level 1
semester 2

MICROBIOLOGY

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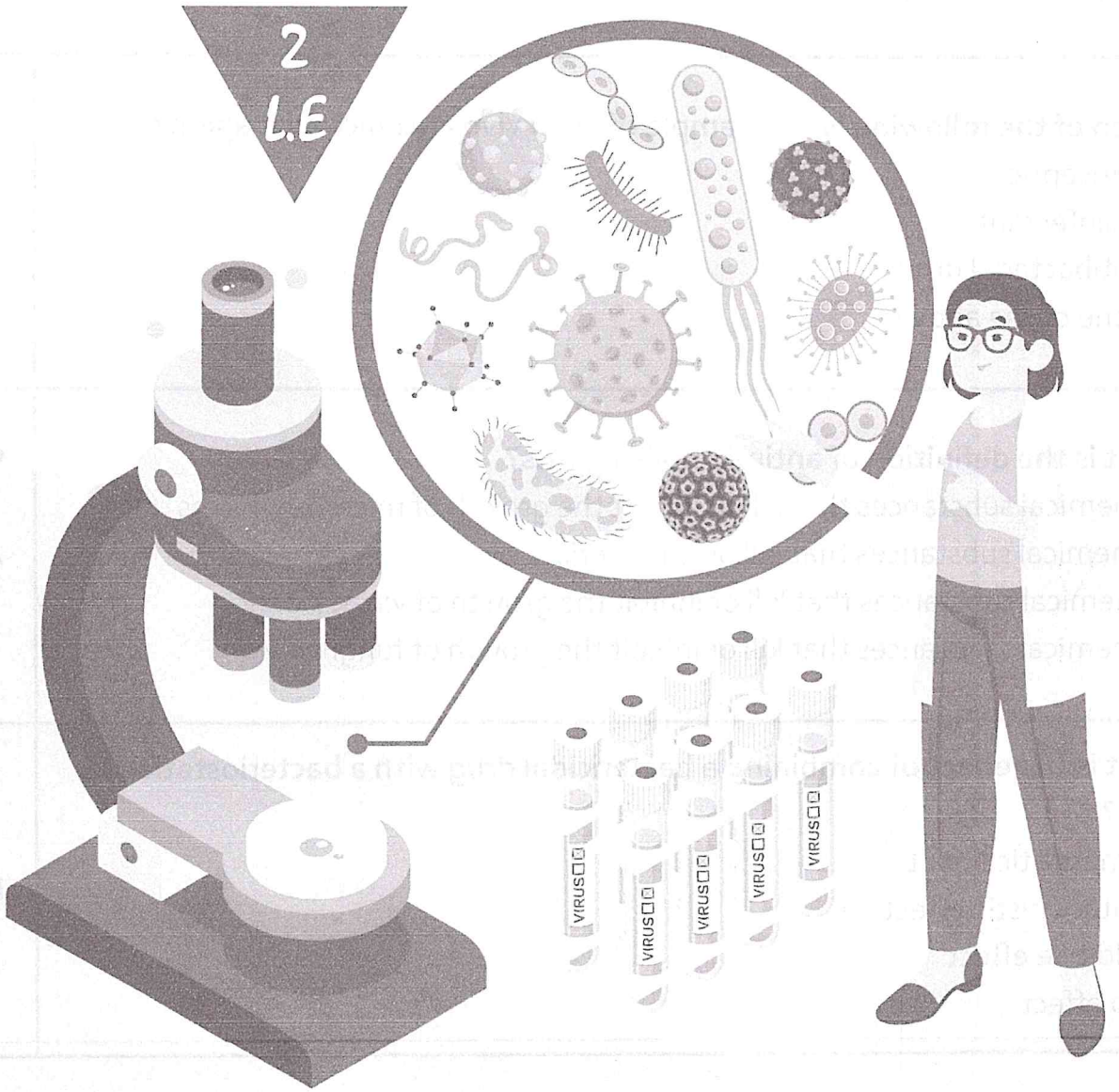
MCQ LECTURE 12



MCQ MICRO LECTURE 12

1. **What is the effect of combining a bactericidal drug with a bacteriostatic drug?** a) Synergistic effect b) Antagonistic effect c) Additive effect d) No effect	B
2. **What is the main goal of antimicrobial agents?** a) To kill host cells b) To inhibit the growth of microorganisms without injuring host cells c) To destroy all microorganisms in the environment d) To promote the growth of microorganisms	B
3. **Which of the following is an example of an in vivo antimicrobial agent?** a) Antiseptic b) Disinfectant c) Antibacterial drug d) none of the above	C
4. **What is the definition of antimicrobial agents?** a) Chemical substances that kill or inhibit the growth of microorganisms b) Chemical substances that kill only bacteria c) Chemical substances that kill or inhibit the growth of viruses only d) Chemical substances that kill or inhibit the growth of fungi only	A
5. **What is the effect of combining a bactericidal drug with a bacteriostatic drug?** a) Synergistic effect b) Antagonistic effect c) Additive effect d) No effect	B

6. What is antibiotic resistance? a) The ability of microorganisms to resist the action of antimicrobial agents b) The ability of microorganisms to destroy host cells c) The ability of antimicrobial agents to inhibit the growth of microorganisms d) The ability of microorganisms to produce antimicrobial agents	A
7. How is antibiotic resistance developed? a) Through spontaneous mutations in bacteria b) Through the presence of antimicrobial drugs as selective pressure c) Through the alteration of structural receptors for antimicrobial agents d) All of the above	D
8. What are plasmids? a) Bacterial cell membranes b) Extrachromosomal genetic elements c) Enzymes that inactivate antimicrobial agents d) Short DNA sequences	B
9. How is the sensitivity of microorganisms to antimicrobial agents determined? a) By measuring the potency of the antimicrobial agent in solution b) By measuring its concentration in body fluids or tissues c) By testing the zones of inhibition of growth on agar surfaces d) All of the above	D
10. Which of the following mechanisms is NOT involved in antimicrobial resistance? a) Decreased permeability of the organism to the drug b) Inactivation of the drug by enzymes produced by the organism c) Development of an altered structural target site for the drug d) Overproduction of the drug by the organism	D

11. What is the purpose of combining multiple antibiotics in the treatment of microbial infections? a) To increase the chance for drug reactions b) To prevent or delay drug resistance c) To promote the growth of microorganisms d) To decrease the chance of drug interactions	B
12. Which of the following is a potential disadvantage of using antibiotic combinations? a) Increased effectiveness against mixed or unknown infections b) Lower cost of treatment c) Increased risk of drug antagonism d) Decreased chance for drug reactions	C
13. How is the susceptibility of microorganisms to antimicrobial agents typically tested in the laboratory? a) By measuring the drug concentration in body fluids b) By testing the ability of microorganisms to destroy host cells c) By measuring the zones of inhibition of growth on agar surfaces d) By evaluating the potency of the antimicrobial agent in solution	C
14. What is the minimal inhibitory concentration (MIC) of an antimicrobial agent? a) The concentration of the drug required to kill all microorganisms b) The concentration of the drug required to inhibit bacterial growth c) The concentration of the drug in body fluids or tissues d) The concentration of the drug required to destroy host cells	B
15. Mechanisms of Action of Antibiotics include a. Inhibition of cell wall synthesis. b. Inhibition of cell membrane permeability or inhibition of active transport. c. Inhibition of protein synthesis. d. Inhibition of nucleic acid synthesis e. All of the Above	E
16. A bactericidal drug when combined with another bactericidal drug may produce a synergistic effect a. Synergism b. Antagonism c. Addition d. None of the Above	A

17. A bacteriostatic drug combined with a bactericidal drug is likely to produce antagonistic effect a. Synergism b. Antagonism c. Addition d. None of the Above	B
18. A bacteriostatic drug combined with another bracteriostatic drug is usually merely additive a. Synergism b. Antagonism c. Addition d. None of the Above	C
19. Cotrimoxazole a combination of trimethoprim and sulphamethoxazole is an example of a. Synergism b. Antagonism c. Addition d. None of the Above	C
20. Advantages of drug Combination is a. Promote treatment in patients suspected to have serious microbial infections. b. Prevent or delay drug resistance. c. Effective in mixed or unknown infection. d. All of the Above	D