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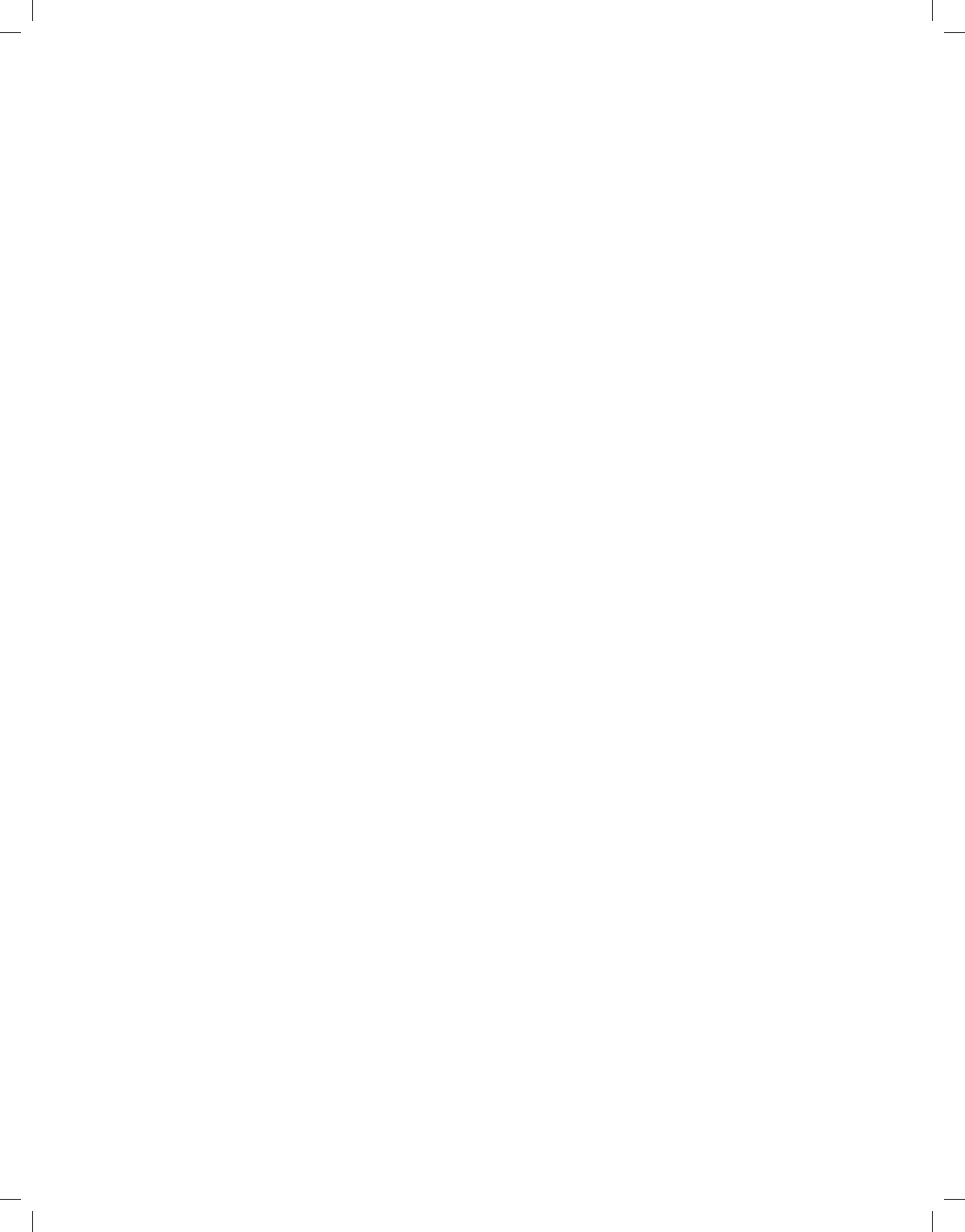
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Index of Competencies/Code of Competencies

- MI (Microbiology).
- Other subjects (for integrated topics): BI (Biochemistry), PA (Pathology), PH (Pharmacology), CM (Community Medicine), DR (Dermatology and Venerology), DE (Dentistry), IM (General Medicine), PE (Pediatrics), SU (General Surgery), OR (Orthopedics) and CT (Respiratory Medicine).
- Competency numbers written in bold indicate the topics of practical Microbiology/skill assessment/DOAP (Demonstrate, Observe Assess and Perform).



Abbreviations

+ve: Positive	BCGF: B-cell growth factor
2ME: 2-mercaptoethanol	BCR(s): B-cell receptor(s)
5-HT: 5-hydroxy tryptamine	BCYE agar: Buffered charcoal yeast extract agar
AAV: Adeno-associated virus	BDBV: Bundibugyo virus
Ab(s): Antibody(ies)	BEBOV: Bundibugyo ebola virus
ACE 2: Angiotensin-converting enzyme 2	BFP: Biological false-positive
Ach: Acetylcholine	BHIA: Brain heart infusion agar
ADCC: Antibody-dependent cytotoxic cells	BHIB: Brain heart infusion broth
ADS: Antidiphtheria serum	BL: Borderline lepromatous
AETCOM: Attitude, ethics and communication	BMW: Biomedical waste
AFB: Acid-fast bacilli	BOD incubator: Biological (biochemical) oxygen demand incubator
AFLP: Amplified fragment length polymorphism	BP: Blood pressure
Ag(s): Antigen (s)	BPL: Beta propiolactone
Ag-Ab reaction: Antigen-antibody reactions	BSE: Bovine spongiform encephalopathy
AGN: Acute glomerulonephritis	BSL: Biosafety level
AGS: Antigas gangrene serum	BT: Blood transfusion
AIDS: Acquired immunodeficiency disease	BT: Borderline tuberculoid
ALG: Antilymphocyte globulin	BUN: Blood urea nitrogen
ALS: Antilymphocytes serum	C/Cs: Cultural characteristics
ALT: Alanine aminotransferase	C/F(s): Clinical feature(s)
AMA(s): Antimicrobial agent(s)	C: Complement
AMB: Amphotericin B	CA MRSA: Community-acquired MRSA
AMC: Acetyl methyl carbinol	CABSI: Catheter-associated bloodstream infection
AMI: Antibody-mediated immunity	C-activation: Complement activation
APCs: Antigen-presenting cells	CAM: Chorioallantoic membrane
APSGN: Acute post-streptococcal glomerulonephritis	CAMP test: Christie-Atkins-Munch-Peterson test
APT: Alum precipitated toxoid	CAUTI: Catheter-associated urinary tract infection
APW: Alkaline peptone water	CBC: Complete blood count
ARC: AIDS-related complex	CBNAAT: Cartridge-based nucleic acid amplification test
ARDS: Acute respiratory distress syndrome	CCHF: Crimean Congo hemorrhagic fever
ARF: Acute rheumatic fever	CD: Cluster of differentiation
ART: Antiretroviral therapy	CDC: Centres for Disease Control and Prevention
ASO test: Antistreptolysin O test	CFP-10: Culture filtrate protein -10
ASOM: Acute suppurative otitis media	CFT: Complement fixation test
ASP: Antimicrobial Stewardship Program	CFW stain: Calco-fluor-white stain
AST: Antimicrobial sensitivity testing	CGD: Chronic Granulomatous disease
ASV: Antisnake venom	Ch.: Chapter
ATCC: American type culture collection	CHD: Congenital heart disease
ATG: Anti-thymocyte globulin	CIE: Counter immunoelectrophoresis
ATS: Anti-tetanus serum	CIEBOV: Côte d' Ivoire ebolavirus
ATS: Anti-thymocyte serum	CJD: Creutzfeldt-Jacob disease
B/R(s): Biochemical reaction (s)	CL crystals: Chacot-Leyden crystals
b/w (B/W): Between	CLED medium: Cysteine lactose electrolyte deficient medium
BAL: Bronchoalveolar lavage	CMI: Cell-mediated immunity
BB: Borderline	
BCDF: B-cell differentiation factor	
BCG: Bacillus Calmette Guerin	

- xxvi CMN group: Corynebacteria-mycobacteria-nocardiae group
 CMV: Cytomegalovirus
 CNS: Central nervous system
 CoNS: Coagulase-negative *Staphylococcus*
 CoPS: Coagulase-positive *Staphylococcus*
 COVID-19: Coronavirus disease -19
 CPE(s): Cytopathic effect(s)
 CPIS: Clinical pulmonary infection score
 CR(s): Complement receptor(s)
 CRF: Coagulase reacting factor
 CRP: C-reactive protein
 CSOM: Chronic suppurative otitis media
 CVS: Cardiovascular system
 D/D: Differential diagnosis
 DCA: Deoxycholate citrate agar
 DEC: Diethyl carbamazine
 DGIM: Dark-ground (field) illumination microscope
 DHF: Dengue hemorrhagic fever
 DIC: Disseminated intravascular coagulation
 DM: Diabetes mellitus
 DOAP: Demonstrate, observe, access and perform
 DP vaccine: Diphtheria and pertussis vaccine
 DPT vaccine: Diphtheria, pertussis and tetanus vaccine
 ds: double stranded
 DSS: Dengue shock syndrome
 DT vaccine: Diphtheria and tetanus vaccine
 DTH: Delayed-type hypersensitivity
 E test: Epsilomer test
 e.g.: *exempli gratia* (for example)
 EB: Elementary body
 EBV: Epstein-Barr virus
 EC: Exposure code
 EIA: Enzyme immunoassay
 ELFA: Enzyme-linked fluorescent assay
 ELISA: Enzyme-linked immunosorbent assay
 E-M pathway: Embden-Meyerhof pathway
 EM: Electron microscope
 ESAT-6: Early secretory antigen target-6
 ESBL: Extended spectrum β -lactamase
 ET tube: Endotracheal tube
 EV: *Enterovirus*
 FDA: Food and Drug Administration
 f-IPV: Fractional injectable polio vaccine
 FITC: Fluorescein isothiocyanate
 FM: Fluorescent microscope
 FNAC: Fine needle aspiration cytology
 FT: Formal toxoid/fluid toxoid
 FTA-ABS test: Fluorescent *Treponema* antibody-ABSorption test
 FTLV: Feline T-cell lymphotropic virus
 G S L M: Glucose sucrose lactose mannitol
 GBS: Guillain-Barre syndrome
 GC: Genital chlamydiasis
 G-CSF: Granulocyte-colony stimulating factor
 GGMS stain: Grocott Gomori's methenamine silver stain
 GI: Genital infection
 GISAID: Global initiative on sharing avian influenza data
 GIT: Gastrointestinal tract
 GLC: Gas-liquid chromatography
 GM-CSF: Granulocyte macrophage-colony stimulating factor
 GNB: Gram-negative bacilli
 GNC: Gram-negative cocci
 GPB: Gram-positive bacilli
 GPC: Gram-positive cocci
 GU: Gonococcal urethritis
 H & E stain: Hematoxylin and eosin stain
 H/o: History of
 HA MRSA: Hospital-acquired MRSA
 HAI test: Hemagglutination inhibition test
 HAI(s): Healthcare-associated infection(s)
 HAV: Hepatitis A virus
 Hb: Hemoglobin
 HBLV: Human B-cell lymphotropic virus
 HBV: Hepatitis B virus
 HBVIg: Hepatitis B virus immunoglobulin
 HCC: Hepatocellular carcinoma
 HCF(s): Healthcare facility/facilities
 hCG: Human chorionic gonadotropin
 HCoV-EMC: Human coronavirus-Erasmus Medical Centre
 HCV: Hepatitis C virus
 HCW(s): Healthcare worker(s)
 HDN: Hemolytic disease of newborn
 HDP: Hanging drop preparation
 HDV: Hepatitis D virus
 HEV: Hepatitis E virus
 HFMD: Hand-foot-mouth disease
 HFV: Hepatitis F virus
 HGE: Human granulocytic ehrlichiosis
 HGV: Hepatitis G virus
 HHV (1-8): Human herpes virus (1-8)
 HI: Humoral immunity
 Hib: *Haemophilus influenzae* type b
 HIV: Human immunodeficiency virus
 HLA: Human leukocyte antigen
 HME: Human monocytic ehrlichiosis
 HMW: High molecular weight
 HPLC: High performance liquid chromatography
 HPV: Human papilloma virus
 hr: Hour
 HRCT: High-resolution CT
 HSV-1/2: Herpes simplex virus-1/2
 HTLV: Human T-cell lymphotropic virus
 HUS: Hemolytic uremic syndrome
 IARC: International Agency for Research on Cancer

- IC: Inclusion conjunctivitis
 IC: Intracutaneous
 ICC(s): Immunocompetent cell(s)
 ICMR: Indian Council of Medical Research
 ICRC: Indian Cancer Research Center
 ICSOL(s): Intracranial space-occupying lesion(s)
 ICT: Immunochromatographic test
 ICTC: Integrated Counseling and Testing Centre
 ID: Intra-dermal
 IDD(s): Immunodeficiency disease(s)
 IET: Immuno enzyme test
 IF test/assay: Immunofluorescent test/assay
 IFN: Interferon
 IFT: Immunoferritin test
 Ig (s): Immunoglobulin (s)
 IGRA: Interferon gamma release assay
 IHA test: Indirect hemagglutination test
 IM: Intramuscular
 IMG: Indian medical graduate
 IMN: Infectious mononucleosis
 IN test: Indole nitrate/Indoso nitrate) test
 IP: Incubation period
 IPV: Injectable polio vaccine
 Ir: Immune response
 ITH: Immediate type hypersensitivity
 IV: Intravenous
 JC virus: John Cunningham virus
 JE: Japanese Encephalitis
 KB method: Kopeloff's and Beerman's method
 KFD: Kyasnur forest disease
 KLB: Klebs-Loeffler bacillus
 KSHV: Kaposi's sarcoma-associated herpes virus
 LAK cells: Lymphokine activated killer cells
 LAMP: Loop-mediated isothermal amplification
 LATS: Long-acting thyroid stimulator
 LBW: Low-birth weight
 LCB stain: Lactophenol cotton blue stain
 LCM virus: Lymphocytic choriomeningitis virus
 LD: Lethal dose
 LF(s): Lactose fermenter(s)
 LGL: Large granular lymphocyte
 LGV: Lymphogranuloma venereum
 LJ medium: Lowenstein Jensen medium
 LL: Lepromatous leprosy
 LLF(s): Late lactose fermenter(s)
 LMW: Low-molecular weight
 LPA: Line probe assay
 LPS(s): Lipopolysaccharide(s)
 LTRs: Long-terminal repeat sequences
 MAC: *Mycobacterium avium*-complex
 MAC-ELISA: IgM antibody capture enzyme-linked immunosorbent assay
 MALDI-TOF: Matrix-assisted laser desorption ionization time of flight
 MAT: Microscopic agglutination test
 MCH: Mean corpuscular hemoglobin
 MCHC: Mean corpuscular hemoglobin concentration
 MCV: Mean corpuscular volume
 MCV: Molluscum contagiosum virus
 MDR: Multidrug resistance
 MDR-TB: Multidrug-resistance tuberculosis
 MERS-CoV: Middle-East respiratory syndrome-related coronavirus
 MFS stain: Masson Fontana silver stain
 MHA: Muller Hinton agar
 MHC: Major histocompatibility complex
 MIC: Minimum inhibitory concentration
 MID: Minimum infecting dose
 MIO test: Motile indole ornithine test
 MIS-C: Multiorgan inflammatory syndrome in children
 MLD: Minimum lethal dose
 MMR vaccine: Measles-mumps-rubella vaccine
 MMRV vaccine: Measles-mumps-rubella varicella vaccine
 MOHFW: Ministry of Health and Family Welfare
 MOI: Multiplicity of infection
 MOMP: Major outer membrane protein
 MR vaccine: Measles-rubella vaccine
 MRSA: Methicillin-resistance *Staph. aureus*
 MSP: Mycobacteria as skin pathogen
 MSSA: Methicillin-susceptible *Staph. aureus*
 MTC: *Mycobacterium tuberculosis* complex
 MW: Molecular weight
 NA: Nucleic acid
 NACO: National Aids Control Organisation (New Delhi)
 NANB hepatitis: Non-A non-B hepatitis
 NASBA: Nucleic acid sequence base amplification
 NB: Nutrient broth
 NCTC: National collection of type culture
 NGO(s): Non-government organization(s)
 NGU: Non-gonococcal urethritis
 NIH: National Institute of Health
 NIV: National Institute of Virology (Pune)
 NK cells: Natural killer cells
 NLF(s): Non-lactose fermenter(s)
 NS: Normal saline
 NSF(s): Non-sucrose fermenter(s)
 NTM: Nontuberculous mycobacteria
 OF test: Oxidation-fermentation test
 OMP: Outer membrane protein
 ONPG test: O-Nitro phenyl- β -D-galactosidase test
 OPV: Oral polio vaccine
 PAGE: Polyacramide gel electrophoresis
 PAIR: Puncture, aspiration, injection and reaspiration
 PAMPs: Pathogen-associated molecular patterns
 PAMs: Pulmonary alveolar macrophages
 PANGOLIN: Phylogenetic Assignment of Named Global Outbreak LINEage

- PAS stain: Periodic-acid Schiff stain
 PBS: Peripheral blood smear
 PCA: Passive cutaneous anaphylaxis
 PCM: Phase-contrast microscope
 PCP: *Pneumocystis pneumonia*
 PCR: Polymerase chain reaction
 PCV: Packed cell volume
 PDAB: Para-dimethyl aminobezadehyde
 PEM: Protein-energy malnutrition
 PEP: Post-exposure prophylaxis
 PFGE: Pulse field gel electrophoresis
 PHC: Primary Health Center
 PHOL stain: Pal, Hasegawa, Ono and Lee stain
 PIA: *Pseudomonas*-isolation agar
 PIMS: Pediatric inflammatory multisystem syndrome
 PIMs: Potentially infectious materials
 PJP: *Pneumocystis jirovecii* pneumonia
 PK reaction: Praunitz-Kustner reaction
 PML: Progressive multifocal leuko-encephalopathy
 PMNs: Polymorphonuclear cells
 Pn G: Penicillin G
 PPA test: Phenyl pyruvic acid test
 PPD: Purified protein derivative
 PPE (s): Personal protective equipment (s)
 PPI: Pulse polio immunization
 PPLO: Pleuropneumonia like organism
 ppm: parts per million
 PPNG: Penicillinase-producing *Neisseria gonorrhoeae*
 PPTCT: Prevention of parent-to-child transmission
 PRAS: Prereduced anaerobic system
 PRNT: Plaque reduction neutralization test
 PRP: Polyribosyl ribitol phosphate
 PRRs: Pattern recognition receptors
 PT medium: Potassium tellurite medium
 PVC: Polyvinylchloride
 PW: Peptone water
 PYG agar: Peptone yeast extract glucose agar
 PYR: L- pyrrolidonyl β -naphthylamide
 RA: Rheumatoid arthritis
 RB: Reticulate body
 RBF: Rat bite fever
 RCMM: Robertson's cooked meat medium
 RE system: Reticuloendothelial system
 REA: Restriction endonuclease analysis
 RF: Rheumatoid factor
 RFLP: Restriction fragment length polymorphism
 RIA: Radioimmunoassay
 RNP: Ribonucleoprotein
 RNTCP: Revised National Tuberculosis Control Program
 RPR test: Rapid plasma reagin test
 RSV: Respiratory syncytial virus
 RT-PCR: Reverse transcriptase PCR
 RTF: Resistance transfer factor
 S/C: Subculture
 SABE: Subacute bacterial endocarditis
 SALT: Skin-associated lymphoid tissue
 SARS-CoV (1 and 2): Severe acute respiratory syndrome related coronavirus (1 and 2)
 SAT: Standard agglutination test
 SC: Status code
 SC: Subcutaneous
 SCC: Squamous cell carcinoma
 SDA: Sabouraud dextrose agar
 SDA: Strand displacement amplification
 SDL: Self directed learning
 SDS-PAGE: Sodium dodecyl sulfate-polyacramide gel electrophoresis
 SGD: Small group discussion
 SIM test: Sulfide indole motility test
 SIV: Simian immunodeficiency virus
 SLE: Systemic lupus erythematosus
 SLT: Shiga-like toxin
 Sp./spp.: Species
 SPA: Surface protein antigen
 SPE: Streptococcal pyrogenic exotoxin
 SPS: Sodium polyanethol sulfonate
 ss: Single stranded
 SSI: Surgical site infection
 SSPE: Subacute sclerosing panencephalitis
 SSS: Specific soluble substance
 SSSS: Staphylococcal-scalded skin syndrome
 STSS: Streptococcal toxic shock syndrome
 SUDV or SEBOV: Sudan ebola virus
 SWG: Standard wire gauge
 TAFV: Tai forest ebola virus
 TATA: Tumor-associated transplant antigen
 Tc cells: T cytotoxic cells (cytotoxic T cells)
 TCBS agar: Thiosulfate citrate bile salt sucrose agar
 TCGF: T cell growth factor
 TCID: Tissue culture infective dose
 TCR(s): T-cell receptor(s)
 Td : Diphtheria toxoid
 TF: Transfer factor
 Th cells: T helper cells (CD4+)
 TIG: Tetanus immunoglobulin
 TIP: Translation inhibiting protein
 TLRs: Toll-like receptors
 TMA: Transcription-mediated amplification
 TNF: Tumor necrosis factor
 TPHA test: *Treponema pallidum* Hemagglutination test
 TPI test: *Treponema pallidum* immobilization test
 TPPA test: *Treponema pallidum* particle agglutination test
 TRIC: Trachoma inclusion conjunctivitis
 TSI medium: Triple sugar iron medium
 TSS: Toxic shock syndrome
 TSST: Toxic shock syndrome toxin
 TSTA: Tumor-specific transplant antigen

TT: Tetanus toxoid
TT: Tuberculoid type
UGC: Urogenital chlamydiasis
URTI: Upper respiratory tract infection
US FDA: United State Food and Drug Administration
UV light (rays): Ultraviolet light (rays)
VAP: Ventilator-associated pneumonia
VDPV: Vaccine derived polio virus
VDRL test: Venereal Disease Research Laboratory test
-ve: Negative
VHF: Viral hemorrhagic fever
VISA: Vancomycin intermediate *Staph. aureus*

VPF: Vascular permeability factor
VRE: Vancomycin-resistant *Enterococcus*
VRSA: Vancomycin resistant *Staph. aureus*
VTM: Viral transport medium/media
VZV: Varicella zoster virus
WB test: Western blot test
WPV: Wild polio virus
XDR: Extended drug resistance
XDR-TB: Extended drug resistance tuberculosis
XLD medium: Xylose lysine deoxycholate medium
ZEBOV: Zaire ebola virus
ZN stain: Ziehl-Neelsen stain

