

# Clinical Question Bank 1-25

*Clinical* **Question Bank** includes 109 Studies with 307 original images & 13 videos to illustrate historical and contemporary clinical microbiology for students to investigate.

Clinical 1-5 Clinical 6-10 Clinical 11-15 Clinical 16-20 Clinical 21-25

## Clinical 1 Biosafety Clinical Question Bank 1.1

## **Clinical 2 Selective & Differential Media**

*Clinical* Question Bank 2.1 *Clinical* Question Bank 2.2 *Clinical* Question Bank 2.3 *Clinical* Question Bank 2.4

# **Clinical 3 Hemolysis**

*Clinical* Question Bank 3.1 *Clinical* Question Bank 3.2 *Clinical* Question Bank 3.3 *Clinical* Question Bank 3.4

# **Clinical 4 Staphylococcus**

Clinical Question Bank 4.1 Clinical Question Bank 4.2 Clinical Question Bank 4.3

## Clinical 5 Beta-Hemolytic Streptococci

*Clinical* Question Bank 5.1 *Clinical* Question Bank 5.2 *Clinical* Question Bank 5.3 *Clinical* Question Bank 5.4 *Clinical* Question Bank 5.5 *Clinical* Question Bank 5.6

# Clinical 6 Streptococcus pneumoniae

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Clinical 1-5

### *Clinical* Question Bank 6.1 *Clinical* Question Bank 6.2 *Clinical* Question Bank 6.3 *Clinical* Question Bank 6.4

# *Clinical* 7 Group D Enterococci/Streptococci

Clinical Question Bank 7.1

## **Clinical 8 Skin & Nose Swabs**

*Clinical* Question Bank 8.1 *Clinical* Question Bank 8.2 *Clinical* Question Bank 8.3

# Clinical 9 Throat Swab

*Clinical* Question Bank 9.1 *Clinical* Question Bank 9.2 *Clinical* Question Bank 9.3 *Clinical* Question Bank 9.4

# Clinical 10 Vagina Flora

*Clinical* Question Bank 10.1 *Clinical* Question Bank 10.2

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## Clinical 11 Antiseptics & Disinfectants Clinical Question Bank 11.1

*Clinical* Question Bank 11.2 *Clinical* Question Bank 11.3 *Clinical* Question Bank 11.4 *Clinical* Question Bank 11.5 *Clinical* Question Bank 11.6 *Clinical* Question Bank 11.7 *Clinical* Question Bank 11.8 *Clinical* Question Bank 11.9 *Clinical* Question Bank 11.10 *Clinical* Question Bank 11.11 *Clinical* Question Bank 11.11 **Studies (images/\*videos)** Best Practice for BSL1 & BSL2 (4\*\*\*\*)

Mannitol Salt, Selective & Differential Medium (1) Staphylococci & Enterics on MS, MC & EMB (3) Enterics on MacConkey Agar (3) Enterics on Salmonella/Shigella Agar (3)

Streptococcus mitis Hemolysis Colony Morphology & Hemolysis from Throat Swabs (1) Colony Morphology & Hemolysis of Pathogens (4) CAMP Reaction of Unknowns (1)

Staphylococci on Mannitol Salt (1) API Staph Biochemistry (1) MRSA (methicillin-resistant *staphylococcus aureus*) (1)

Streptococcus Bacitracin, SXT, CAMP Reactions (2) CAMP Reaction (1) Dr. Ignaz Semmelweis & Puerperal Fever (2) Streptococcus Serology (1) Identify API Strep 20 Unknowns (3) Mastitis & Beta-Hemolytic Streptococci (2)

Streptococcus pneumoniae on Blood Agar (1) Gram Stain of S. pneumoniae & S. mitis (2) Antimicrobial Agents for Clinical Pneumonia (1) Japanese Face Masks (1)

API Strep 20 for Group D Streptococci (4)

Clinical Unknowns: Skin & Nose Swabs (4) API Staph of Clinical Unkown (3) *Staphylococcus aureus* Antibiograms (2)

Throat Swab Streak Plates (2) Clinical Unknown Throat Swab (2) Clinical Unknown API Strep 20 (4) *Streptococcus* Latex Agglutination (1)

Cells of the Vagina (6) Pharmaceuticals: Canesten, Monistat, Azo (3)

Joseph Lister [1827-1912] Antiseptic in Surgery (1) Lister Centenary (2) Listerine Antiseptic Mouthwash (2) Dettol: Antiseptic & Disinfectant (1) Applications of Antiseptics (8) Antiseptics & Disinfectants (10) Triclosan in Soaps, Toothpaste & Antiseptic Creams (5) Savlon: WHO Essential Medicine (4) Hand Sanitizer on a Cruise Ship (6) Manuka Honey & Tea Tree Oil (2) Chemical Structure of Antiseptics & Disinfectants (6) Why Does the US Chlorinate Raw Chicken? (2)

#### Clinical 12 MIC

Clinical Question Bank 12.1

#### **Clinical 13 Kirby-Bauer Assay**

*Clinical* Question Bank 13.1 *Clinical* Question Bank 13.2 *Clinical* Question Bank 13.3 *Clinical* Question Bank 13.4 *Clinical* Question Bank 13.5 *Clinical* Question Bank 13.7 *Clinical* Question Bank 13.8 *Clinical* Question Bank 13.9 *Clinical* Question Bank 13.9

#### **Clinical 14 Dermatophytes**

*Clinical* Question Bank 14.1 *Clinical* Question Bank 14.2

# **Clinical 15 Yeasts**

*Clinical* Question Bank 15.1 *Clinical* Question Bank 15.2 *Clinical* Question Bank 15.3

#### Clinical 16 Systemic Mycoses

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#### **Clinical 17 Intestinal & Urogenital Protozoa**

*Clinical* Question Bank 17.1 *Clinical* Question Bank 17.2 *Clinical* Question Bank 17.3 *Clinical* Question Bank 17.4

#### Clinical 18 Blood & Tissue Protozoa

*Clinical* Question Bank 18.1 *Clinical* Question Bank 18.2 *Clinical* Question Bank 18.3 *Clinical* Question Bank 18.4 *Clinical* Question Bank 18.5 *Clinical* Question Bank 18.6

#### **Clinical 19 Cestodes & Trematodes**

*Clinical* Question Bank 19.1 *Clinical* Question Bank 19.2

#### **Clinical 20 Nematodes**

*Clinical* Question Bank 20.1 *Clinical* Question Bank 20.2 *Clinical* Question Bank 20.3 *Clinical* Question Bank 20.4 *Clinical* Question Bank 20.5 *Clinical* Question Bank 20.6

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# Clinical 21 Arthropods

Clinical Question Bank 21.1 Clinical Question Bank 21.2 Clinical Question Bank 21.3 Clinical Question Bank 21.4 Clinical Question Bank 21.5 Clinical Question Bank 21.6 Clinical Question Bank 21.7 Clinical Question Bank 21.8 Clinical Question Bank 21.9 Clinical Question Bank 21.10 Clinical Question Bank 21.11 Clinical Question Bank 21.12 Clinical Question Bank 21.12

#### Clinical 22 Leukocytes

*Clinical* Question Bank 22.1 *Clinical* Question Bank 22.2

#### MIC Assay: Streptococcus pyogenes & Penicillin (1)

WW1 & WW2 Treatment of War Wounds (2\*) Chemical Structurse of Antimicrobial Agents (6) Susceptibility of *Staphylococus aureus* Isolates (3) Susceptibility of *E. coli* Isolates (2) Applications of Peptide Antibiotics (4) Charles Darwin: Natural Selection of Antimicrobial Agents (1) Cabo San Lucas, Mexico: OTC Antibiotics (5\*) Chicken: Raised Without Antibiotics (3) Superbugs: CRE, ESBL, MDR, ,RAB, MRSA, VRE, VRSA, ... (1) Komodo Dragon Blood Peptides (2)

Dermatophyte Clinical Unknowns (4) Antimicrobial Agents for Dermatophytes (3)

Cells/Cell Structures of *Candida*, *Cryptococcus*, *Pneumocystis* (4) Respiratory Yeast Infections, Plaça de Catalunya, Barcelona (2\*) Antibiotic Resistance of *Candida auris* (2)

Clincal Unknown 16A (2)

Aspergillus & Aspergillosis (3) Sporothrix schenckii & Subcutaneous Mycoses (1) Cartagena, Colombia, South America & Mold Growth (6) Crohn's Diseae, Humira & Mycoses (1)

Parasitology Gifts of Doll & Embroidered Sweater (1) Entamoeba histolytica: Longitudinal or Transverse Cell Division? (1) Identify Intestinal/Urogenital Protozoa (6) Case Study: Intestinal Protozoan, Intestinal Pain & Diarrhea (2)

Dr. Carlos Chagas, Trypanosomiasis, & the Poor (2) The World United Against Malaria (3) Stages of the Malaria Parasite, 18A-18E (3) Ronald Ross [1857-1932] "Cunning Seeds" (1) *Amoebic* Trophozoites in Brain Autopsy (1) Ephesus Cats & Toxoplasmosis (7)

Unknown 19A: Human Tapeworm (2) Humans, Sheep & Sheepdog (3)\*\*

Male & Female Ascaris (3) Male & Female Ascaris Transverse Sections (2) Eradication of Infectious Nematode, South Sudan (2019/2020) (2\*) Rod of Asclepius & Guinea Worm Disease (2) Medical Symbol, Livorno & Florence, Italy (3) Medical Symbol, St John's, US Virgin Islands (2)

Basilica di Santa Maria Della Salute & 1630-1631 Black Death (3) Mask for the Plague Doctor, Venice, Italy (4) Great Fire of London, 1666 (5) Scenes from a Pandemic, 1665-1666 & 2020 (12) English Harbour, Antigua & the "Withering Effects of the Tropics" (5\*) Panama Canal: Tropical Infectious Disease & Arthropod Vectors (6\*\*) Arthropod Unknowns 21A-21C (3) *Anopheles* Mosquito & *Ixodes* Tick Mouthparts (2) Unknown Arthropods (4) Characteristics of Head Lice (3) Nix Ultra Kills Head Lice (3) Seresto Product Recall (2) Insect Killer & Insect Repellent (1)

Elie Metchnikoff [1845-1916] Nobel Studies of Immunity Identify these Leukocytes (3) Gram Stain of Leukocytes & Pus Cells (1) Infections Named after Leukocytes (2)

*Clinical* Question Bank 22.3 *Clinical* Question Bank 22.4

#### Clinical 23 Blood Typing

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#### **Clinical 24 Streptococcus Serology**

Clinical Question Bank 24.1

#### **Clinical 25 ELISA**

*Clinical* Question Bank 25.1 *Clinical* Question Bank 25.2 *Clinical* Question Bank 25.3 *Clinical* Question Bank 25.4 *Clinical* Question Bank 25.5 Blood Types: Universal Donor/Recipient & Erythroblastosis Fetalis (1) Demise of the Canadian Red Cross (1) Determine these Blood Types (3)

Latex Agglutination (3)

Negative Indirect ELISA (4) Positive Direct ELISA (4) Lateral Flow Assays: Pregnancy Test & Ovulation Detector (2) BinaxNOW Lateral Flow Assay for COVID-19 (3) Analysis of Lateral Flow Assay for COVID-19 (1)