

OLABISI ONABANJO UNIVERSITY, AGO-IWOYE
FACULTY OF SCIENCES
DEPARTMENT OF MICROBIOLOGY
HARMATTAN SEMESTER 2016/2017 ACADEMIC SESSION

MCB 201: INTRODUCTORY MICROBIOLOGY (TYPE A)

MULTIPLE CHOICE QUESTIONS

TIME: 1 Hour

1. Which of the following best represents the hierarchy of levels of biological classification?
A. Phylum, kingdom, class, order, genus, species, family
B. Kingdom, phylum, class, order, family, genus, species
C. Kingdom, phylum, family, class, order, genus, species
D. Class, order, kingdom, phylum, family, genus, species
2. One of the following is a moist heat sterilization method
A. Hot air oven B. Autoclaving C. Filtration D. Flaming
3. Nitrosomonas and Nitrococcus convert ammonium salt to nitrites. Nitrites are further changed to by Nitrobacter and Nitrocystis.
A. nitrates B. nitrogen C. ammonium D. gas
4. Plaques are:
A. clear areas in a lawn of cultured cells caused by virus infection
B. stained areas in a cell culture indicating cells infected by a virus.
C. virus colonies on agar D. bacterial colonies on agar
5. Dead and waste organic matter contains compounds which are converted by nitrifying bacteria into nitrates and these are assimilated by plants.
A. ammonium B. nitrite C. nitrogen D. gas
6. Virus reproduces in living cells by
A. replication B. duplication C. multiplication D. all of these
7. Specific fungicidal chemicals are effective against the few fungal microorganisms that live on skin such as and
A. diarrhea and ringworm B. athlete's foot and ringworm
C. athlete's foot and staphylococcal D. ringworm and staphylococcal
8. Bacteria such as *Streptococcus lactis* convert milk sugar lactose into that coagulates casein in dairy Industry. A. lactic acid B. milk C. lactose D. sugar
9. Viable plate count can be obtained using
A. Spread plate method B. Pour plate method C. both (a) and (b) D. Haemocytometer
10. Denitrifying bacteria remove nitrates and ammonium compounds from the soil by converting them into
A. ammonium B. nitrite C. nitrogen gas D. nitrates
11. In order to grow, all microorganisms require:
A. organic substances B. oxygen C. warm temperatures D. low pressure
12. Microorganisms are literally microscopic organisms, which can only be seen properly with the aid of
A. microscope B. periscope C. eyes D. telescope.

13. The viral nucleocapsid is the combination of
A. genome and capsid ~~B. capsid and spikes~~ C. envelope and capsid D. capsomere and genome
14. One of these is not a feature of Antiseptics
A. They are used externally on living tissue ~~B. They are used on skin and mucous membrane~~
C. They are used on inanimate objects D. They are mild forms of disinfectants
15. The region where bacterial genome resides is termed as
A. Golgi body B. Nucleus C. Ribosome D. Cytoplasm
16. Example of halogens or their compounds used in the control of microorganisms is
A. Sodium hypochlorite B. Tincture of Iodine C. Betadine D. All of the above
- 17..... contain killed or non-virulent (less pathogenic) strains of bacteria and viruses.
A. antigens B. antibodies C. immunity D. Vaccines
18. Blood produces specific in response to the presence of specific foreign bodies called antigens. A. vaccines B. antigens C. antibodies D. immunity
19. Microorganisms can be grown in a sterile Petri dish on agar jelly which contains appropriate
A. food B. nutrients. C. agar D. temperature
20. All algae possess
A. nuclei B. chloroplasts C. Both (a) and (b) D. none of these
21. The appropriate method of sterilizing syringes and surgical instruments is
A. Inspissation B. Pasteurization C. Hot and oven D. Autoclaving
22. Viruses require _____ for growth.
A. bacteria B. plants C. animals D. living cells
23. One of the following is not a low-level disinfectant
A. Hydrogen Peroxide B. Alcohol C. Formaldehyde D. Detergents and Soaps
24. All the following are basic properties of cells except
A. cells have nuclei and mitochondria B. cells have a genetic programme and the means to use it
C. cells are capable of producing more of themselves D. cells are able to respond to stimuli
25. When comparing the types of viruses that infect bacteria, plants, and vertebrate animals, what trends appear from bacterial to vertebrate viral groups?
A. more complex-type forms B. more enveloped forms C. fewer enveloped forms
D. same number of DNA-containing forms
26. Animals are usually able to develop to infections by virtue of immune system.
A. vaccines B. antigens C. antibodies D. immunity
27. Who identified the antimicrobial action of penicillin?
A. Robert Koch B. Richard Petri C. Alexander Fleming D. Louis Pasteur
28. In the pour plate method, the mixed culture is diluted directly in tubes of
A. liquid agar medium B. sterile liquid usually water C. both (a) and (b) D. none of these
29. are weaker chemicals applied to wounds and sores to prevent micro-organisms from multiplying. A. Disinfectants B. Antibiotics C. Antiseptics D. Metabolites
30. Appropriate technique of sterilizing enzyme preparation is
A. Autoclaving B. Oven method C. Membrane filtrations D. Incineration
31. In bacteria, extra chromosomal, circular double stranded, self-replicating DNA molecule is known as
A. Phagemid B. Plasmid C. Phasmid D. Cosmid

32. Which groups of fungi do not generally produce sexual reproductive structures and are also sometimes known as imperfect fungi?
 A. Ascomycotina B. Oomycetes C. Zygomycotina D. Deuteromycotina
33. Which of the following structure is absent in eukaryotic cells?
 A. Mitochondria B. Chloroplasts C. Golgi structure D. Mesosome
34. Bacterial chromosome is
 A. Double stranded and circular B. Single stranded and circular
 C. Double stranded and linear D. Single stranded and linear
35. Microorganisms are the most numerous organisms in any
 A. ecosystem B. water C. air D. life
36. The first organism in most natural food chains is
 A. a herbivore B. a decomposer C. photosynthetic D. carnivorous
37. The disease causing organisms are called
 A. fungi B. bacteria C. pathogens D. viruses
38. What groups listed below have true cell walls?
 A. algae B. mycoplasmas C. Gram-positive bacteria D. fungi
39. Membrane filtration apparatus consists of
 A. Vacuum pump B. Millipore Filter C. Filterate collector D. All of the above
40. Sewage treatment employs bacteria which break down harmful substances in sewage into ones. A. toxic B. hazardous C. less harmful D. odorous
41. Which one is not studied in microbiology?
 A. Bacteria B. Animal Structure C. Fungi D. Virus
42. Bacterial flagella is made up of
 A. Microtubules B. Tubulin C. Flagellin D. Spinnin
43. Identify which statements are correct.
 A. All bacteria have peptidoglycan in their cell walls. B. All fungi have chitin in their cell walls.
 C. All algae have cellulose in their cell walls D. All protozoans have protein in their cell walls
44. In disinfection _____ must be killed
 A. Spores B. Pathogens C. Fungi D. Bacteria
45. Which of the following structures is the smallest?
 A. Viriod B. Hydrogen atom C. fungi D. Chroloplast
46. Gram staining was introduced by
 A. Christian Gram B. Alfred Gram C. Robert Hook D. Louis Pasteur
47. One of these statements is incorrect
 A. High-level germicides are used on living tissue B. Ethylene oxide kills vegetative cells and spores
 C. Ozone can kill cells and spores on the surface of glassware and surgical implements
 D. Aldehydes fix tissues by alkylolation
48. ----- technique is critical to obtaining pure culture in microbiology laboratory
 A. Septic B. Aseptic C. Disinfection D. Pasteurization
49. Some pathogens are carried by from one organism to another.
 A. mosquitoes B. rodents C. vectors D. animals
50. decompose organic matter in sewage in the presence of oxygen.
 A. anaerobic bacteria B. decomposers C. aerobic bacteria D. houseflies
51. Which of the following are not found in Cyanobacteria?
 A. thylakoids B. gas vesicles C. chloroplasts D. heterocysts

52. Which photosynthetic pigments are found in all prokaryotic and eukaryotic photoautotrophs?
A. chlorophyll a B. carotenoids C. phycobilins D. phycocyanin
53. What is Mycology?
A. Study of viruses B. Study of nucleic acid C. Study of bacteria D. Study of fungi
54. Inoculating loop is best sterilized by
A. Dipping in absolute ethanol B. Flaming to red hot for 3-5 minutes C. Tyndallization
D. Autoclaving
55. Microorganisms are found in which of the following kingdom of five kingdom concept
A. Monera B. Protista C. Fungi D. All of these
56. If the disease organism can be transmitted from one person to another it is said to be
A. zoonotic B. contagious C. infectious D. homogeneous
57. Which of the following is not true of virions?
A. Reproduce independently B. Contain DNA C. Contain RNA D. Are extracellular
58. Penicillin was the first antibiotic drug. It was discovered by (1881 - 1955), isolated from the *Penicillium* mould, and commercially produced using biotechnology.
59. The site of ATP synthesis in microorganisms includes:
A. cytoplasmic membranes B. cell walls C. chloroplasts D. mitochondria
60. Microbial number on laboratory bench top is best controlled using
A. Absolute ethanol B. 70% Ethanol C. Butanol D. Propanol
61. What are Blue-Green bacteria called?
A. Aquasobacteria B. Cyanobacteria C. Protozoa D. None of the above
62. Which of the following is not true for eukaryotic cells?
A. Nucleus is bounded by nuclear membrane B. Chromosomes contain histones
C. Chloroplasts and mitochondria contain 70S ribosomes D. Gas vacuoles are present
63. Sterilization does not involve one of the followings.
A. Killing of all microorganisms B. Removal of all forms of life C. The killing of many microorganisms
D. Removal of both vegetative cell and spore of microorganism
64. Which group(s) of microorganisms is (are) thought to be the oldest living organisms?
A. eukaryotes B. heterotrophic prokaryotes C. *Archaea* D. viruses
65. One of these can control microbes
A. Ozonization B. Irradiation C. Methylated spirit D. All of the above
66. Microorganisms particularly, are the most widely distributed forms of life on the planet.
A. bacteria B. virus C. spores D. earthworm
67. Rhizobium bacteria, living in root nodules of leguminous plant symbiotically, helps in fixing atmospheric A. gas B. carbon C. oxygen D. nitrogen
68. Chemicals used for controlling microorganisms can be
A. High-level germicide B. intermediate-level disinfectant
C. Low-level disinfectant D. All of the above
69. Bacteriophages have been used widely in genetic research, since they are the smallest and simplest biological entities capable of
A. self-replication B. duplication C. self-duplication D. multiplication
70. Which of the following is not true for prokaryotic organism?

- A. Nucleus is not bounded by nuclear membrane B. Chromosomes does not contain histones
C. 80S ribosomes are distributed in cytoplasm D. Cell wall contains peptidoglycan as one of
the major component

SHAREHOUSE.OOUBLOG.COM