

HAKEEM



Microbiology - mid

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Microbiology-mid

Sterilize powder and oil by which mechanism

- 1) filtration
- 2) hot oven
- 3) autoclave
- 4) UV

ans: 1 and 2

“All of the following are about the germ theory, except.”

- A. Diseases are not caused by “bad air” or mystical forces.
- B. Transmission can be controlled (hygiene, sterilization,
- C. “All microorganisms can cause disease

ans: c

Examples of acellular organisms

Viruses

Bacteria

Parasites

ans : a

Microbiology-mid

A patient with an airborne infection stays in ED for 6 hours what are HIGHEST risk people that should be tested for the infection ?

The immunosuppressed and who stayed close the patient

All the people that entered the ED

ans: a

A strict fermenter and a obligate aerob were put in an anaerobic enviroment what happens ?

fermenter lives , aerobe dies

H₂s producing bacteria:

Salmonella and perteus

Outbreak of Creutzfeldt-Jakob disease in a hospital.

Suspected route of transmission?

- Contaminated food
- Iatrogenic route
- respiratory droplets

ans: a

“Which of the following is related to prokaryotes?”

Ribosomes 70S ,no nucleus, No mitochondria ✓

Bloody diarrhea / H₂S positive :

Salmonella

Colistridum perfringes fermentation causes gas gangerne. If oxygen was introduced to tissue how would that affect it?

It would stop gas formation as colistridium are strict anaerobes

Which of the following bacterial gene transfer methods can cause toxin resistance?

- A) Transduction
- B) Transformation
- C) Vertical transmission
- D) Conjugation

ans: a

A person in ICU was suffering from an infection caused by a resistant bacteria. A week later, the nearby patient had the same infection (I think E.coli was mentioned), which mode of transmission had occurred?

- A) Transduction
- B) Transformation
- C) Vertical transmission
- D) Conjugation

ans : d

In gene expression process of a bacteria, cytosine in UAC codon was replaced by G to produce UAG(stop codon), which type of mutations had occurred?

- A) Silent mutation
- B) Missense mutation
- C) Non-sense mutation
- D) Frameshift mutation

ans: C

X and Y bacteria were cultured. Both were diplococci glucose fermenters. X was able to ferment Maltose while Y wasn't. (And many other details for each were mentioned). The correct sentence is :

- A) X is nesseria gonnorrhoea and Y is Neisseria meningitidis, Both are resistant to vancomycin, but may be affected by 3rd generation of Chlorosporines
- B) Y is nesseria gonnorrhoea and X is Neisseria meningitidis, Both are resistant to vancomycin, but may be affected by 3rd generation of Chlorosporines.
- C) Y is nesseria gonnorrhoea and X is Neisseria meningitidis, Both are sensitive to vancomycin, but resistant to Chlorosporines. (I think so).

5 ans: c

Vaccination will break the chain of infection by:

- A) Providing protection for Susceptible host
- B) Killing reservoirs
- C) preventing portals of exit

ans: a

Proper wound dressing breaks the chain of infection by :

Drainage from wounds .

• Colonization: Microorganisms present but NOT causing disease or immune response

• Ziehl-Neelsen stain : (hot stain - uses heat)

• outbreak investigation : whole genome sequence

The correct description of prokaryotes:

- A. 70s ribosome, DNA in nucleoid, unicellular correct
- B. 80s ribosome, membrane bounded, Multiple chromosome

ans : a

The division that occurs in eukaryotes is :

- A. Binary fission only
- B. Mitosis

ans: b

what is the bacterial structures that help in adhesion and antibiotic resistance in order:

- A. Common pili, sex pili
- B. Flagella, capsule

ans: a

Which of the following is not phenotypic method :

- A. MALDI-TOF
- B. Acid fast stain

ans: a

How much ATP produced from fermentation only:

- A. 2
- B. 4
- C. 38
- D. Zero

ans: d

Which of the following is a feature of Airborne transmission:

- A. Up to 1-2 meters
- B. Suspended in air for long periods
- C. Large particles

ans: b

a patient with pneumonia is being treated by an antibiotic, the treatment fails, ribosome methylation was later observed...

what other class of antibiotics will likely fail due to this mechanism?

aminoglycoside

macrolide

b lactam

sulfonamide

ans: b

تكرر نهط بعض الاسئلة (4_5 أسئلة تقريبا نفس المبدأ) يكتب الدكتور جمل تتعلق بخصائص بكتريا معينة أو من أي مجموعات وبعض الأمراض التي تسببها البكتريا في نص السؤال يذكر تقريبا خمس جمل أما الخيارات فتكون مثلا

A- الجملة الأولى والثانية والخامسة صحيحة

B- الجملة الخامسة والأولى والثانية خاطئة

وهكذا

وضعت هذه الملاحظات لتتبعوا إلى طريقة السؤال (ولصعوبة تذكر الخيارات) تحديداً محاضرة 8+9.

What is the main structural component of the bacterial cell wall?

A. Lipopolysaccharide (LPS)

B. Phospholipids

C. Teichoic acids

D. Peptidoglycan (PG)

E. Lipoteichoic acids

Ans:D

A patient has dysuria and positive nitrites on urinalysis.

The pathogen causes UTI by attaching to the bladder wall.

Which organism is most likely responsible?

- A. Staphylococcus saprophyticus
- B. Helicobacter pylori
- C. Pseudomonas aeruginosa
- D. Klebsiella pneumoniae
- E. Escherichia coli

Correct answer: E

"In the lag phase of bacterial growth, which of the following occurs?"

- A. Rapid cell division
- B. No cell divide yet
- C. Cell divide a constans rate
- D. Growth rate slows

Ans: B

Thrive in cold (0-20C).....psychrophiles

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bacterial colony and you collect samples from multiple patients, which method would you use?

- A. Morphological experimentation
- B. Whole genome sequencing
- C. Gram staining
- D. Coagulase test

Correct answer:

B. Whole genome sequencing

?Which of the following is true about the Coagulase test

A. It is used to differentiate Staphylococcus from Streptococcus

B. The Oxidase reagent used for detection

C-Coagulase is an enzyme that clots plasma (converts fibrin _fibrinogen)

D_It's a virulence factor

Ans:D

الطبيب والجراحة
للمنحة