#### Microbiology - midterm exam

### إعداد:



#### **Content:**

- Introduction to microbiology lecture
- Bacterial structure lecture
- Bacterial physicology lecture
- Microbial genetics lecture
- Identification and classification of Bacteria lecture
- Sterilization and disinfection lecture
- Gram +ve bacteria lecture
- Gram -ve bacteria lecture
- Infection control lecture
- Antimicrobial lecture
- Virus structure and classification lecture

# Q1: Molds are multicellular organisms that referred to: a) viruses b) bacteria c) fungi XXX d)protozoa

- Q2: Microorganisms that use photosynthesis to produce energy:
  - a) Achaea
  - b) algae XXX
  - c) fungi
  - d) viruses
- Q3: Clusters of flagella at both end of the cell called:
  - a) Lophotrichous
  - b) Monotrichous
  - c) Amphitrichous XXX
  - d) Peritrichous
- Q4: One of the following bacteria considered as a grape structure:
  - a) staphylococci XXX
  - b) streptococci
  - c) spirochete
  - d) vibrio
  - e) Coccobacillus
- Q5: One of the following bacteria have a lipopolysaccharides in its cell wall:
  - a) gram-positive bacteria
  - b) gram-negative bacteria XXX
  - c) streptococci
- Q6: The phase at which bacteria grow at a rapid rate:
  - a) lag phase
  - b) logarithmic phase XXX
  - c) stationary phase
  - d) Death phase
- Q7: The temperature that describes the maximal possible rate at which organisms grow:
  - a) optimum temperature XXX
  - b) Cardinal temperature
  - c) maximum temperature
  - d) minimum temperature
- Q8: The convenient temperature range for the mesophiles:
  - a) 40-60
  - b) 25-40 XXX
  - c)60-80
- Q9: Organisms that do not and may even be killed by oxygen:
  - a) aerobes
  - b) facultative
  - c) anaerobes XXX
  - d) Aerotolerant anaerobes



#### Q10: The breakdown of cellular constituents (cell wall, proteins, fatty acids, nucleic acids) called: a) Anabolism b) catabolism XXX Q11: enzyme that copies the viral negative-sense RNA genome into a positive-stranded copy: a) RNA polymerase XXX b) Reverse transcriptase

- c) RNA polymerase I
- d) RNA polymerase II

#### Q12: The perfect percentage to be present in disinfectant and anticeptic of alcohol is:

- a) 100%
- b) 50%
- c) 70% XXX
- d) 60%

#### Q13: Q(13): One of the following is bacteriostatic:

- a) Aminoglycosides
- b) Rifampicin
- c) Quinolones
- d) Erthromycin XXX
- e) Voncamycin

#### Q14: One of the following use for inhibition of folate synthesis:

- a) Carbapenems
- b) Co-trimoxazol XXX
- c) Rifampicin

#### Q15: For DNA hyperidization we use:

- a) Southern blot analysis XXX
- b) Western blot analysis
- c) Eastern blot analysis
- d) Restriction endonuclease analysis

#### Q16: One of the following is true about viroids:

- a) Contain host cell DNA instead of viral DNA within the capsid.
- b) Molecules of RNA with no capsid protein or envelope XXX
- c) Infectious protein molecules that do not contain DNA or RNA

#### Q17: Amies medium is an example of:

- a)Transport media XXX
- b)Enriched media
- c)Selective media

#### Q18: Items such as media, liquids, and instruments are usually autoclaved for 15 minutes at temperature:

- a)100 C
- b)160 C
- c)121 C XXX
- d)870 C



## Q19: Blood agar is an example of: a)enriched media XXX b)enrichment c)transport

d)special

#### Q20: Zoonotic transmission of pathogens means:

- a) transmit pathogen from human to animal
- b) transmit pathogen from human to other human
- c) transmit pathogen from animal to human XXX

## Q21: A method which kills food pathogens without damaging the nutritional value or flavor:

- a) Pasteurization XXX
- b) Sterilization
- c) Incineration

#### Q22: For normal examination of microbes we use :

- a) High magnification 1000 diameter XXX
- b)EM
- c)High magnification 400 diameter

#### Q23: The most common chemical sterilant is:

- a)iodine
- b)Ethyl alcohol
- c)Chlorine
- d)Ethylene oxide XXX

#### Q24: The first who use antisepetic techniqes is:

- a) Robert Hooke
- b) Leeuwenhoek's
- c) Joseph Lister XXX
- d) Jenner

#### Q25: What is the level of classification that strain refer to:

- a)Subspecies XXX
- b)Species
- c)Genus
- d)Family

#### **Q26:** All of the following are Key Points for infection control and Personal Hygiene EXCEPT:

- a) Restrain hair hair falling forward may drop organisms.
- b) Keep nails long it's easier to pick stuff XXX
- c)Minimum jewelry (see agency policy)
- d)Cover open wounds with an occlusive dressing
- e)Bare above elbow, no ties or coats

#### Q27: One of the following statements related to biovar:

- a)Special biochemical or physiological properties XXX
- b)Distinctive antigenic properties
- c) Pathogenic properties for certain hosts
- d) Ability to be lysed by certain bacteriophages
- e)Special morphologic features



## Q28: A boy with difficulty in breathing... Bacteria gram negative cocobacillus so the therapy will be for :

- a) Haemophilus influenzae
- b) Bordetella pertussis XXX

#### Q29: Most strains resists phagocytosis by:

- a)Capsule
- b) Cell membrane
- c)Cytoplasm

#### Q30: Virus contains lipid in it's virion:

- a) Parvoviruses
- b) Picornaviruses
- c) hepadnaviruses
- d) Herpes virus XXX

#### Q31: All of the following about C.difficile, EXCEPT?

- a) heavly attached to the colon XXX
- b) antibiotic associated colitis
- c) Enterotoxin that damage intestine
- d) major cause of diarrrhea in hospital
- e) It's an opportunistic infection

## Q32: Someone came to the clinical with wound infection, black skin and gas bubbles, what is the true statement?

- a) the causative agent is spore-forming, gram positive bacilli XXX
- b) the causative agent is spore-forming, gram negative bacilli
- c) the causative agent is nonspore-forming, gram positive bacilli
- d) the causative agent is nonspore-forming, gram negative bacilli
- e) the causative agent is spore-forming, aerobic and gram positive bacilli

#### Q33: The following bacteria are interfering with normal muscle contraction?

- a)clostridium botulinum and clostridium tetani XXX
- b)*C.botulinum* only
- c)C.tetani only
- d)C.difficile only
- e)C.botulinum and C.difficile

## Q34: Someone came to the clinical with clinical manifestation, he said to the doctor that he ate a canned food, what is the bacteria that associated with this?

- a) C.perfeingens
- b) C.difficile
- c) B.anthracis
- d) C.botulinum XXX
- e) Mycobacterium

#### Q35: One of the following is INCORRECT?

- a)coagulase negative involved in nosochomial and opportunistic infection
- b)S.epidermids can easly optain from skin and mucous membrane
- c)S.saprophticus lives on skin, intestine and vagina XXX
- d)coagulase is a specific to identified staphylococcus
- e)S.aureus can cause necrotizing infection



#### Q36: Infant meningitis.. Bacteria was gram negative diplococcoid: a) Neisseria meningitidis XXX b) Neisseria gonorrhoeae c) Haemophilus influenzae Q37: Uncultured gram positive bacteria, which of the following analysis use to identify it: a)Serologic XXX b)special biochemical c)PCR d)rRNA analysis e)gel electrophoresis Q38: What's incorrect about rhinovirus and poliovirus? a)contain RNA polymerase XXX b) have multiple antigenic types c) is not integrated Q39: Ethylene oxide used in gaseous form for sterilizing heat sensitive Objects as: a) catheters b) gloves before use c) Glasswares d) forceps e)Endoscopes XXX Q40: one of these equipments is not needed in case of tuberculosis: a) surgical mask XXX b) Gown c) Gloves d) Goggles e) Respirator mask Q41: The average size of cells during the exponential phase of growth is: a) lesser than the lag phase XXX b) greater than the lag phase c) none of these d) equal to the lag phase Q42: One of the following viruses can enter the cell purely: a) Parvoviruses b) Picornaviruses XXX c) hepadnaviruses d) Herpes virus Q43 Which of the following groups are given in precaution? A. History of hypersensitivity B. Impaired liver and kidney functions

C. Pregnancy and breastfeeding

D. children

E. All of the above

#### Q44: All of the following mechanisms will cause antimicrobial resistance except?

- A. Inactivation of the antibacterial agent
- B. Target hyperproduction
- C. Target bypass
- D. Sequence mutation
- E. Multiple mutations of the genes found in the mitochondria

Q45) Incorrect about chlamidya: Answer: present free in cytoplasm

Q46)Something related to Tugument: Answer: between plasmid and envelope

Q47)True about capsid: Answer: protect genome and determine shape

**Q48)Miss match**: answer: *S.typhi* === infecting proximal small bowel

**Q49) Eccentric spores :** answer: *Clostridium tetani* 



