monitoring, storage and distribution of sterile supplies.
Microbiology Laboratory	Understand specimen collection and transport, culture and sensitivity reports, identification of common pathogens and laboratory-based infection surveillance.
Dialysis Unit, Oncology Unit and Isolation Wards	Apply infection prevention measures for high-risk patients, follow transmission-based precautions and understand the prevention of blood-borne and opportunistic infections.
Environmental Services, Biomedical Waste Management and Occupational Health	Monitor environmental cleaning, safe biomedical waste segregation, sharps disposal, spill management and occupational exposure reporting.
Infection Surveillance, Audit and Quality Improvement	Collect and analyze infection surveillance data, calculate infection rates using approved definitions, conduct compliance audits and prepare improvement plans.

9. Essential Emergency and Trauma Care Skills and Logbook

The fellow must maintain a clinical logbook documenting all infection prevention and control procedures observed, assisted with or performed. Each entry must be signed by the clinical preceptor and verified by the programme guide.

The following minimum numbers are proposed competency targets for the 840 clinical practice hours. Procedures requiring specialized equipment or restricted access may be completed through supervised observation or simulation where appropriate. All activities must follow institutional policies and applicable infection control guidelines.

9.1 Procedures observed (O)

No.	Procedure	Min.
1	Infection Control Committee meeting or infection control review meeting	2
2	Healthcare-associated infection surveillance and reporting	5
3	CSSD instrument decontamination and sterilization workflow	3
4	Sterilization monitoring and documentation	3
5	Microbiological specimen processing and culture report review	5
6	Environmental cleaning and disinfection audit	5
7	Investigation of suspected healthcare-associated infection clusters or outbreaks	2
8	Occupational exposure management and needle-stick injury reporting process	2
9	Biomedical waste management audit	3
10	Antimicrobial stewardship or microbiology case review	2

9.2 Procedures assisted (A)

No.	Procedure	Min.	Sim
1	Hand hygiene compliance audit	5	
2	PPE selection, donning and doffing	5	Sim
3	Implementation of contact, droplet and airborne precautions	5	Sim
4	Preparation and maintenance of an isolation area	3	Sim
5	Aseptic specimen collection and transport	5	Sim
6	Infection prevention bundle compliance audit	5	
7	Environmental cleaning and disinfection monitoring	5	
8	Preparation of disinfectant solutions according to approved protocols	3	Sim
9	Biomedical waste segregation and waste audit	5	
10	CSSD instrument cleaning, packaging and sterilization workflow	3	
11	Sterilization indicator checking and record verification	3	

No.	Procedure	Min.	Sim
12	Surveillance data collection and infection control documentation	5	
13	Investigation and documentation of occupational exposure incidents	2	Sim
14	Patient and staff education on infection prevention	5	

9.3 Procedures performed (P)

No.	Procedure	Min.	Sim
No.	**Procedure / Activity**	**Minimum**	**Sim.**
1	Hand hygiene using the recommended technique	10	Sim
2	Correct donning and doffing of PPE	10	Sim
3	Selection and implementation of standard precautions	10	Sim
4	Selection and application of transmission-based precautions	5	Sim
5	Aseptic technique during nursing procedures	10	Sim
6	Safe handling and transport of clinical specimens	5	Sim
7	Biomedical waste segregation and sharps disposal	10	Sim
8	Spill management for blood and body fluids according to protocol	3	Sim
9	Environmental cleaning and disinfection checklist completion	5	
10	Monitoring and documentation of high-touch surface cleaning	5	
11	Infection prevention bundle compliance assessment	5	
12	Completion of a hand hygiene or PPE compliance audit	3	
13	Completion of an infection surveillance data collection form	5	
14	Calculation of an infection rate using approved surveillance data	3	
15	Preparation of an infection control incident or audit report	3	
16	Patient and family education on infection prevention	5	
17	Preparation of an infection prevention awareness poster or educational leaflet	2	
18	Documentation of occupational exposure and reporting procedures through a supervised case exercise	2	Sim
19	Development of a corrective action plan based on an infection control audit	2	

9.4 Logbook

- Procedure documentation: Record the date, clinical area, procedure or activity, level of participation (O/A/P), clinical or simulation setting, competency achieved reflection and preceptor's signature.
- Guide verification: The clinical guide must verify competencies at the end of each posting. The Fellowship Coordinator should review the logbook at Weeks 8, 16 and 24.
- Case studies: Complete at least 10 case studies or case presentations covering healthcare-associated infections, isolation precautions, device-associated infection prevention, surgical site infection prevention, antimicrobial resistance, environmental hygiene and outbreak management.
- Audit reports: Complete at least three infection control audits, such as hand hygiene, PPE compliance, environmental cleaning or biomedical waste management, with findings and recommendations.
- Surveillance activity: Participate in infection surveillance and complete at least one supervised surveillance report using approved hospital data and definitions.
- Health education: Conduct at least five documented infection prevention education sessions for patients, caregivers or healthcare workers.
- Competency assessment: Demonstrate satisfactory performance in hand hygiene, PPE use, standard precautions, transmission-based precautions, aseptic technique, biomedical waste management and documentation.

- Submission: Submit the completed logbook to the programme guide one week before the final assessment.

10. Scheme of Assessment

10.1 Final assessment and exit examination

The examination is conducted by the School of Nursing Science and Technology, Malla Reddy Vishwavidyapeeth. The final assessment by the assigned guides has three components.

Component	Details	Marks	Minimum (50%)
I. Multiple choice questions	Written paper; 1 mark per question; blueprint in 10.3	25	12.5
II. Practical skills assessment	Three case scenarios with discussion; 20 marks each	60	30
III. Logbook maintenance	Completeness and regularity; accuracy of entries; guide verification	15	7.5
Total		**100**	**50**

10.2 Criteria to pass

- Minimum 50% in each of the three components and minimum 50% aggregate (50 of 100).
- In terms of the earlier wording: 50% in theory (MCQ) and 50% in practical separately, and 50% in internal assessment. The logbook, which records the continuous assessment by guides and preceptors, is the internal assessment component.
- Minimum 80% attendance in theory, simulation and clinical postings; missed postings must be completed before the final assessment.
- A fellow who fails a component repeats only that component, at the next scheduled assessment within 6 months, once.
- Any additional output or deliverable (for example a case study, audit or teaching session) is decided with the guide and needs prior written approval of the Fellowship Committee.

10.3 MCQ blueprint (25 marks)

Unit	Title	Theory hours	MCQs
I	Introduction to Infection Control and Microbiology Basics	16	4
II	Standard Precautions and Hand Hygiene	14	4
III	Transmission-Based Precautions and Isolation Practices	14	4
IV	Healthcare-Associated Infections (HAIs)	14	4
V	Environmental Cleaning and Equipment Disinfection	14	4
VI	Antimicrobial Stewardship and Multidrug-Resistant Organisms (MDROs)	14	3
VII	Patient and Family Education in Infection Prevention	14	2
Total		**100**	**25**

10.4 Practical skills assessment (60 marks)

Each fellow is assessed on three case scenarios in a simulated or clinical setting, with discussion. The cases are drawn so that the three together cover trauma or shock, a cardiac or respiratory emergency, and burns, obstetric or other emergencies. Each case carries 20 marks.

Criterion	Marks
Infection risk assessment and identification of infection prevention needs	5
Selection of appropriate precautions and development of an infection control plan	4
Technical skills (hand hygiene, PPE, aseptic technique, disinfection or surveillance procedures, as relevant)	6
Patient safety, biomedical waste management, communication and documentation	3
Discussion (rationale, complications, guidelines and evidence-based practice)	2
Total per case	**20**

Criterion	Marks
Total for three cases	**60**

10.5 Logbook assessment (15 marks)

Criterion	Marks
Completeness and regularity	5
Accuracy of entries	5
Guide verification	5
Total	**15**

10.6 Formative assessment

Unit-wise MCQ tests, case presentations and viva (the assessment methods listed under each unit), the logbook assessment are used as formative assessment and feedback during the fellowship; they do not carry marks in the final result. The guide records progress at the end of each posting.

10.7 Award of the certificate

The Fellowship in Infection Prevention and Control Nursing certificate is awarded by Malla Reddy Vishwavidyapeeth (Deemed to be University) to a fellow who satisfies the criteria in 10.2, on the recommendation of the Fellowship Committee and under the signature of the Controller of Examinations and the Dean.

11. Infrastructure, Faculty and Quality Assurance

11.1 Clinical facilities

- Teaching hospital with an Infection Control Department or Hospital Infection Control Team, medical and surgical wards, intensive care units, operation theatres, isolation facilities, dialysis unit and other relevant clinical areas to provide adequate supervised clinical exposure.
- Functional Infection Control Committee with established infection prevention and control policies, protocols, surveillance systems and reporting mechanisms.
- Central Sterile Supply Department (CSSD) with facilities for instrument cleaning, decontamination, packaging, sterilization, storage and distribution of sterile supplies.
- Microbiology laboratory with facilities for specimen processing, culture and sensitivity testing, and identification of clinically relevant microorganisms.
- Biomedical waste management facilities with appropriate segregation, collection, storage and disposal systems in accordance with applicable regulations.
- Environmental services for routine and terminal cleaning, disinfection, spill management and monitoring of environmental hygiene.
- Occupational health services for immunization, needle-stick injury management, exposure reporting and healthcare worker safety.
- Affiliation or Memorandum of Understanding (MoU) with suitable clinical facilities, where required, to provide exposure to infection surveillance, outbreak investigation, antimicrobial stewardship and specialized infection control practices.

11.2 Simulation laboratory

- Hand hygiene training facilities, including hand washing stations, alcohol-based hand rub and hand hygiene demonstration materials.
- Personal protective equipment (PPE), including gloves, masks, gowns, goggles and face shields, for donning and doffing practice.
- Isolation room simulation facilities with appropriate signage and demonstration of contact, droplet and airborne precautions.

- Aseptic technique practice stations with dressing materials, sterile instruments, specimen containers and simulated clinical equipment.
- Demonstration materials for environmental cleaning, surface disinfection, spill management and safe handling of contaminated materials.
- Biomedical waste segregation stations with color-coded bins and sharps containers for demonstration and practice.
- Demonstration materials for CSSD workflow, including instrument cleaning, packaging, sterilization indicators and storage procedures.
- Simulated specimen collection and transport materials, including appropriate containers, labels and documentation forms.
- Infection surveillance forms, audit checklists, outbreak investigation exercises and sample infection control records.
- Educational charts, posters and videos on infection prevention, antimicrobial resistance and healthcare-associated infection prevention.

11.3 Classroom and learning resources

- Smart classroom, library and digital resources, and online access to current resuscitation and trauma guidelines
- Learning management system for notes, videos and logbook forms

11.4 Quality assurance

- Fellow feedback on every unit and posting; guide feedback to the committee at mid-point and at the end
- Annual curriculum review by the Fellowship Committee, with updating to current guidelines
- Grievance redressal through the Fellowship Coordinator; escalation to the Dean
- Ethics: informed consent and confidentiality in all patient contact; supervised practice only within the scope of a registered nurse

12. Suggested References

- World Health Organization (WHO). Guidelines on Core Components of Infection Prevention and Control Programmes.
- World Health Organization (WHO). WHO Guidelines on Hand Hygiene in Health Care.
- Centers for Disease Control and Prevention (CDC). Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings.
- Bennett & Brachman's Hospital Infections.
- Murray, Rosenthal and Pfaller. Medical Microbiology.
- Indian Council of Medical Research (ICMR). Guidelines on Antimicrobial Resistance and Antimicrobial Stewardship.
- Government of India. Biomedical Waste Management Rules and applicable infection prevention guidelines.
- National Centre for Disease Control (NCDC). Guidelines on Infection Prevention, Disease Surveillance and Outbreak Management.

Annexure A: Final Assessment Sheet – MRV Fellowship

A. Fellow details

Name of fellow	

Fellowship ID	
Institution / department	
Batch / year	

Component I: Multiple choice questions (25 marks)

Number of questions: _____ Marks obtained: _____ / 25 Result: ☐ Pass ☐ Fail (minimum 50% required)

Component II: Practical skills assessment (60 marks)

Case	Maximum marks	Marks obtained	Examiner signature
Case 1	20		
Case 2	20		
Case 3	20		
Total	**60**		

Result: ☐ Pass ☐ Fail (minimum 50% required)

Component III: Logbook maintenance (15 marks)

Criteria: completeness and regularity; accuracy of entries; guide verification. Marks obtained: _____ / 15 Result: ☐ Pass ☐ Fail (minimum 50% required)

Overall assessment summary

Component	Maximum marks	Marks obtained	Pass / fail
MCQs	25		
Practical skills	60		
Logbook	15		
Total	**100**		

Final result: ☐ Pass ☐ Fail (minimum 50% aggregate required)

Additional outputs (if approved by the Fellowship Committee):

_____

Certification

We certify that the above final assessment and exit examination have been conducted strictly in accordance with the approved MRV Fellowship guidelines.

Date: _____

1. Name of guide / examiner	
Signature	
2. Name of guide / examiner	
Signature	

Annexure B: Logbook Formats

B.1 Procedure log

Date	Patient ID	Procedure	Level (O/A/P)	Clinical / Sim	Outcome and reflection	Preceptor signature

Date	Patient ID	Procedure	Level (O/A/P)	Clinical / Sim	Outcome and reflection	Preceptor signature

B.2 Posting summary

Posting	Dates	Hours completed	Competencies signed off	Guide signature
Infection Prevention and Control Department				
Medical and Surgical Wards				
Intensive Care Units (ICUs)				
Operation Theatre and Post-Anesthesia Care Unit (PACU)				
Central Sterile Services Department (CSSD)				
Microbiology Laboratory				
Dialysis, Oncology and Isolation Units				
Environmental Hygiene, Biomedical Waste Management and Occupational Health				
Infection Surveillance, Audit and Quality Improvement				

B.3 Case study / presentation log

No.	Date	Diagnosis / condition	Area	Guide remarks and signature

Annexure C: Certificate of Completion (format)

MALLA REDDY VISHWAVIDYAPEETH

(Deemed to be University)

This is to certify that

_____

Fellowship ID _____ has successfully completed the 26-week

FELLOWSHIP IN INFECTION PREVENTION AND CONTROL NURSING

At the School of Nursing Science and Technology and has passed the final assessment and exit examination held in _____ with a total of _____ / 100 marks.

Date of issue: _____	Place: Hyderabad
Controller of Examinations	Dean, School of Nursing Science and Technology