

Microbiology for nursing
Exam #1 Mix & Match

1. Abstract - (scientific paper) A brief summary of the study and its findings.
2. Acute disease - Diseases with symptoms that develop rapidly and subside rapidly.
3. Anatomy - The study of structure.
4. Anticodon - Three base sequence on a T-RNA that complements the three base sequence on the M-RNA.
5. Asymptomatic infections - Infections without symptoms.
6. Atomic Force microscope - Type of scanning probe microscope. Can magnify 100,000,000x. Can be used to determine the shape of biological molecules
7. Autopsy - Dissection of a human to determine the cause of death.
8. Autotrophic - Organisms that can use the sun's energy to make high energy compounds (sugars) (i.e. they can get the energy they need from the sun).
9. Bacteriology - The study of bacteria.
10. Biogeography - The study of the distribution of organisms.
11. Botany - The study of plants.
12. Cell wall - A rigid wall that surrounds a plasma membrane.
13. Chronic disease - Diseases with symptoms that develop slowly and persist for a long period of time.
14. Class - A number of related orders are combined to form a class.
15. Codon - Three base sequence on M-RNA which complements the three base sequence on a T-RNA (anticodon).
16. Coelozoic - A parasite that lives in the lumen of the gut (technically outside the body but a type of endoparasite).

17. Cohort group study - A study of a group that has had exposure to risk factors for a disease.
18. Convalescent period - During this period the symptoms subside and the patient's health and strength returns.
19. Commensalism - One organism benefits and the other is unaffected. (ex *entamoeba gingivalis* a protozoa found along the base of the gums).
20. Common source epidemic - The number of cases of the disease rise rapidly and then fall off rapidly, suggesting that all those infected were exposed to a common and limited source of the infectious agent. Usually these types of epidemics are caused by non-communicable pathogens.
21. Communicable diseases - Can be transmitted from one person to another person.
22. Dark field microscope - Gives good contrast between living organisms and the background and allows you to see very thin organisms like syphilis bacteria. Light is directed at an angle so that only the light bent by the specimen can be seen.
23. Definitive host - (primary host) host in which the parasite or disease organism reaches sexual maturity (meiosis to form gametes occurs). If the pathogen lacks sexual reproduction, then the host considered the most important is called the definitive host.
24. Disease - The study of the dysfunction of the body.
25. Discussion - (scientific paper) Compares your findings with those of other researchers.
26. Ecology - The study of the interrelationships of organisms to each other and their non-living environment.
27. Ectoparasite - A parasite that lives outside the host's body.
28. Ectopic infection - An infection in other than its normal site in the body.
29. Elongation factors - Enzyme used in protein synthesis. Causes the ribosome to move after a pair of T-RNA and their

amino acids have bound together so that the next T-RNA can come into and match the next codon in the sequence.

30. Endemic - A disease that is normally found in human populations at low levels (low prevalence).
31. Endoparasite - A parasite that lives inside the host's body. Two types histozoic and coelozoic).
32. Enzootic - A disease that is normally found in animal populations at low levels (low prevalence).
33. Epidemic - A sharp rise in the incidents of infection of a disease in humans.
34. Epidemiology - The study of the factors affecting the transmission, occurrence, and distribution of a parasite or disease.
35. Epizootic - A sharp rise in the incidents of infection or a disease in animals other than humans.
36. Eukaryotic - Cells that contain membrane bound organelles.
37. Family - A number of related genera are combined to form a family.
38. Fluorescent microscope - Used to see fluorescent materials. Uses ultraviolet light to light up fluorescent molecules. Species specific
39. Fomites - inanimate objects that transmit a disease. Antibodies that have been bound to fluorescent molecules are often used to identify pathogen species.
40. Gametangia - The structure that holds gametes (sex cells).
41. Genus - A number of related species are combined to form a genus.
42. Germ theory of disease - (Pasteur) Theory that germs exist.
43. Heterotrophic - Organisms that must use the energy of compounds initially fixed by autotrophic organisms (i.e. they must feed on autotrophic organisms or organisms that feed on autotrophic...).

44. Heteroxenous - Parasites that require development in more than one host species during its life cycle (most parasites).
45. Histozoic - A parasite that lives in the host tissue. (an endoparasite).
46. Holotype - A single specimen of a species designated to represent the species.
47. Horizontal spread - A disease that spreads from person to person.
48. Host - organism that is hurt or is harboring a disease organism.
49. Hypothesis - A tentative explanation for a pattern.
50. Incidence - # of new cases of infection per unit time/ # of uninfected at the start of the time period (as a percentage)
51. Incidental parasite - A parasite that accidentally gets inside a host other than its normal host.
52. Incubation period - The time between the infection and the disease.
53. Infection - When the pathogen gets in the host, does not require disease.
54. Intensity - # of a given type of disease organisms or parasites in a given host.
55. Interference microscope - Allows unstained (live) organisms to be viewed, gives specimen a three dimensional look by separating light source into two beams of light and then recombining them after they are through the source.
56. Intermediate host - Host in which some development occurs, but the parasite or pathogen does not reach sexual maturity.
57. Introduction - (scientific paper) states the purpose of the study
58. Kingdom - A number of related phylum (divisions in plants) are combined to form a kingdom.

59. Koch's postulate - Method used to show that a particular disease is caused by a particular microorganism. 1. Microorganism must be present in every case, 2. Isolate a pure culture of organism, 3. Infect an uninfected animal, 4. After animal dies, verify organism is still in animal.

60. Landscape epidemiology - the study of all factors that are needed for an infection and disease. (topology, weather, environment, vector distribution, reservoir host distribution, climate, susceptibility of the host)

61. Latent disease - Diseases that can remain inactive in the body or develop very slowly so that the incubation or latent period can last for years.

62. Light microscope - Uses regular incandescent or florescent light source. Max mag 2000x, can see as small as 02 um.

63. Locality - The geographic area of the planet where the disease or host is found

64. Materials and methods - (scientific paper) Where and how the study was done.

65. Microbiology - The study of life that can only be seen with a microscope.

66. Monoxenous - parasites that can only live in one host species during their life.

67. Morbidity rate - # of cases of a disease in a population / # of people in the population at risk (as a percentage)

68. Mortality rate - # of people in pop that die from disease / # of people in the population (as a percentage).

69. Mutualism - Both organisms benefit (ex. Termite/protozoa).

70. Mycology - The study of fungi.

71. Necropsy - Dissection of an animal to determine the cause of death.

72. Nomenclature - The rules for naming organisms.

73. Non-communicable disease - Diseases that cannot be spread from one person to another.
74. Nosocomial infections - Infections acquired in a hospital
75. Order - A number of related families are combined to form an order.
76. Parasite - The organism that benefits.
77. Parasitoids - An organism that lives inside a host, feeding off it until it kills the host and breaks out to be an insect. Differ from most parasites in that they kill the host.
78. Parasitism - One organism benefits and the other is hurt.
79. Paratenic host - (transport host) The parasite enters the host, but does not undergo any development.
80. Paratype - Other specimens of a species that were collected at the same time as the type specimen, but are not the type specimen.
81. Pathogen - An organism that causes a disease.
82. Pathology - The study of disease causes and their effects.
83. Period of invasion - (disease period) During this period the pathogen reaches its highest levels and greatest toxicity. Symptoms of the disease are the most severe during this period.
84. Phase contrast microscope - Allows viewing of organisms without staining (live organisms), A single wave length of light is used, increasing the contrast between organisms,
85. Phoresis - Two symbionts that are merely traveling together, neither benefits or is hurt (ex barnacles on a whale).
86. Phylum - A number of related classes are combined to form a phylum (division in plants).
87. Physiology - The study of the functions of the parts of organisms.
88. Prevalence - # of hosts infected/# of hosts examined (as a percentage)

89. Prodromal stage - A short period of 1-2 days. Symptoms first being to appear at this stage, but are not well defined. The person often notices that they do not feel good.
90. Prokaryotic - Cells that lack membrane bound organelles.
91. Propagated epidemic - The number of cases of the disease usually rises slower and falls off slower than a common source epidemic. This type of epidemic is usually caused by communicable diseases that can be transmitted from one person to another.
92. Prospective study - Looks ahead to see if identified risk factors can be used to predict the conditions that will cause future disease outbreaks to occur.
93. Protozoology - The study of protozoa (microorganisms classified as singular)
94. Reservoir host - Any animal that harbors a parasite or disease that can be transferred to an animal of concern.
95. Resistant hosts - Hosts that are in a physiological state so that disease organisms or parasites can not become established in them; the host's immune system destroys the pathogen or it can't get into the body.
96. Results - (scientific paper) The findings of the experiments
97. Retrospective study - A study that is done after a disease outbreak. Compares those effected by those not effected to determine the source, mode of transmission and the cause of the disease outbreak.
98. Ribosome - Cell component that performs protein synthesis from the M-RNA to the amino acid chain.
99. Scanning electron microscope - Forms an image from electrons that bounce off of the surface of the specimen. Specimen must be dried, and then coated with a thin film of metal. Can magnify 100,000x and resolve structures as small as 10 nm.
100. Scanning tunneling microscope - Magnification of 100,000,000x, can see individual molecules. (type of scanning probe microscope). Can magnify solid surfaces.

101. Science - An objective method used to find out about the world around us.
102. Sex - A more or less equal contribution of genetic material by two individuals to form a new individual.
103. Signs of disease - Affects of a disease that can be observed by another person.
104. Site - The location of the disease or parasite in the host
105. Species - Organisms capable of interbreeding and producing viable offspring
106. Spontaneous generation - A belief that suggested that life was regularly formed from non-living matter.
107. Susceptible hosts - A host that is in a physiological state that allows the disease organism or parasites to become established in them, usually means that the host is under some kind of stress so that its immune system doesn't destroy the parasite as it enters.
108. Sylvatic - A parasite or disease cycle that is completed in wild animals.
109. Symbiosis - Two organisms living in close association, usually different species.
110. Symptoms of disease - Things that you can tell someone about how a disease makes you feel.
111. Taxonomy - The arrangement of organisms into groups based on their natural relationships. (aka classification).
112. Theory - A widely supported view of the world. An idea that has been tested repeatedly and supported.
113. Transcription - Making a copy of the DNA -> M-RNA, in mitochondria, one gene at a time.
114. Translation - In cytoplasm, using a ribosome to convert the M-RNA 3 base sequence (codon) to a T-RNA (anticodon) carried amino acid.

115. Transmission electron microscope - Can magnify 1,000,000x and resolve structures as small as 0.5nm. Used to see internal cell structures, but one must be careful to consider preparation artifacts when looking at these images. Images must be cut very thin and coated with a thin layer of carbon.

116. Vector - Any agent such as wind, water, or insects that transmit a disease organism (biological, mechanical, indirect transmission).

117 Vertical spread - A disease that spreads from mother to child before the child is born.

118. Virology - The study of viruses.

119. Virulence - The ability of a pathogen to cause a disease.

120. Zoology - The study of animals.

121. Zoonosis - A disease of animals that is transmittable to humans.