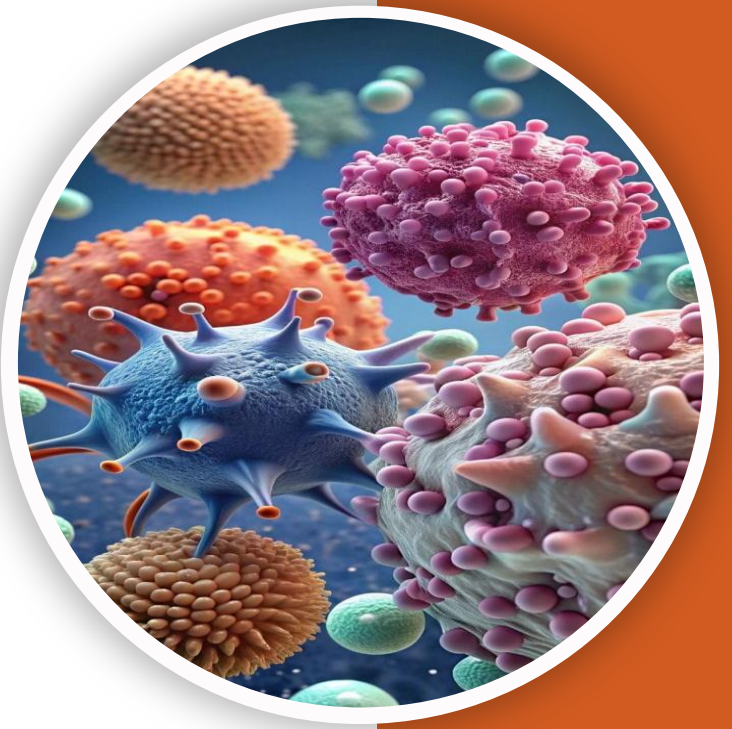
بسم الله الرحمـٰن الرحيم

(وَفَوْقَ كُلِّ ذِي عِلْمٍ عَلِيمٌ)

Microbiology | Mid Material

Past Papers



Done By : موسى النعيمات
عبدالله العبداللات

نودّ إعلامكم بأن جلّ الأسئلة مستخرجة من ملفات امتحانات الميد لدفع ٢٠٢٣ وما سابقها, وقد يردُ الخطأ عَرَضًا أو يقع السهو في بعضها لكثرة ما جُمِع منها, نرجو منكم التفهّم مشكورين

وإذا صادفتم أي سؤال غير واضح أو لاحظتم خطأ في المحتوى، فيُرجى تنبيه الفريق العلمي أو نشره على قروب فيسبوك "دكتور ٢٠٢٤".

وفقكم الله ويسّر أموركم

Please notice that most of the questions have been sourced from midterm exam files for the 2023 and earlier batches. Minor errors may be present due to the large number of questions, we kindly ask for your understanding.

If you come across any unclear question or notice an error in the content, please notify NST members or share it on "Doctor 2024" Facebook group.

Q1: What is the size of bacteria:

A. 0.05-10 micrometers
B. 0.05-10 nanometers
C. 0.1-10 micrometers
D. 0.1-10 nantimeters
E. 1-10 micrometers

Answer: B

Q2: The main feature of prokaryotic organism is:

A. Absence of locomotion
B. Absence of nuclear envelope
C. Absence of nuclear material
D. Absence of protein synthesis
E. Absence of Cell Wall

Answer: B

Q3: Which of the following is found in prokaryotic cells, but not in human cells:

A. Ribosomes
B. Cell membrane
C. Cytosol
D. Cell wall
E. Endoplasmic Reticulum

Answer: D

Q4: Which of the following is NOT true regarding bacterial cell wall?

A. Can be Gram-positive or Gram-negative
B. Is found in all bacteria
C. Protects against osmotic changes
D. A target for some antibiotics
E. 2 and 4

Answer: B

Q5: Which statement about gram negative bacteria is false?

A. They have a thick monolayer of peptidoglycan
B. Lipid A is an endotoxin and can lead to shock
C. The outer membrane protects the bacteria
D. Cytoplasmic membrane contains LPS
E. More than one correct answer

Answer: E (A & D)

Q6: Which of the following is a true statement regarding Endotoxins:

A. Is ONLY found in Gram-negative bacteria
B. Suppresses The immune system
C. Found in both Gram-positive and Gram-negative Bacteria
D. Lipoteichoic acid and Lipopolysaccharides are two examples of endotoxins
E. C and D

Answer: A

Q7: Endotoxin produced by Gram-negative bacteria is present in:

A. Peptidoglycan
B. Lipopolysaccharide
C. Teichoic acid
D. Inner membrane
E. B and C

Answer: B

Q8: The staining material of Gram-positive bacterium is:

A. Fast green
B. Hematoxylin
C. Crystal violet
D. Safranin
E. Iodine

Answer: C

Q9: Which answer best describes the cell wall of Gram-negative bacteria?

A. Thick
B. Lipids are absent
C. Teichoic acids are absent
D. Peptidoglycans are absent
E. More than one correct answer

Answer : C

Q10: Teichoic acids and Lipoteichoic acids are found in:

A. Gram-positive bacteria
B. Gram-negative bacteria
C. Fungi
D. More than one correct answer
E. None of the above

Answer : C

Q11: The difference between Gram-positive and Gram-negative bacteria is shown to reside in the:

A. Cell wall
B. Nucleus
C. Cell membrane
D. Mesosomes
E. More than one correct answer

Answer : C

Q12: The Cell wall is:

A. thicker in Gram-positive bacteria than Gram negative bacteria.

B. thicker in Gram-negative bacteria than Gram-positive bacteria.

C. equally thick in both Gram-negative and Gram-positive bacteria.

D. ALWAYS present for all bacteria.

E. More than one correct answer.

Answer : C

Q13 : One of the following is both an enrichment and differential culture media:

A. Blood agar
B. MacConkey agar
C. Mannitol salt agar
D. Amies medium
E. None of the above

Answer : A

Q14:The correct order of bacterial growth stages is:

A. Lag phase > Log phase > death phase > stationary phase
B. Lag phase > Log phase > stationary phase > death phase
C. Log phase > Lag phase > death phase > decline phase
D. Lag phase > stationary phase > death phase > exponential phase
E. More than one is correct

Answer : B

Q15 :When nutrients in the culture media are depleted and toxic materials are accumulated, this will lead to?

A. Stationary phase
B. log phase
C. Lag phase
D. Decline phase
E. More than one is correct

Answer : E

Q16: Teichoic acid is:

A. Found in the cell walls of Gram-positive bacteria
B. an antigen for a macrophage receptor (immunogenic)
C. Makes up the outer wall of Gram-negative bacteria
D. Influences the permeability of the membrane
E. More than one correct answer

Answer: E (A+B)

Q17: Regarding the function of the Bacterial cell wall, All the following are considered True except:

A. Bacterial rigidity and shape.
B. Protection against osmotic changes.
C. Structure is the same in gram positive and negative bacteria.
D. Porous to allow nutrients passage.
E. Loss of this wall will cause death of the bacteria.

Answer: C

Q18: Regarding Gram-negative bacteria, one of the following statements is true:

A. LPS is the main cause for endotoxin shock
B. Its cell wall has a lot of Teichoic acid
C. They have a thick monolayer of peptidoglycan
D. A+C
E. None of the above

Answer: C

Q19: Which of the following statements is correct regarding Gram-negative bacteria:

A. Thick peptidoglycan layer
B. Stains purple
C. Doesn’t have an outer membrane
D. Contains endotoxin
E. Has more than 10 layers of peptidoglycan

Answer: D

Q20: What is the color of gram-negative bacteria after the decolorization step

A. Pink-Red
B. Yellow
C. Blue
D. Purple
E. Colorless

Answer: E

Q21: In most bacteria, the capsule consists mainly of:

A. Polysaccharides
B. Proteins
C. Lipids
D. Metals
E. Peptidoglycan

Answer: A

Q22: Conjugation is best described as:

A. Plasmid movement by cell-cell contact
B. Uptake of naked DNA
C. Using bacteriophages as vectors
D. Jumping genes
E. Meiosis

Answer: A

Q23: Which of the following is NOT true regarding flagella?

A. They are made of subunits called flagellins
B. They help in motility
C. They are not antigenic
D. Their rotation machinery utilizes proton gradient
E. has 4 anchoring rings in Gram-negative bacteria and 2 anchoring rings in Gram-positive bacteria.

Answer: C

Q24: Which structure is responsible for bacterial attachment:

A. Flagella
B. Lipopolysaccharides
C. cell wall
D. Spores
E. Fimbria / Pilli

Answer: E

Q25: The sex pilus is used for:

A. Motility
B. withstanding harsh conditions
C. Conjugation
D. Replication of Plasmids
E. C and D

Answer: C

Q25: Lophotrichous means:

A. Flagella at both poles
B. Flagella all around the cell
C. Tuft of flagella on one pole
D. Tuft of flagella at both poles
E. Flagella at one pole

Answer: D

Q27: Inhibiting synthesis of one of the following can significantly affect bacterial adhesion to epithelial cells:

A. Flagellum
B. Capsule
C. Fimbria
D. Cell wall
E. Spore

Answer: C

Q28: Bacterial capsule is chemically composed of:

A. Polypeptides
B. Polynucleotides
C. Polysaccharides
D. Polypeptides or polysaccharides
E. Lipopolysaccharides

Answer: C

Q29: Bacteria with one flagellum at one end is called:

A. Monotrichous
B. Amphitrichous
C. Lophotrichous
D. Peritrichous
E. Endotrichous

Answer: A

Q30: What is the function of bacterial capsule?

A. Protection of organism from phagocytosis
B. Helps in adherence of bacteria to surface in its environment
C. Conjugation
D. A and B only
E. None of these

Answer: A

Q31: single flagella at both ends, describes which on of the following types of flagellar arrangement:

A. Amphitrichous
B. Peritrichous
C. Lophotrichous
D. Monotrichous
E. Polar flagellum

Answer: A

Q32: Which of the bacterial virulence factors contribute to the initiation of an infection in the upper respiratory tract?

A. presence of a capsule
B. Flagella presence
C. Complement inhibitors
D. Antimicrobial resistance
E. Adhesion in pili

Answer: E

Q33:Which structure can be found in prokaryotes but not in human cells :

A. PG
B. Plasma membrane
C. Ribosomes
D. Cell wall
E. LPS

Answer: D

Q34: About gram negative bacteria, one is False?

A. They have a thick monolayer of peptidoglycan.
B. Lipid A can lead to endotoxin.
C. The outer membrane protects the bacteria.
D. Outermost membrane contains LPS.
E. All of the above.

Answer: A

Q35:One of the following Bacteria is an obligate intracellular?

A. Clostridium
B. Mycoplasma
C. Bacillus
D. Chlamydia
E. Mycobacteria

Answer: B+D

Q36:In Escherichia coli, Escherichia is:

A. Species
B. Family
C. Genus
D. Class
E. Kingdom

Answer: C

Q37:Coagulase test differentiates between

A. Staphylococci from streptococci.
B. Streptococci from enterococci.
C. Staph aureus from staph epidermis.
D. Staph epidermidis from staph saprophyticus.

Answer: C

Q38:Bacteria which produces coagulase is:

A. S epidermidis
B. S saprophyticus
C. S aureus
D. S hominis
E. Mycobacterium

Answer: C

Q39:Staining material of gram positive bacterium is

A. Fast green
B. Haematoxillin
C. Crystal violet
D. Safranin
E. H&E

Answer: C

Q40:Rod shaped bacteria are known as

A. Cocci
B. Comma forms
C. Bacilli
D. Plemorphic from
E. None of the above

Answer: C

Q41 :Which of the following method is preferred to be used to sterilize solutions that likely to be damaged by heat?

A. Filtration
B. Boiling
C. Inspissation
D. Pasteurization
E. Autoclaving

Answer : A

Q42 :The inactivation of all self-propagating biological entities associated with the materials, is called:

A. Disinfection
B. Cleaning
C. Sterilization
D. Decontamination
E. 2 or more are correct

Answer : C

Q43 :The ascending order according to their ability to resist sterilization:

A. Bacteria, spores, Enveloped Viruses
B. Spores, bacteria, Enveloped viruses
C. Enveloped viruses, bacteria, spores
D. Spores, Enveloped viruses, bacteria
E. All are incorrect

Answer : C

Q44 :Which of the following is true:

A. lag phase has the highest acceleration

B. the doubling time is the same for the same bacterial species at the same conditions

C. Stationary phase, there is an equilibrium between cell division and death

D. Log phase, increase in size

E. Log phase, decrease in protein number

Answer : C

Q45 :One of the following Bacteria is an obligate intracellular:
knowledge improvement

A. Clostridium
B. Mycoplasma
C. Bacillus
D. Chlamydia
E. treponema

Answer : D

Q46: When nutrients in the culture media are depleted and toxic materials accumulated and death in the bacteria is more than replication, this will lead to?

A. Stationery phase
B. log phase
C. Lag phase
D. Decline phase
E. Exponential phase

Answer : D

Q47 : The correct order of bacterial growth stages is:

A. Lag phase > Log phase > death phase > stationary phase
B. Lag phase > Log phase > stationary phase > death phase
C. Log phase > Lag phase > death phase > decline phase
D. Lag phase > stationary phase > death phase > exponential phase
E. All are incorrect

Answer : B

Q48 : Which of the following is a selective media?

A. Lowenstein Jensen medium
B. blood agar
C. chocolate agar
D. Robertson’s cooked meat medium
E. None of the above

Answer : A

Q49 : An example of obligate anaerobes?

A. Campylobacter species
B. Helicobacter species
C. Pseudomonas aeruginosa
D. Bacteroides fragilis
E. Brucella

Answer : D

Q50 : The enzyme catalase is only found in:

A. aerobic bacteria
B. anaerobic bacteria
C. all bacteria
D. facultative anaerobic bacteria
E. more than one of the above

Answer : E

Q51 : Which of the following grows on nutrients agar?

A. chlamydia
B. Treponema pallidum
C. Mycobacterium leprae
D. staphylococcus aureus
E. staphylococcus epidirmidis

Answer : D

Q52 : The period in which bacteria are preparing for rapid proliferation by high metabolic activity is?

A. the growth phase
B. lag phase
C. stationary phase
D. none of the above
E. 2 or more are correct

Answer : B

Q53 : After a messy night at the lab, you and your supervisor go home without cleaning up only to return the next morning to find a left over patry dish at the counter with a beta hemolytic obvious activity in it , which of the following bacterium do you expect did this and on what medium

A. hemophilius influenza .... chocolate agar
B. staph aureus .... blood agar
C. shigella bacterium ... XLD medium
D. Dvibrion bacterium ... TCBS medium Which of the following grows on nutrients agar

Answer : B

Q54 : The last phase of bacterial growth cycle is:

A. lag phase
B. stationary phase
C. Death
D. Exponential
E. Log

Answer : C

Q55 : A facultative anaerobic is:

A. Only grow anaerobically
B. Only grow in the presence of O2
C. Ordinarily an anaerobe but can grow with O2
D. Ordinarily an aerobe but can grow in absence of O2

Answer : C

Q56 : β-haemolytic bacteria is

A. Streptococcus pyogenes
B. Str. Pneumoniae
C. Str. Faecalis
D. None of the above

Answer : A

Q57 : α-haemolytic streptococci are also known as:

A. Str. Pyogenes
B. Virulence group
C. Viridans group
D. None of these

Answer : C

Q58 : Diagnosis of bacterial disease can be made by:

A. Finding bacteria in pathological fluids
B. Isolation of bacteria by culture from exudates or blood
C. Culturing bacteria, then counting
D. Both a and b
E. All are correct

Answer : E

Q59 : The first phase of a growth curve is:

A. Log phase
B. Lag phase
C. stationary phase
D. Decline phase
E. Both a and b

Answer : B

Q60 : Rapid bacterial growth phase is known as:

A. Log
B. Lag
C. Stationary
D. decline
E. None of these

Answer : A

Q61 : Cells are active and synthesizing new protoplasm. This stage of growth is called

A. Lag phase
B. Stationary phase
C. Log phase
D. Decline phase
E. All of these

Answer : C

Q62: The organisms which can grow best in the presence of a low concentration of oxygen:

A. Aerophilic
B. Microaerophilic
C. Aerobic
D. Anaerobic
E. 2 or more are correct

Answer : B

Q63 : The most active stage in the sigmoid curve of bacteria in which maximum growth is attained:

A. Lag phase
B. Stationary phase
C. Decline phase
D. Log phase
E. None of the following

Answer : D

Q64: Growth curve does not include following phases of bacteria –

A. Decline phase
B. Stationary phase
C. Lag phase
D. Synchronous growth
E. All are correct

Answer : D

Q65 : Bacteria are more sensitive to antibiotics at which phase of growth curve?

A. Decline phase
B. Stationary phase
C. Lag phase
D. Log phase
E. None of the following

Answer : D

Q66: Log-phase is also known as

A. Death phase
B. Exponential phase (invasive)
C. Lag-phase
D. Incubation period phase
E. None of the following

Answer : B

Q67 : Which of the following defines the inactivation of all self-propagating biological entities (100% killing):

A. Disinfection
B. Cleaning
C. Decontamination
D. Sterilization
E. Antisepsis

Answer : D

Q68 : Arrange the microorganisms in ascending order according to their ability to resist sterilization:

A. Enveloped viruses, bacteria, spores
B. Spores, bacteria, Enveloped viruses
C. Bacteria, Enveloped viruses, spores
D. Fungi, Bacteria, Prions
E. Prions, Bacteria, Fungi

Answer : A

Q69 :What is the function of ethylene oxide?

A. Denaturation of proteins and DNA by cross-linking functional groups.
B. Renaturation of proteins and DNA by cross-linking functional groups.
C. Culturing bacteria
D. Needs only an hour to complete the process
E. 2 or more are correct

Answer : A

Q70: Which of the following is not considered an opportunistic fungal infection?

A. Candidiasis
B. Sporotrichosis
C. Aspergillosis
D. Zygomycosi

Ans:B

Q71: The most prevalent infection among alldermatophytoses is?

A. Tinea pedis

B. Tinea unguium

C. Tinea corporis

D. Tinea capitis

E. Tinea cruris

Ans:A

Q72: Which of the following is CORRECT regarding fungi?

A. azoles target the cell membrane

B. Hyphae is a filamentous structure

C. dimorphic fungi turn to mold in heat

D. dimorphic fungi turn to yeast in cold

Ans: B

Q73: What do the term dimorphic mean?

A. Bisexual

B. Unisexual

C. Exists in two forms

D. Exists in single form

Ans: C

Q74: Fungi are ?

A. Prokaryotic

B. eukaryotic

C. prokaryotic and lack chlorophyll

D. eukaryotic and lack chlorophyll

Ans:D

Q75: Dermatophytes are fungi that?

A. Infect the superficial keratinized areas of the body

B. Cause inapparent systemic infections

C. Invariably invade the subcutaneous tissues

D. Produce morphologically identical spores by all genera

E. Best grow at 37°C

Ans:A

Q76: A 50-year-old woman receiving chemotherapy via a subclavian catheter for acute leukemia. She presented with fever and stiffness in the neck with clinical suspicion of meningitis. CF culture grew budding yeasts that formed germ tubes. The organism most likely causing this infection is:

A. Cryptococcus neoformans
B. Candida albicans
C. Aspergillus Fumigatus
D. Histoplasma capsulatum
E. Candida tropicalis

Ans:B

Q77: Which statement regarding fungal structure is correct?

A. The major components of fungal cell walls are proteins such as chitin, glucans, and mannans

B. The cell wall is not essential for fungal viability or survival

C. Fungal cell membrane components are the targets for the major classes of anti fungal antibiotics, such as-the polyenes and azoles.

D. Fungal cell wall components rarely stimulate an immune response

Ans:A

Q78: Which of the following is found in the fungal cell membrane but not found in the mammalian?

A. Peptidoglycan
B. Cholesterol
C. Ergosterol
D. Chitin
E. Teichoic acid

Ans:C

Q79:Which of the following is not part of human microbiota?

A. Candida Albicans
B. Candida Tropicalis
C. Malassezia Furfur
D. Cryptococcus Neoformans

Ans:D

Q80: the filamentous part of fungi is ?

A. Hyphae
B. Bugging
C. Mold
D. Mycelium

Ans:A

Q81: Which of the following can be used to culture mycobacterium Species:

Answer: middlebrook Agar

Q82: Which of the following is a rapidly growing mycobacterium?

Answer: mycobacterium abscessus (I don’t know if this was mentioned in our slides).

Q82: All of the following actors influence the likelihood of transmitting Active tuberculosis except:

A. Probability of contact which an infectious person
B. Duration of contact with an infected person
C. Presence of extra pulmonary tuberculosis
D. Presence of laryngeal tuberculosis
E. Environment in which contact occurs

Ans:c

Q83: All of the following are members of mycobacterium tuberculosis complex “ MTC “ EXCEPT:

A. mycobacterium tuberculosis
B. mycobacterium bovis
C. mycobacterium microti
D. mycobacterium dassie
E. mycobacterium falciparum

- *Answer: E*

Q84: All of the following are the symptoms of pulmonary tuberculosis, EXCEPT:

A. Weakness and fatigue
B. Decreased body temperature
C. Weight loss
D. Severe prolonged cough with sputum or blood

- *Answer: B*

Q85: The initial therapy of tuberculosis treatment regimen includes which of the following antibiotics/ drugs:

A. Streptomycin and rifampin
B. Isoniazid, streptomycin, and ethambutol
C. Rifampin, isoniazid, and ciprofloxacin
D. Isoniazid, rifampin, pyrazinamide, and ethambutol

- *Answer: D*

Q86: Humans become infected with Mycobacterium tuberculosis most frequently by:

A. inhalation
B. ingestion
C. contact
D. inoculation
E. Hematogenus

- *Answer: A*

Q87: Which of the following can be used to culture Mycobacterium species:

A. Chocolate agar
B. Brucella agar
C. Middlebrook Agar
D. TB agar
E. EMJH medium

- *Answer: C*

Q88: Which of the following is Not considered an opportunistic fungal infection:

A. Candidiasis
B. Sporotrichosis
C. Aspergillosis
D. Zygomycosis
E. All answers considered opportunistic fungal infections

- *Answer: B*

Q89: Which of the following is true regarding Tinea versicolor:

A. It is an example of cutaneous mycoses
B. It is caused by candida species
C. Its only clinical manifestation is hyperpigmentation
D. It is diagnosed by a device called Wood lamp
All are true answers

- *Answer: D*

Q90: The most prevalent (common) infection among all dermatophytoses is:

A. Tinea pedis
B. Tinea unguium
C. Tinea corporis
D. Tinea capitis
E. Tinea cruris

- *Answer: B (from google)(IF QUESTION ASKED ABOUT MOST SEVERE ONE ;ANSWER WILL BE D)*

Q91: Dermatophytes are fungi that:

A. Infect the keratinized areas of the body
B. Cause inapparent systemic infections
C. Invariably invade the subcutaneous tissues
D. Produce morphologically identical spores by all genera
E. Best grow at 37°C

- *Answer: A*

Q92: A 50-year-old woman receiving chemotherapy via a subclavian catheter for acute leukemia. She presented with fever and stiffness in the neck with clinical suspicion of meningitis. CF culture grew budding yeasts that formed germ tubes. The organism most likely causing this infection is:

- *A. Cryptococcus neoformans*
- *B. Candida albicans*
- *C. Aspergillus Fumigatus*
- *D. Histoplasma capsulatum*
- *E. Candida tropicalis*

- *Answer: B*


Virology

Q93 : Viruses can enter the body directly by all of the following except

A. Skin contact
B. Respiratory aerosols
C. Blood
D. Genital secretions
E. Fomites

Answer : E

Q94 :viruses are:

A. Larger than cells
B. Acellular
C. Bacteria
D. Can’t live inside cells
E. 2 or more are correct

Answer : B

Q95 : which of the following statements is wrong:

A. Viruses do not contain enzymes or ribosomes
B. Some viruses contain RNA that turns to DNA after entering the host cell
C. Aenveloped viruses are often transmitted in respiratory droplets
D. All the above are correct

Answer : A

Q96 : Which of the following is a characteristic of adaptive immunity in living organisms?

A. Activated immediately upon first antigen encounter
B. Deficiencies in adaptive immunity usually results in no symptoms.
C. Important for eradicating intracellular infections
D. An ancient immune system that can be found in plants and unicellular organisms
E. Recognizes only a small number of conserved molecular patterns associated with pathogens.

Answer : C

Q97: TNF is primarily produced by:

A. a-Macrophages
B. b-Plasma cells
C. c-Endothelial cells d-NK cel
D. E.a+b

Answer :a

Q98 :one of the following is ssDNA virus:

A. Parainfluenza
B. Norwalk, Rotavirus
C. Reovirus
D. Adeno-associated virus
E. All are incorrect

Answer :D

Q99 :Herpes simplex virus type 2 is considered a ..... in virus taxonomy:

A. Family
B. Subfamily
C. Genus
D. Species
E. subtype

Answer :E

Q100 :which of the following would not be a nucleic acid found in viral genome:

A. DsDNA
B. SsDNA
C. DsRNA
D. SsRNA
E. RNA DNA hybrid

Answer:E

Q101: The word "phage" is a shortened version of the name of virus that can affect:

A. Bacterial cell
B. Human cell
C. Eukaryotic cell
D. Plant cell
E. Insect cell

Answer:A

Q102 :A 5-years-old child was brought by his parents to the ER after the appearance of bright red macular exanthem on the cheeks as seen in the picture . The parents also reported that their child had fever , malaise. Headache ,myalgia nausea and rhinorrhea one week prior to the appearance of the rash. Knowing that the causative agent of the child illness was parvovirus B10. Which of the following is correct about the causative virus?

A. It is the smallest human virus in term of genome size
B. It is a positive sense single stranded RNA virus
C. Virus replication is totally dependent on the host cell
D. It is an enveloped virus
E. It has a helical capsid

Answer:C

Q103 :The rash seen in the picture is caused by viral infection that has been completely eradicated globally. Which of the following is a characteristic of the causative virus ?

A. Double stranded RNA virus
B. Has a complex capsid
C. It is non enveloped
D. Has a segmented genome
E. Transmitted throug animal bite

Answer:B

Q104 :Which of the following is true about adsorption step in the viral replication?

A. In naked viruses, adsorption doesn't facilitate virus penetration
B. Virus entry into the host cell requires a spike-receptor complex only in all viruses
C. Influenza virus has three glycoprotiens that help in viral penetration into target cell
D. Different viruses can use similar receptors on target cells to gain entry
E. Neutralization of receptors by antibodies is an effective way to prevent viral entry

Answer:D

Q105 :In a single -stranded positive sense RNA virus such as rhinovirus the monocistronic mRNA problem is overcome by:

A. Cleavage of the polyprotien product by proteases to form mature individual protiens
B. The virus has a segmented genome
C. The viral mRNA has special features which enable ribosomes to bind internally instead of (or as well as)at the 5’ end
D. The virus makes primary transcripts which are processed by the host splicing machinery to give more than one monocistronic RNA
E. All of the above

Answer :A

Q106: Clinical viral disease

A. Is most frequently due to toxin production
B. Usually follows virus infection
C. Can result without infection of host cells
D. Is associated with target organs in most disseminated viral infections

Answer:D

Q107 :Linear, single-stranded DNA is the genetic material of

A. Calciviruses
B. Flaviviruses
C. Papillomaviruses
D. Parvoviruses

Answer:D

Q:108 Which one of the following statements concerning the viral replication is correct?

A. Most RNA viruses assemble in the nucleus, whereas most DNA viruses develop solely in cytoplasm.

B. DNA viruses must provide virtually all enzymatic and regulatory molecules needed for a complete replication cycle.

C. Viral (+) single-stranded RNA serves as the template for complementary (-) strand synthesis using host RNA-Dependant RNA polymerase.

D. In a virus with a single-stranded (ss) RNA genome of (-) polarity, (-) ssRNA is translated into viral proteins.

E. In a virus with a double-stranded RNA genome, (+) RNA strands serve both as mRNA and template for complementary (-) RNA strand synthesis.

Answer:E

Q109: The early genes of DNA viruses code primarily for proteins whose functions are required for:

A. transcription of viral mRNA.
B. translation of the capsid proteins.
C. replication of the viral DNA.
D. final uncoating of the infecting virions.
E. processing of the mRNA precursors

Answer :C

Q110: which of the following best describes protein shell of viral genome:

A. Capsid
B. Envelope
C. Matrix
D. Virion
E. capsomere

Answer:A

Q111 : a 2-year-old child suffering from a sore throat for anti streptococcal antibody. The child is found to have only IgG antibodies with no IgM this means an

A. immunodeficiency disease which only IgM is lacking
B. Natural maternal immunity across placenta
C. The child was exposed to streptococcus in the past
D. Current active infection
E. Focal infection with streptococcus

Answer : C

Q112 : which of the following can be considered a distinctive feature of viruses:

A. Genome consisting of a sole type of nucleic acid
B. Universal presence of plasma membrane-derived envelope
C. Variability in size
D. Ability to infect humans
E. Facultative intracellular parasitism

Answer:A

Q113 : the method that is used for definitive diagnosis of influenza is:

A. Flow cytometry
B. Antigen testing
C. PCR
D. Radioimmunoassay
E. ELISA

Answer :C

Q114 :one of the following methods of detecting virus infection is not used in clinical practice, however it is referral and gold standard:

A. Serology
B. Virus culture
C. Antigen detection
D. Molecular detection

Answer:B

Q115 :one of the following is true about IgM, IgG respectively:

A. In the first 2 weeks, in the first 2 months
B. Indicates new infection, indicated past infection
C. After few weeks from the infection IgM disappear and IgG stays
D. All of the above

Answer :D

Q116 :the most common method that used in molecular detection:

A. PCR
B. Recombinant DNA
C. Histopathologic examination
D. None of the above

Answer :A

Q117: If u were to define the envelope of a virus, which would you choose?

A. A series of interconnected glycoproteins enveloping the viral genome
B. A hijacked lipid bilayer with some interconnected glycoproteins
C. Proteins arranged helically or in a icosahedral manner around the viral genome
D. You can't define it for its variability

Answer:B

Q118: You've acquired a stool sample, and you want to test the diversity of its microbiota, which would you use?

A. Small-subunit (16S) ribosomal RNA gene sequencing.
B. Biochemical reactions.
C. Culturing
D. Observing the chemical and physical properties of stool.

Answer: A

Q119: Regarding killed-virus vaccines, and attenuated-live virus vaccine, which of the following is an advantage of the killed-virus vaccine?

A. This type of vaccine doesn't have the risk of activation or transmission to susceptible people.
B. Killed-virus vaccines only require one dose

Answer: A

Q120: Which of the following materials are used with this mechanism, Items exposed to it at 55°C for 3-6 hr.Then aerated for 8-12 hr.

A. Ethylene Oxide (EO)
B. Peracetic acid
C. Hydrogen peroxide

Answer : A

Q121: Which of the following would be used for a blood spill?

A. Alcohol
B. Choloroxylenol
C. Ethylene oxide
D. Benzethonium chloride

Answer: D

Q122: Viruses usually initiate infection by first interacting with receptors on the surface of cells. Which of the following statements is most accurate about cellular receptors for viruses?

A. It happens randomly with no need for spikes attachment.
B. All cells in a susceptible host express the viral receptor.
C. Successful infection of a cell by a virus may involve interaction with more than one type of receptor.
D. Spikes are only present in enveloped viruses.

Answer: C

Q123 : Which of the following refers to the complete virus particle that able to infect a cell

A. Virus
B. Virion
C. Capsid
D. DNA
E. Protein coat

Answer : B

Q124: Which of the following statements is not true?

A. Some viruses can grow in cell-free media.
B. Some mammalian viruses can be cultivated in hen's eggs.
C. Some viruses with broad host ranges can multiply in many types of cells.
D. Some human viruses can be grown in mice

Answer: A

Q125: Virus-infected cells often develop morphologic changes referred to as cytopathic effects. Which of the following statements about virus-induced cytopathic changes is most accurate?

A. They are pathognomonic for an infecting virus.
B. They are rarely associated with cell death.
C. They may include giant cell formation.
D. They can only be seen with an electron microscope.
E. They are diagnostic for a specific type of virus

Answer: C

Q126: The relationship between innate and adaptive immunity can be described by one of the following:

A. Adaptive immune responses are activated several days after innate immunity.

B. Innate immunity can recognize foreign antigens while adaptive immunity cannot.

C. Adaptive immunity can recognize foreign antigens while innate immunity cannot.

D. Innate immune responses are activated following the recognition of antigens by adaptive immunity.

E. Adaptive immunity has evolved before innate immunity in all life forms.

Answer : A

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في روضة القرآن، في ظل الأحاديث الصحاحْ

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