

**Faculty Medicine- Microbiology Sept 2024****PO, CO and Mapping****Annexure-57 of AC-50/2024****(MGM Kamothe, Aurangabad, Sanpada and Nerul)**

| Program and Course Outcomes                             |                                          |
|---------------------------------------------------------|------------------------------------------|
| Step 1: Obtain course & Program outcomes                |                                          |
| Program Outcomes (PO) (As per NMC Guidelines – 12.9.24) |                                          |
| Program Code                                            | Program Name                             |
| 101                                                     | MBBS                                     |
| PO1                                                     | Primary care Physician                   |
| PO2                                                     | Healthcare Team Leader and Member        |
| PO3                                                     | Communicator with patients and family    |
| PO4                                                     | Life long Learner                        |
| PO5                                                     | Professional                             |
| PO6                                                     | Critical thinker                         |
| PO7                                                     | Researcher                               |
| PO8                                                     | Digitally literate (As per workshop)     |
| PO9                                                     | Developed Holistically (As per workshop) |

| Course Outcomes (CO) |                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      | <b>Microbiology (As per NMC Guidelines – 12.9.24)</b>                                                                                                                                                                                                                                                                                                               |
|                      |                                                                                                                                                                                                                                                                                                                                                                     |
| CO1                  | Know and describe etiology, Morphology, cultural characteristics, pathogenesis, Clinical manifestations of diseases caused by microorganisms and plan and interpret lab investigations for diagnosis of infectious diseases and do clinical correlation, describe prophylaxis for preventable infectious diseases. Describe commensals and opportunistic infections |
| CO2                  | Know proper methods of collection, storage and transport of clinical material for microbiological investigations. To maintain respect for patients samples and confidentiality                                                                                                                                                                                      |
| CO3                  | Understand the principles of Immunology, and its application in the diagnosis and prevention of infectious diseases, Autoimmune diseases and Hypersensitivity                                                                                                                                                                                                       |
| CO4                  | Understand methods of disinfection and sterilisation and their application to control and prevent hospital and community acquired infections including Universal safety precautions and waste disposal                                                                                                                                                              |
| CO5                  | Understand different types of antimicrobials and how to use it judiciously to prevent antimicrobial resistance/ antibiotic stewardship                                                                                                                                                                                                                              |
| CO6                  | The student should be well equipped with knowledge of prevalent communicable diseases of national importance, and of new emerging and re-emerging pathogens. Knowledge about outbreak investigation and its control                                                                                                                                                 |

**Step 2: Correlate COs to POs**

| Course code & name |                                                                                                                                                                                                                                                                                                                                                                     | Program code & name                     |                                                |                                                        |                             |                     |                            |                       |                              |                                  |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------|--------------------------------------------------------|-----------------------------|---------------------|----------------------------|-----------------------|------------------------------|----------------------------------|
| CO No.             | CO                                                                                                                                                                                                                                                                                                                                                                  | PO1<br>Primary<br>care<br>Physicia<br>n | PO2<br>Healthcare<br>Team Leader<br>and Member | PO3<br>Communicato<br>r with<br>patients and<br>family | PO4<br>Life long<br>Learner | PO5<br>Professional | PO6<br>Critical<br>thinker | PO7<br>Researche<br>r | PO8<br>Digitally<br>literate | PO9<br>Developed<br>Holistically |
| CO 1               | Know and describe etiology, Morphology, cultural characteristics, pathogenesis, Clinical manifestations of diseases caused by microorganisms and plan and interpret lab investigations for diagnosis of infectious diseases and do clinical correlation, describe prophylaxis for preventable infectious diseases. Describe commensals and opportunistic infections | 3                                       | 3                                              | 2                                                      | 3                           | 3                   | 3                          | 3                     | 2                            | 2                                |
| CO 2               | Know proper methods of collection, storage and transport of clinical material for microbiological investigations. To maintain respect for patients samples and confidentiality                                                                                                                                                                                      | 3                                       | 3                                              | 3                                                      | 2                           | 2                   | 2                          | 3                     | 1                            | 2                                |



|  |                                                                                 |  |  |  |  |  |  |  |  |  |
|--|---------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
|  | Clues :                                                                         |  |  |  |  |  |  |  |  |  |
|  | 1. Evaluate if the Course Outcome (CO) Correlate with the explicitly stated PO. |  |  |  |  |  |  |  |  |  |
|  | 2. Please Mark the coorelation between CO / PO using the following scale.       |  |  |  |  |  |  |  |  |  |
|  | 0 - No correlation                                                              |  |  |  |  |  |  |  |  |  |
|  | 1 - Slight (low) correlation                                                    |  |  |  |  |  |  |  |  |  |
|  | 2 - Moderate (medium) correlation                                               |  |  |  |  |  |  |  |  |  |
|  | 3- Substantial (High) correlation                                               |  |  |  |  |  |  |  |  |  |

**Clues :**

1. Identify the major course comptencies given in the curriculum document.
2. Map which of the CO and PO is addressed by the TL activities used in the module Using
  - I – Outcomes introduced
  - P – Students afforded opportunities to practice
  - R – Reinforcement of practiced outcomes
  - M/C – Students demonstrate mastery/competency

| CO     |               | Modules in Microbiology                    |            |                          |                                 |                                                      |                |                              |                        |                                     |                              |                                                     |
|--------|---------------|--------------------------------------------|------------|--------------------------|---------------------------------|------------------------------------------------------|----------------|------------------------------|------------------------|-------------------------------------|------------------------------|-----------------------------------------------------|
| CO No. | CO Definition | General Micro and ethics and communication | Immunology | CVS and Blood infections | GI and Hepatobiliary infections | Musculo skeletal and skin and soft tissue infections | CNS infections | Respiratory tract infections | Genitourinary and STIs | Zoonotic diseases and Miscellaneous | Hospital acquired Infections | Antimicrobial resistance and antibiotic stewardship |

[illegible]

[illegible]

|  |                                                                                                |  |  |  |  |  |  |  |  |   |   |   |
|--|------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|---|---|---|
|  | new emerging and re-emerging pathogens. Knowledge about outbreak investigation and its control |  |  |  |  |  |  |  |  | I | I | I |
|--|------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|---|---|---|