



**FMGE** June '26

# **RECALL SESSION**

**A Mega Recall Session By  
India's Top Educators**

# Microbiology



**Q. A 33 year old HIV positive male with CD4 count  $<50$  cells/  $\mu$ l. Biopsy of the affected tissue is shown below. Identify the cytopathic affect and the causative virus?**

- a. EBV
- b. CMV
- c. HSV
- d. HPV



# Microbiology



**Q. A patient presents with multiple soft, verrucous, exophytic lesions over the external genitalia, giving them a wart-like or cauliflower-like appearance. Which infectious agent is most commonly responsible for this condition?**

- a. Herpes simplex virus (HSV)
- b. Treponema pallidum
- c. Human papillomavirus (HPV 6,11)
- d. Haemophilus ducreyi

# Microbiology



**Q. A 4-year-old child presents with a history of fever, painful oral ulcers, and vesicular lesions over the palms and soles. What is the most likely causative organism?**

- a. Coxsackievirus A16
- b. Coxsackievirus B
- c. Cytomegalovirus (CMV)
- d. Parvovirus B19

# Microbiology



**Q. In a rural village, several residents report finding a sudden large number of dead rats in and around their house over the past week. A few days later, some villagers developed fever, painful lymph node swelling, and severe weakness. The local health authorities suspect a rodent-associated epidemic (?Rat flea). Residents of this area are at highest risk of which disease?**

- a. Dengue fever
- b. Bubonic Plague
- c. Typhoid fever
- d. Hepatitis A

# Microbiology



**Q. A 25-year-old sexually active male presents with swelling in the inguinal region. On examination, there is enlargement of both inguinal & femoral lymph nodes separated by inguinal ligament, producing a groove sign. Which of the following is the most likely causative organism?**

- a. *Haemophilus ducreyi*
- b. *Treponema pallidum*
- c. *Chlamydia trachomatis*
- d. *Klebsiella granulomatis*



# Microbiology



**?Q. A 34-year-old man working as a cattle handler presents with a gradual onset of fever, malaise, and weight loss for the past three weeks. He also reports drenching night sweats and low back pain. On examination, there is mild hepatosplenomegaly. Blood cultures are pending. He frequently handles cattle, assists in animal delivery, and consumes unpasteurized milk. Which of the following is the most likely diagnosis?**

- a. Leptospirosis
- b. Brucellosis
- c. Anthrax
- d. Rabies

# Microbiology



**Q. IDENTIFY the culture media?**

- a. Castaneda culture media
- b. LJ media
- c. LSS media
- d. ..



# Microbiology

**Q. After a week of heavy rainfall and flooding in Mumbai, several patients present to the local health centre with high fever, severe cough, muscle pain, headache and red eyes/ conjunctival suffusion. Many of them reported walking barefoot in flooded water contaminated with animal waste. Rodent infestation has been reported in that area. One of the patients reports jaundice and AKI. Dark field microscopy shows tightly coiled spiral organisms with hooked ends. What is the likely diagnosis?**

- a. Borrelia
- b. Treponema pallidum
- c. Spirillum minus
- d. Leptospirosis



# Microbiology



**Q. A 35 year old leather industry worker presents with a malignant  
echar/ blackish necrotic lesion surrounded by extensive edema.  
Which virulence factor is responsible for this?**

- a. Bacillus anthracis– capsule
- b. Bacillus anthracis– edema factor, lethal factor
- c. ..
- d. ..



# Microbiology



**Q. A 25 year old with a history of swimming in fresh stagnant water pond. He presents with neural manifestations. CSF sample will be sent for which of the following culture media studies?**

- a. Non nutrient agar with E.Coli
- b. Diamond medium
- c. Blood agar
- d. LJ media

# Microbiology



**Q. Which of the following culture media can be used for the growth of rhinosporidiosis?**

- a. Blood agar
- b. SDA
- c. LJ media
- d. Non-cultivable

# Microbiology



**Q. A 42 year old living in an endemic river basin area of Sub Saharan Africa presents with severe generalised pruritus, subcutaneous nodules, and progressive visual impairments. Which of the following is the causative organisms?**

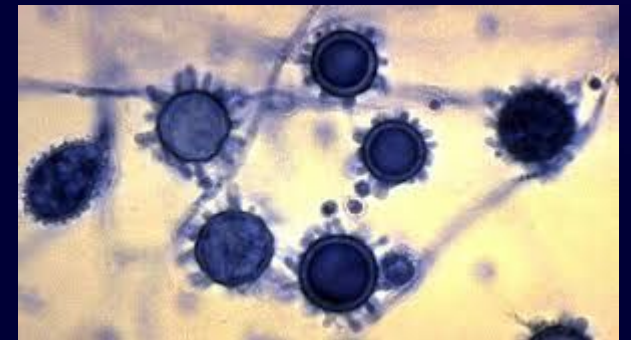
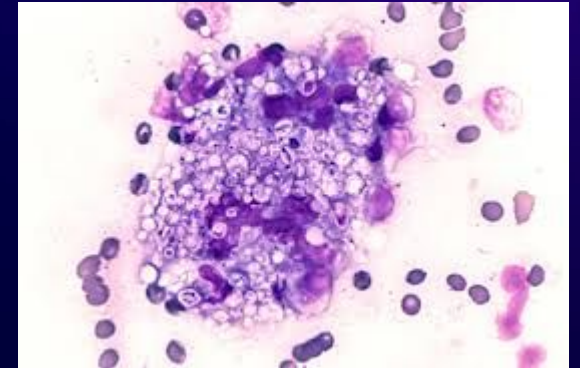
- a. Loa loa
- b. Onchocerca volvulus
- c. Wuchereria
- d. Dracunculus medinensis

# Microbiology



**Q. A 40 year old HIV positive individual with low CD4 count, fever, cough, and bilateral pulmonary infiltrates undergoes a bone marrow biopsy. Microscopic examination is shown below. Identify the mode of transmission of this disease?**

- a. Inhalation of bird or bat droppings
- b. Bite of infected rats
- c. Ingestion of contaminated dairy products
- d. Skin inoculation



# Microbiology



**Q. Patient from Manipur with pulmonary and gastrointestinal symptoms. Eggs of the organism are shown below. How many intermediate hosts are seen in the life cycle of the organism?**

- a. One – Snail only
- b. Two– Snail and crab
- c. Three– Snail, crab, plants
- d. None



# Microbiology



**Q. A microbiology technician is running a quality control on the apparatus shown below. which of the following biological controls can be used for the same?**

- a. *Geobacillus stearothermophilus*
- b. *Bacillus subtilis*
- c. *Bacillus globigii*
- d. *Bacillus pumilus*



# Microbiology



**Q. A patient presents to the ED with fever, hypotension and diffuse macular and erythematous rash over torso. MOD develops. Superantigens are responsible. What is the diagnosis?**

- a. TSS
- b. SSSS
- c. Meningococccemia
- d. Scarlet fever



# Microbiology



**Q. A 35-year-old male presents with acute, profuse, painless diarrhea that resembles “rice-water” stools, accompanied by severe dehydration & vomiting after consumption of street food. Causative organism produces an enterotoxin. What is the intracellular mechanism of action of this toxin?**

- a. ☒ Increased cAMP
- b. Increased cGMP
- c. Inhibition of protein synthesis (inactivation of EF-2)
- d. SNARE protein cleavage to block neurotransmission

# Microbiology



**Q. A 45-year-old man who recently travelled to the rainforests of Central Africa presents with crawling sensation in his eye. On slit lamp examination, a thin motile worm is seen moving across the subconjunctiva. Peripheral blood smear reveals a microfilaria that is sheathed, with nuclei extending continuously all the way to the tip of the tail. Identify the parasite.**

- a. *Loa loa*
- b. *Wuchereria bancrofti*
- c. *Brugia malayi*
- d. *Mansonella perstans*

# Microbiology



**Q. A 65-year-old female underwent an elective surgery 5 days ago and was treated with broad-spectrum IV clindamycin post-operatively. She now presents with profuse, watery diarrhea. Which organism is the primary cause of this condition?**

- a. *Clostridioides difficile*
- b. Enterotoxigenic *E coli*
- c. *Salmonella enteritidis*
- d. *Staphylococcus aureus*



**THANK YOU**