

MICROBIOLOGY BSc. MCQ 20MARKS

Q1. In a routine diagnostic Microbiology laboratory, the initial stage of bacterial identification involves:-

- A) Genetic homology
- B) Growth characteristics
- C) Biochemical characteristics
- D) Spore formation
- E) Morphology and staining

Q2. Large spirochetes with irregular/regular coils includes:-

- A) Vibrio
- B) Leptospira
- C) Spirillum
- D) Borrelia
- E) Mycoplasma

Q3. Cysteine Lactose Electrolyte Deficient Media (CLED) incorporates a fermentation indicator called?

- A) Neutral red
- B) Phenol red
- C) Bromothymol blue
- D) Bromocresal purple
- E) Methyl red

Q4. Sources of nitrogen in artificial culture media includes:

- A) Mineral salts
- B) Agar
- C) Glucose
- D) Peptones
- E) Sucrose

Q5. Cell membrane damage causes death because ;

- a) All the cell undergoes osmotic lysis
- b) Cell contents leak out
- c) The cell plasmaolysis
- d) The cell lacks a cell wall
- e) Non of the above

Q6. *Staphylococcus aureus* spreads from one place to another in the body through tissues due to secretion of an enzyme termed as:-

- A) Coagulase
- B) Catalase
- C) Saphylokinase
- D) Hyaluronidase
- E) Deoxyribonuclease

Q7. Freidlander bacillus is:

- A) Escherichia
- B) Klebsiella
- C) Citrobacter
- D) Enterobacter
- E) Edwardsiella

Q8. Food poisoning arising from a rice meal is likely to be due to:-

- A) *Bacillus anthracis*
- B) *Bacillus cereus*
- C) *Shigella* species
- D) *Staphylococcus*
- E) *Escherichia coli*

Q9. The drug chloramphenicol binds to the 50S portion of ribosome, thus interfering with

- a) Transcription in prokaryotic cells
- b) Transcription in eukaryotic cells
- c) translation in prokaryotic cells
- d) translation in cells eukaryotic
- e) DNA synthesis

Q10. What is the common characteristic of *Rickettsia*, *Chlamydia* and viruses?

- A) Posses DNA and RNA
- B) Posses DNA and RNA
- C) Obligate intracellular
- D) Reproduce through replication
- E) Reproduce through binary fission

Q11. Lipochrome pigment production is associated with?

- A) *Staphylococcus saprophyticus*
- B) *Staphylococcus aureus*
- C) *Streptococcus pyogenes*
- D) *Streptococcus pneumoniae*
- E) *Escherichia coli*

Q12. Penicillinase producing *Neisseria gonorrhoeae* (PPNG) is associated with an enzyme called?

A) Beta Lactamase

B) Hyaluronidase

C) Coagulase

D) Kinase

E) Phosphatase

Q13. *Bacillus anthracis* varies from *anthracoides*, the latter is:-

A) Non-haemolytic on SBA

B) Non motile

C) McFadyean reaction positive

D) Capsulated

E) Beta haemolytic on SBA

Q14. Optimum growth for *Campylobacter jejuni* is obtained at:-

A) 25°C

B) 29°C

C) 37°C

D) 43°C

E) 55°C

Q15. In acute brucellosis very high level of:

- A) IgM is found
- B) IgM is found
- C) IgE is found
- D) IgA is found
- E) IgA and IgE are found

Q16. Branhamella catarrhalis is associated with:-

- A) Tooth decay
- B) Athletes foot
- C) Sinusitis
- D) Endocarditis
- E) Diarrhea

Q17. Deoxycholate citrate agar is selective due to:-

- A) Crystal violet
- B) Sodium deoxycholate
- C) Ferric citrate
- D) Sodium thiosulphate
- E) Sodium Selenite

Q18. Dermatophytes that attack nails belong to genus:-

- A) Aspergillus
- B) Candida
- C) Epidermophyton
- D) Microsporum
- E) Trichophyton

SECTION B: ESSAY QUESTIONS (30 MARKS)

1. Briefly state Koch's Postulate **10 MARKS**
2. Give 5 reasons that could result to false positive result reporting in sputum, and their solution to the above mentioned problems in a tabulated format. **10MARKS**
3. Mention five factors that could result into incorrect reporting of disc inhibition zones.

10 MARKS

