



قائمة الاسئلة

ميكروبيولوجي - () - المستوى الأول - قسم جميع التخصصات - كلية العلوم الطبية التطبيقية - الفترة الأولى - درجة الامتحان (70)

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- 1) Cardiotoxic in diphtheria is due to exotoxin affects the heart to cause heart failure a common cause of death in diphtheria.
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 2) The only source of S.aureus infection is infected lesions where large numbers of Staphylococci are disseminated in pus and dried exudates discharged from large infected wounds, burns, secondarily infected skin lesions.
 - 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 3) In developing countries including Yemen, infection is still common: at least 50% of all illnesses for which patients consult their doctors are infective illnesses.
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 4) It is very common for patients to acquire infection while they are in hospitals, sometimes with multi-resistant organisms.
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 5) There is links between microbes and diseases such as cancers, peptic ulcer, inflammatory bowel disease and rheumatoid arthritis.
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 6) Tetanus treatment include only antibiotics to eliminate Cl. teteni from the wound site.
 - 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 7) Female preponderance of UTI is probably due to the shortness of the female urethra.
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 8) BCG vaccine consists of killed M. tuberculosis grown in bile containing medium.
 - 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 9) Urinary infection is predominantly a disease of hospital in-patients.
 - 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 10) Zoonoses are infections between non-vertebrate animals and man.
 - 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 11) Sterilization: Destruction of microbes that cause disease; may not be effective in killing spores.
 - 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 12) Disinfection: Destruction of all forms of microbial life including spores.
 - 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 13) Antisepsis: destruction or inhibition of microorganisms in living tissue there by limiting or preventing the harmful effect of infection.
 - 1) ☐ TRUE.



- 2) ☒ FALSE.
- 14) There are many types of plasmid types. R factors: Plasmids which contain genes that code for extracellular toxin.
1) ☐ TRUE.
2) ☒ FALSE.
- 15) Vancomycin is glycopeptides, available for 30 years but little used and administration by intravenous, or oral route.
1) ☒ TRUE.
2) ☐ FALSE.
- 16) In Epidemiology: A fomite refers to inanimate objects that can carry and spread disease and infectious agents. Fomites can also be called passive vectors.
1) ☒ TRUE.
2) ☐ FALSE.
- 17) In rheumatic fever: ASO is the main serological test of diagnosis Rheumatic fever.
1) ☒ TRUE.
2) ☐ FALSE.
- 18) Clostridium are anaerobic gram positive bacilli, Cl. tetani one of the main pathogen cause gas gangrene.
1) ☐ TRUE.
2) ☒ FALSE.
- 19) Streptococcus pyogenes causes pharyngitis; pharyngitis is inflammation of the back of the throat, known as the pharynx.
1) ☒ TRUE.
2) ☐ FALSE.
- 20) Sexually transmitted diseases naturally tend to produce genital lesions, but several give rise to systemic, sometimes severe, disease.
1) ☒ TRUE.
2) ☐ FALSE.
- 21) Virus particles are small intracellular micro-organisms contain both RNA and DNA.
1) ☐ TRUE.
2) ☒ FALSE.
- 22) The virus possess cellular structures and organelles unable them to make their own proteins as enzymes.
1) ☐ TRUE.
2) ☒ FALSE.
- 23) The Icosahedral virus has capsid contains 20 equal sides.
1) ☒ TRUE.
2) ☐ FALSE.
- 24) Hepatitis viruses are not of great importance in Yemen and do not exist.
1) ☐ TRUE.
2) ☒ FALSE.
- 25) Chikungunya virus is important viral infection in Yemen.
1) ☒ TRUE.
2) ☐ FALSE.
- 26) Dengue viruses are transmitted to man by the dog bites.
1) ☐ TRUE.
2) ☒ FALSE.
- 27) DSS is dengue shock syndrome and mortality rate of DSS is about 15%.
1) ☒ TRUE.
2) ☐ FALSE.
- 28) Measles is serious viral infection in developing countries including Yemen, it can lead to death particularly in



non-immune children.

- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 29) Rabies is a viral infection transmitted to humans through the bite of a mosquito.
- 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 30) Coronaviruses are a group of related RNA viruses that cause diseases in mammals and birds. In humans and birds, it causes respiratory infections that can range from mild to fatal.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 31) Hepatitis B is an infectious disease caused by the hepatitis B virus (HBV) that infects the liver.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 32) Vaccines for the prevention of hepatitis B have been routinely recommended for babies and health care workers in Yemen.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 33) Some viruses of humans and other animals are spread by exposure to infected bodily fluids.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 34) Viruses such as rotavirus are transmitted through the fecal-oral route, which includes contamination of hands, food, and water.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 35) HIV is transmitted through bodily fluids transmitted during sex.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 36) The Hepatitis virus as HBV, are spread by blood-sucking insects and the virus is endemic in Yemen.
- 1) ☐ TRUE.
 - 2) ☒ FALSE.
- 37) The COVID-19 and influenza viruses are two examples of how quickly viruses can mutate and give rise to new genotypes, with human hosts often having no defense against them.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 38) Many viruses are referred to as "benign" and cause little or no disease as herpes simplex type one.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 39) Aciclovir for herpes virus infections and lamivudine for HIV and hepatitis B virus infections are two examples of nucleoside analogues for viral treatment.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 40) The measles vaccine is effective at preventing the disease, is exceptionally safe, and is often delivered in combination with other vaccines.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 41) Immunity is concerned with the recognition and disposal of foreign or 'non-self' material that enters the body.
- 1) ☒ TRUE.
 - 2) ☐ FALSE.
- 42) Resistance to infection may be 'innate' (i.e. get it with time and changing) or 'acquired' as the result of an



adaptive immune response.

- 1) - TRUE.
 - 2) ☒ FALSE.
- 43) Adaptive immune response: The development or augmentation of defence mechanisms in response to a particular ('specific') stimulus, e.g. an infectious organism.
- 1) ☒ TRUE.
 - 2) - FALSE.
- 44) Vaccination: A method of stimulating the innate immune response and generating memory and acquired resistance without suffering the full effects of the disease.
- 1) - TRUE.
 - 2) ☒ FALSE.
- 45) Immunosuppression Autoimmunity, hypersensitivity and, above all, graft rejection sometimes necessitate the suppression of adaptive immune responses by drugs or other means.
- 1) ☒ TRUE.
 - 2) - FALSE.
- 46) Complement: A complex set of serum proteins, some of which can be triggered by contact with bacterial surfaces. Once activated, complement can damage some cells and stop inflammation.
- 1) - TRUE.
 - 2) ☒ FALSE.
- 47) Cytotoxicity is the mechanism that Macrophages can kill some targets (perhaps including tumour cells) without phagocytosing them, and there are a variety of other cells with cytotoxic abilities.
- 1) ☒ TRUE.
 - 2) - FALSE.
- 48) Infection is Parasitic viruses, bacteria, protozoa, worms or fungi that attempt to gain access to the body or its surfaces are probably the chief raison d'être of the immune system.
- 1) ☒ TRUE.
 - 2) - FALSE.
- 49) In adaptive immunity, there are numerous antimicrobial (mainly antibacterial) secretions in the skin and mucous surfaces; these include lysozyme (also found in tears), lactoferrin, defensins and peroxidases.
- 1) - TRUE.
 - 2) ☒ FALSE.
- 50) B lymphocytes secrete antibody, the humoral element of innate immunity.
- 1) - TRUE.
 - 2) ☒ FALSE.
- 51) Erythropoietin, a glycoprotein hormone formed in the kidney in response to hypoxia, accelerates the differentiation of red cell precursors and thus adjusts the production of red cells to the demand for their oxygen-carrying capacity, a typical example of 'negative feedback'.
- 1) ☒ TRUE.
 - 2) - FALSE.
- 52) Eosinophil A leucocyte with large refractile granules that contain a number of highly basic or 'cationic' proteins, possibly important in killing larger parasites including worms.
- 1) ☒ TRUE.
 - 2) - FALSE.
- 53) Platelets Small cells responsible for sealing damaged blood vessels ('haemostasis') but they are not the source of many inflammatory mediators.
- 1) - TRUE.
 - 2) ☒ FALSE.
- 54) T and B lymphocytes T (thymus-derived) and B (bone marrow derived or, in birds, bursderived) lymphocytes are the major cellular components of adaptive immunity .



- 1) ☒ TRUE.
2) ☐ FALSE.
- 55) Each immunoglobulin class differs in its biological properties and has evolved to deal with different antigens. Antibodies are synthesized and secreted by plasma cells that are derived from the B cells of the immune system.
1) ☒ TRUE.
2) ☐ FALSE.
- 56) Transfusion of incompatible blood leads to a transfusion reaction, which is mediated by the humoral immune response.
1) ☒ TRUE.
2) ☐ FALSE.
- 57) The main complication of a transfusion reaction is that the hemoglobin produced by the destruction of red blood cells can cause acute kidney failure.
1) ☒ TRUE.
2) ☐ FALSE.
- 58) The complement system is a biochemical cascade of the innate immune system that helps remove pathogens from an organism. It is derived from several small blood plasma proteins that work together to disrupt the plasma membrane of the target cell resulting in cytolysis of the cell.
1) ☒ TRUE.
2) ☐ FALSE.
- 59) The complement system consists of more than 35 soluble, cell-associated proteins, 12 of which are directly involved in complement pathways. The complement system is involved in the activities of both innate immunity and acquired immunity.
1) ☒ TRUE.
2) ☐ FALSE.
- 60) NK (natural killer) cell is a lymphocyte-like cell capable of killing some targets, notably virus-infected cells and tumour cells, but without the receptor or the fine specificity characteristic of TRUE. lymphocytes.
1) ☒ TRUE.
2) ☐ FALSE.
- 61) *Entamoeba histolytica* is
1) ☐ an anaerobic parasitic amoebozoan, part of the genus *Entamoeba*.
2) ☐ Predominantly infecting humans and other primates causing amoebiasis.
3) ☐ *E. histolytica* is estimated to be very common in Yemen.
4) ☒ All answers are correct
- 62) Diagnosis of *Entamoeba histolytica* :
1) ☒ confirmed by microscopic examination for trophozoites or cysts.
2) ☐ smears of aspirates or scrapings obtained by proctoscopy, and aspirates of abscesses.
3) ☐ blood test may not be helpful in diagnosing current illness, because the test can be positive if the patient has had amebiasis in the past, even if they are not infected at the time of the test.
4) ☐ Stool antigen detection and PCR are available for diagnosis, and are more sensitive and specific than microscopy.
- 63) *Entamoeba histolytica*
1) ☐ There are a number of effective medications.
2) ☐ For Intestinal infection; Usually nitroimidazole derivatives (such as metronidazole) are used.
3) ☐ metronidazole highly effective against the trophozoite form of the amoeba.
4) ☒ All answers are correct
- 64) Malaria (all TRUE. except one):
1) ☒ An infectious disease transmitted by flies and infects humans.
2) ☐ It causes symptoms that usually include fever, fatigue, vomiting, and headache.



- 3) - In severe cases, malaria can cause jaundice, seizures, coma, or death.
- 4) - Symptoms usually begin ten to fifteen days after the bite of an infected mosquito.
- 65) Malaria; the risk of disease can be reduced by (all TRUE. except one):
- 1) - preventing mosquito bites through the use of mosquito nets and insect repellents.
- 2) - mosquito-control measures such as spraying insecticides and draining standing water.
- 3) - by medications prevent malaria for travelers in areas where the disease is common as combination of sulfadoxine/pyrimethamine .
- 4) + Recently, there is one vaccine which has been shown to reduce the risk of malaria by about 40% in children and it is available in Yemen.
- 66) Malaria (all TRUE. except one):
- 1) - Five species of Plasmodium can infect and be spread by humans.
- 2) + Most deaths are caused by *P. vivax*, whereas *P. falciparum*, *P. ovale*, and *P. malariae* generally cause a milder form of malaria.
- 3) - Malaria is typically diagnosed by the microscopic examination of blood using blood films, or with antigen-based rapid diagnostic tests.
- 4) - Methods that use the polymerase chain reaction to detect the parasite's DNA have been developed, but are not widely used in areas where malaria is common due to their cost and complexity.
- 67) Leishmania species are
- 1) - unicellular eukaryotes having a well-defined nucleus and other cell organelles including kinetoplasts and flagella.
- 2) - The amastigote form is found in the mononuclear phagocytes and circulatory systems of humans.
- 3) - The promastigote form is found in the alimentary tract of sand flies.
- 4) + All answers are correct
- 68) Visceral leishmaniasis (VL)
- 1) - The parasite migrates to the internal organs such as the liver, spleen (hence "visceral"), and bone marrow.
- 2) - if left untreated, will almost always result in the death of the host.
- 3) - Signs and symptoms include fever, weight loss, fatigue, anemia, and substantial swelling of the liver and spleen.
- 4) + All answers are correct
- 69) In intestinal schistosomiasis,
- 1) - The worms of *S. mansoni* and *S. japonicum* migrate to the veins of the gastrointestinal tract and liver.
- 2) - Eggs in the gut wall can lead to pain, blood in the stool, and diarrhea (especially in children).
- 3) - Severe disease can lead to narrowing of the colon or rectum.
- 4) + All answers are correct
- 70) Cutaneous leishmaniasis all TRUE. except one:
- 1) - localised and diffuse infections appear as obvious skin reactions.
- 2) - The most common Cutaneous leishmaniasis is the Oriental Sore.
- 3) - Cutaneous infections are most common in Afghanistan, Brazil, Iran, Peru, Saudi Arabia and Syria and Yemen.
- 4) + Cutaneous leishmaniasis is the second-largest parasitic killer in the world (after malaria), responsible for an estimated 20,000 to 30,000 deaths each year worldwide.