

MULTIPLE CHOICE QUESTIONS (MCQs)**Instructions: Attempt all questions. Each question contains 01 mark**

Q. No. 1	A virus having twenty corners of capsid is said to be? a. Helical b. Icosahedral c. Spherical d. Metrix
Q. No. 2	What are Buildings blocks of viral capsid? a. Capsomeres b. Viral envelope c. Spikes d. Viral nucleic acid
Q. No. 3	Viral envelope is made up from? a. Glycoprotein b. Lipoprotein c. Carbohydrates d. Polysaccharides
Q. No. 4	Which of the following is heat sensitive component of virus? a. Viral capsid b. Viral envelope c. Viral spikes d. Viral nucleic acid
Q. No. 5	For the formation of viral envelope, lipid content is originated from? a. Viral capsid b. Host cell c. Viral spikes d. Viral nucleic acid
Q. No. 6	Identify the example of virus that can transmit through Sexual contact? a. Corona virus b. Influenza virus c. HIV d. Polio virus
Q. No. 7	Primary site of replication of all DNA viruses? a. Nucleus of host b. Cytoplasm of host c. Cell membrane of the host d. Ribosome of host
Q. No. 8	Which of the following vaccine contain alive antigen? a. Recombinant vaccine b. Live attenuated vaccine c. Toxoid vaccine d. Killed vaccine
Q. No. 9	What kind of vaccine is used to prevent hepatitis B virus? a. Subunit vaccine b. Live attenuated vaccine c. Toxoid vaccine d. Killed vaccine
Q. No. 10	Regarding cytomegalovirus (CMV), which one of the following is most accurate? a. CMV is usually acquired by the fecal-oral route in adults. b. Neonates born from infected mothers should be given the subunit vaccine. c. Reactivation of CMV in sensory ganglion cells leads to painful vesicles along nerves. d. CMV infection of a fetus during the first trimester results in more congenital abnormalities than infection in the third trimester.
Q. No. 11	Your patient is a 35-year-old man who had a grand-mal seizure this morning. Magnetic resonance imaging revealed a lesion in the temporal lobe. A brain biopsy showed multinucleated giant cells with intranuclear inclusion bodies. Which one of the following is the most likely cause of this disease? a. Cytomegalovirus b. Epstein-Barr virus c. Herpes simplex virus type 1 d. Human herpesvirus 8
Q. No. 12	Your patient is a 22-year-old woman with several episodes of bloody diarrhea. She is HIV antibody positive with a CD4 count of 50. Stool cultures for Shigella, Salmonella, and Campylobacter were negative. An assay for Clostridium difficile toxin was negative. Colonoscopy revealed many ulcerated

	<p>lesions. Biopsy revealed cells with "owl's eye" inclusions in the nucleus. Which one of the following is most likely cause of this disease?</p> <p>a. Cytomegalovirus b. Epstein-Barr virus c. Herpes simplex virus type 1 d. Human herpesvirus 8</p>
Q. No. 13	<p>Regarding human papillomavirus (HPV), which one of the following statements is most accurate?</p> <p>a. There is no vaccine available against HPV. b. Acyclovir is effective in preventing lesions caused by HPV but does not cure the latent state. c. Antigen-antibody complexes play an important role in the pathogenesis of warts caused by HPV. d. The early proteins of HPV play a more important role in malignant transformation than the late proteins.</p>
Q. No. 14	<p>Regarding influenza virus, which one of the following statements is most accurate?</p> <p>a. The virion contains an RNA-dependent DNA polymerase. b. Its surface proteins, hemagglutinin and neuraminidase, have multiple serologic types. c. The protein that undergoes antigenic variation most often is the internal ribonucleoprotein. d. Antigenic drift involves major changes in antigenicity that result from reassortment of the segments of its RNA genome.</p>
Q. No. 15	<p>Regarding influenza virus and the disease influenza, which one of the following statements is most accurate?</p> <p>a. Both the killed and the live, attenuated vaccines induce lifelong immunity. b. Influenza A virus causes more severe disease and more widespread epidemics than does influenza B virus. c. The genome of influenza A virus has eight segments, but the genome of influenza B virus is in one piece. d. The classification of influenza viruses into A, B, and C viruses is based on antigenic differences in their hemagglutinin.</p>
Q. No. 16	<p>A woman was hiking in an isolated area when a skunk appeared and bit her on the leg. She now presents to your emergency room about an hour after the bite. Which one of the following is the most appropriate thing to do?</p> <p>a. Give rabies vaccine and hyperimmune globulin immediately. b. Reassure her that rabies is not a problem because skunks do not carry rabies. c. Quarantine the animal for 10 days and only treat her if signs of rabies appear in the animal. d. Test the patient's serum for antibodies now and in 10 days to see if there is a rise in antibody titer before treating her.</p>
Q. No. 17	<p>Regarding poliovirus and the disease poliomyelitis, which one of the following is most accurate?</p> <p>a. Poliovirus is transmitted primarily by the fecal-oral route. b. New antigenic variants arise by coinfection with animal strains of poliovirus. c. Paralytic poliomyelitis is the most common manifestation of poliovirus infection. d. Poliovirus has single-stranded RNA as its genome and a polymerase in the virion that synthesizes its mRNA.</p>
Q. No. 18	<p>An outbreak of jaundice occurs in several young children who attend the same day care center. If the outbreak was caused by a virus, which one of the following is the most likely cause?</p> <p>a. Hepatitis A virus b. Hepatitis B virus c. Hepatitis C virus d. Hepatitis D virus</p>
Q. No. 19	<p>A woman who is hepatitis B surface antigen (HBsAg) positive and hepatitis B surface antibody (HBsAb) negative has just given birth. Which one of the following is the most appropriate thing to do for the newborn?</p> <p>a. Nothing. The child is protected against hepatitis B. b. Immunize with the vaccine containing HBsAg (HBV vaccine). c. Give hepatitis B hyperimmune globulin (HBIG). d. Give both the HBV vaccine and HBIG.</p>
Q. No. 20	<p>Your patient is a 35-year-old man who complains that the whites of his eyes have turned yellow. After taking a history and doing a physical, you order serologic tests to determine whether he has viral hepatitis. On the basis of the results, you tell him that he has a mild form of hepatitis that does not cause long-term damage to the liver. Your conclusion is based on a positive result on which one of the following tests?</p> <p>a. Antibody to hepatitis C virus b. Hepatitis B surface antigen c. Hepatitis delta antigen d. IgM antibody to hepatitis A virus</p>
Q. No. 21	<p>Yellow fever still exists in many tropical areas of the globe. Which one of the following is the best reason yellow fever still exists?</p> <p>a. Sewage disposal is inadequate in many areas. b. Both humans and monkeys are reservoirs for yellow fever virus. c. The virus has mutated, so the existing vaccine is no longer effective. d. The vaccine has been withdrawn because it was found to have unacceptable side effects.</p>
Q. No. 22	<p>Regarding the mode of action of antifungal drugs, which one of the following is most accurate?</p> <p>a. Azole drugs, such as fluconazole, act by inhibiting ergosterol synthesis. b. Amphotericin B acts by inhibiting fungal protein syntheses at the 40S ribosomal subunit. c. Terbinafine acts by inhibiting fungal DNA synthesis but has no effect on DNA synthesis in human cells. d. Echinocandins, such as caspofungin, act by inhibiting messenger RNA synthesis in yeasts but not in molds.</p>
Q. No. 23	<p>Regarding the structure and reproduction of fungi, which one of the following is most accurate?</p> <p>a. Peptidoglycan is an important component of the cell wall of fungi.</p>

	<p>b. Molds are fungi that grow as single cells and reproduce by budding.</p> <p>c. Some fungi are dimorphic (i.e., they are yeasts at room temperature and molds at body temperature).</p> <p>d. The fungal cell membrane contains ergosterol, whereas the human cell membrane contains cholesterol.</p>
Q. No. 24	<p>AIDS disease is caused by a virus which belongs to</p> <p>a. Retro virus group</p> <p>b. Rhabdo virus group</p> <p>c. Hepatitis virus group</p> <p>d. Adeno virus group</p>
Q. No. 25	<p>Koplic's spots will develop in</p> <p>a. HIV</p> <p>b. Measles</p> <p>c. Mumps</p> <p>d. Rubella</p>
Q. No. 26	<p>Aflatoxin is produced by</p> <p>a. Aspergillus sps</p> <p>b. Penicillium sps</p> <p>c. Alternaria sps</p> <p>d. None of these</p>
Q. No. 27	<p>Rabies virus can multiply in</p> <p>a. The central nervous system only</p> <p>b. The peripheral nerves</p> <p>c. Muscle tissues</p> <p>d. All the above</p>
Q. No. 28	<p>Fungi producing mycelium are called</p> <p>a. Moulds</p> <p>b. Filamentous fungi</p> <p>c. Both a and b</p> <p>d. Yeasts</p>
Q. No. 29	<p>Which one of the following drug of choice is required for most systemic fungal infection?</p> <p>a. Fluconazole</p> <p>b. Amphotericin</p> <p>c. Caspo fungin</p> <p>d. Griseofulvin</p>
Q. No. 30	<p>In the family coronavirus, the word corona refers to:</p> <p>a. Thread</p> <p>b. Whip</p> <p>c. Prominent halo of spikes</p> <p>d. Tales</p>
Q. No. 31	<p>Which one of the following repeating subunits are responsible to determine the shape of the viruses?</p> <p>a. Capsid</p> <p>b. Capsule</p> <p>c. Capsomers</p> <p>d. Envelope</p>
Q. No. 32	<p>Any fungal infection of the skin, hair or nails is called a?</p> <p>a. mycophytosis</p> <p>b. hairandnailopsis</p> <p>c. dermatophytosis</p> <p>d. keratosis</p>
Q. No. 33	<p>Polio is primarily a disease that affects?</p> <p>a. the gastrointestinal system</p> <p>b. the central nervous system</p> <p>c. muscles and skeleton</p> <p>d. the respiratory system</p>
Q. No. 34	<p>Molds grow by the formation of ribbon like structures are known as:</p> <p>a. Septum</p> <p>b. Mycelium</p> <p>c. Hyphae</p> <p>d. Septae</p>
Q. No. 35	<p>Which one of the following fungi do not exist as saprophytes?</p> <p>a. Cryptococcus</p> <p>b. Aspergillus</p> <p>c. Candida albicans</p> <p>d. Histoplasma</p>
Q. No. 36	<p>Which one of the following chemical component is only present in wall of fungi?</p> <p>a. Peptidoglycan</p> <p>b. Ergosterol</p> <p>c. Chitin</p> <p>d. Zymosterol</p>
Q. No. 37	<p>Regarding Ebola virus, which one of the following is most accurate?</p> <p>a. Skunks and raccoons are the main natural reservoirs for Ebola virus.</p> <p>b. In endemic areas, most people are latently infected with Ebola virus.</p>

	c. People known to be exposed to Ebola virus should be given ganciclovir to prevent disease. d. The appearance of Ebola virus in the electron microscope is that of a long thread, which often has a
Q. No. 38	Which of the following modes of transmission of human immune deficiency virus (HIV) occurs significantly MORE often than the others? a. Direct skin contact b. During childbirth c. Fecal-oral route d. Respiratory aerosols
Q. No. 39	Your patient is a 30-year-old woman who is in her third trimester of pregnancy, is of Filipino origin, and lives in the Central Valley of California. She complains of severe low back pain of several weeks in duration. An X-ray reveals a lesion in the fourth lumbar vertebra. Material from a needle biopsy of the lesion is examined by a pathologist who calls to tell you the patient has coccidioidomycosis of the following, which one did the pathologist see in the biopsy? a. Nonseptate hyphae b. Septate hyphae c. Spherules containing endospores d. Yeasts with a single bud
Q. No. 40	What types of viruses contain the enzyme lysozyme to aid in their infection? a. Bacteriophage b. Animal Viruses c. Plant Viruses d. Fungal Viruses e. Human Viruses
Q. No. 41	Which of the following is not an RNA virus? a. Retrovirus b. Enterovirus c. Rhabdovirus d. Adenovirus
Q. No. 42	A type of cell culture that can reproduce for an extended number of generations and is used to support viral replication is a : a. Primary cell culture b. Continuous cell line c. Cell strain d. Diploid fibroblast cell
Q. No. 43	What is the most common cause of aseptic meningitis of viral etiology? a. Enteroviruses b. Herpesviruses c. Arboviruses d. Retroviruses
Q. No. 44	The time from adsorption of a bacteriophage to release of newly synthesized bacteriophage is generally a. 1-5 minutes b. 20-40 minutes c. 1-4 hours d. 6-24 hours
Q. No. 45	Viral surface proteins have various roles to play for their survival and in pathogenesis. Which of the following statement is most accurate about them? a. Misfolded viral surface proteins cause prions disease. b. They act as proteases that degrade cellular proteins leading to cell death. c. They are the polymerases that synthesize viral messenger RNA. d. Neutralizing antibodies are formed against viral surface proteins .
Q. No. 46	The human virus that has been associated with Burkett's lymphoma (a malignant tumor of the jaw) is: a. Cytomegalovirus b. Human papilloma virus (HPV) c. Retroviruses d. Epstein- Barr virus
Q. No. 47	A girl who pricked her finger while pruning some rose bushes develops a local pustule that progresses to an ulcer. Several nodules then develop along the local lymphatic drainage. The most likely agent is a. Aspergillus fumigatus b. Sporothrix schenckii c. Cryptococcus neoformans d. Candida albicans
Q. No. 48	Which one of the following is not the characteristics of histoplasmosis? a. Person to person transmission b. Specific geographic distribution c. Yeasts in tissue d. Mycelial phase in the soil
Q. No. 49	How can we identify Aspergillosis in tissue? a. Meta granules b. Budding cells c. Pseudohyphae d. Septate hyphae
Q. No. 50	What is the medical term for a fungal infection in humans?



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- a. Mycosis
- b. Fungosis
- c. Mucorsis
- d. None of These

Q. No. 51 Which one of the following is pandemic?
a. worldwide outbreak of disease
b. disease outbreak
c. disease that is easily spread
d. vector of infection

Q. No. 52 Which one of the following is communicable disease?
a. disease spread while staying at a hospital
b. disease that is spread by direct contact
c. disease that is easily spread
d. inanimate object

Q. No. 53 Polio is primarily a disease that affects?
a. the gastrointestinal system
b. the central nervous system
c. muscles and skeleton
d. the respiratory system

Q. No. 54 Which one of the following are killed by polio virus?
a. Sensory neurons
b. Motor neurons
c. Receptors
d. Effectors

Q. No. 55 Which one of the following is causative agent of common cold?
a. Rhabdo virus
b. Pox virus
c. Ebola virus
d. Rhino virus

Q. No. 56 Which one of the following virus causes Upper and lower respiratory tract infections?
a. Influenza virus
b. Polio virus
c. Paramyxo virus
d. Flavi virus

Q. No. 57 Which one of the following is the causative agent for the ringworm?
a. Epidermatophyton
b. Tinea Nigra
c. Mycetoma
d. Histoplasma

Q. No. 58 Which one of the following is known as Rose Gardeners disease?
a. Sporotrichosis
b. Chromomycosis
c. Mycetoma
d. Tinea versicolor

Q. No. 59 Which of the following is the most correct statement about eumycotic mycetoma?
a. It is characterized by infectious granulomas and abscesses
b. The disease is more frequent in colder regions
c. It spreads from one person to another very easily
d. The mycoses are usually superficial

Q. No. 60 What are the primary sites of invasion in eumycotic mycetoma?
a. Neck and face
b. Hair shafts
c. Legs and hands
d. Chest and back

Q. No. 61 Which one of the following chemical component is only present in wall of fungi?
a. Peptidoglycan
b. Ergosterol
c. Chitin
d. Zymosterol

Q. No. 62 Which one of the following fungi reproduce by budding?
a. Cryptococcus neoformans
b. Sporothrix
c. Histoplasma capsulatum
d. Malassezia furfur

Q. No. 63 The primary mode of transmission of poliomyelitis is
a. Oral route
b. Blood
c. Milk
d. Person to person

Q. No. 64 Mycotoxins are produced by
a. Bacteria
b. Fungi

	c. Algae d. Protozoans
Q. No. 65	Rabies virus is a. Naked RNA virus b. Naked DNA virus c. Enveloped RNA virus d. Enveloped DNA virus
Q. No. 66	m RNA synthesis from DNA is termed a. Transcription b. Transformation c. Translation d. Replication
Q. No. 67	Which of the following is called serum Hepatitis? a. HCV b. HAV c. HBV d. HIV
Q. No. 68	AIDS disease is caused by a virus which belongs to a. Retro virus group b. Rhabdo virus group c. Hepatitis virus group d. Adeno virus group
Q. No. 69	HIV can be transmitted through a. Blood b. Semen c. Vaginal fluid d. All of these
Q. No. 70	Koplic's spots will develop in a. HIV b. Measles c. Mumps d. Rubella
Q. No. 71	Pus-forming forms are called as a. Pyoderm b. Pyogenic c. Pyrogen d. None of the above
Q. No. 72	Aflatoxin is produced by a. Aspergillus sps b. Penicillium sps c. Alternaria sps d. None of these
Q. No. 73	Influenza virus contains a. Eight segments of RNA b. Two strands of RNA c. Single RNA d. None of these
Q. No. 74	Dengue virus is transmitted from man to man by the a. Sand fly b. Ticks c. Aedes aegypti d. Culex
Q. No. 75	Which one of the following repeating subunits are responsible to determine the shape of the viruses? a. Capsid b. Capsule c. Capsomers d. Envelope
Q. No. 76	The fungus candida causes? a. vaginal yeast infections b. thrush of the mouth c. infections in Canadians d. a and b
Q. No. 77	Mumps is a viral infection that affects what part of the body? a. my humps b. the ears c. the reproductive organs d. the parotid glands
Q. No. 78	Which one of the following is responsible to spread infection by direct contact? a. Water b. Soil

	<ul style="list-style-type: none"> c. Contaminated food d. Sewage
Q. No. 79	<p>Which one of the following drug of choice is required for most systemic fungal infection?</p> <ul style="list-style-type: none"> a. Fluconazole b. Amphotericin c. Caspo fungin d. Griseofulvin
Q. No. 80	<p>Immune response to fungal infection is the formation of....</p> <ul style="list-style-type: none"> a. Granulomas b. Granules c. Spores d. Conidia
Q. No. 81	<p>If a cell is infected by a virus the calculated time to replicate it is approximately....</p> <ul style="list-style-type: none"> a. 12 hours b. 10 hours c. 8 hours d. 4 hours
Q. No. 82	<p>Which one of the following repeating subunits are responsible to determine the shape of the viruses?</p> <ul style="list-style-type: none"> a. Capsid b. Capsule c. Capsomers d. Envelope
Q. No. 83	<p>Nucleic acid of the viruses contains:</p> <ul style="list-style-type: none"> a. Deoxyribonucleic acid (DNA) only b. Ribonucleic acid (RNA) only c. Aminoacid d. Either DNA or RNA
Q. No. 84	<p>Which one of the following is correct option about size of yeast?</p> <ul style="list-style-type: none"> a. 3 microns b. 5 microns c. 1 micron d. 6 micron
Q. No. 85	<p>Which one of the following fungi do not exist as saprophytes?</p> <ul style="list-style-type: none"> a. Cryptococcus b. Aspergillus c. Candida albicans d. Histoplasma
Q. No. 86	<p>The proteins on the external surface of viruses serve several important functions. Regarding these proteins, which one of the following statements is most accurate?</p> <ul style="list-style-type: none"> a. They are the antigens against which neutralizing antibodies are formed . b. They are the polymerases that synthesize viral messenger RNA. c. They are the proteases that degrade cellular proteins leading to cell death. d. They are the proteins that regulate viral transcription.
Q. No. 87	<p>Regarding the tegument, which one of the following is most accurate?</p> <ul style="list-style-type: none"> a. It uncoats the virion within the phagocytic vesicle. b. It mediates the binding of the virion to the cell surface. c. It guides the viral core from the cytoplasm to the nucleus. d. It is the location of proteins in the virion that act as viral transcription factors
Q. No. 88	<p>The purified genome of certain viruses can enter a cell and elicit the production of progeny viruses (i.e., the genome is infectious). Regarding these viruses, which one of the following statements is most accurate?</p> <ul style="list-style-type: none"> a. Their genome RNA has positive polarity. b. Their genome RNA is double-stranded. c. They have a polymerase in the virion . d. They have a segmented genome
Q. No. 89	<p>Viruses can cause changes in individual cells that are visible in the light microscope after suitable staining. Which one of the following is most characteristic of the changes seen in rabies virusinfected cells?</p> <ul style="list-style-type: none"> a. Inclusion bodies in the cytoplasm of macrophages b. Inclusion bodies in the cytoplasm of neurons c. Inclusion bodies in the nucleus of neurons d. Multinucleated giants cells composed of neurons
Q. No. 90	<p>Many viruses use the upper respiratory tract (mouth, nasopharynx) as their important portal of entry. One feature of the portal of entry is that it is the site where the virus first infects and replicates. Which one of the following viruses is most likely to enter via the upper respiratory tract?</p> <ul style="list-style-type: none"> a. Dengue virus b. Epstein-Barr virus c. Hepatitis A virus d. Hepatitis B virus
Q. No. 91	<p>The term vertical transmission refers to:</p> <ul style="list-style-type: none"> a. transmission by insect vector from reservoir to patient. b. transmission from a sex worker to a client.

	<p>c. transmission from mother to child .</p> <p>d. transmission from one child to another at school.</p>
Q. No. 92	<p>Some viruses are known for their ability to cause perinatal infections. Which one of the following viruses is most likely to cause perinatal infections?</p> <p>a. Cytomegalovirus</p> <p>b. Epstein-Barr virus</p> <p>c. JC virus</p> <p>d. Norovirus</p>
Q. No. 93	<p>Which one of the following viruses that causes human disease has an animal reservoir?</p> <p>a. Cytomegalovirus</p> <p>b. Hepatitis C virus</p> <p>c. Smallpox virus</p> <p>d. Yellow fever virus</p>
Q. No. 94	<p>Viral cell are commonly cultured on?</p> <p>a. Nutrient agar</p> <p>b. Living cells</p> <p>c. Blood agar</p> <p>d. Chocolate agar</p>
Q. No. 95	<p>Virus don't replicate without their host because they do not contain?</p> <p>a. Cell wall</p> <p>b. Ribosome</p> <p>c. Enzymes</p> <p>d. Plasmid</p>
Q. No. 96	<p>A virus that can also infect bacterial cell?</p> <p>a. Oncholytic virus</p> <p>b. Onchogenic virus</p> <p>c. Bacteriophage virus</p> <p>d. Lysogenic virus</p>
Q. No. 97	<p>Name the scientist who discovers vaccine?</p> <p>a. A. Fleming</p> <p>b. L. pasture</p> <p>c. E. Jenner</p> <p>d. R. Koch</p>
Q. No. 98	<p>Which component of viral cell makes it receptor specific?</p> <p>a. Viral capsid</p> <p>b. Viral envelope</p> <p>c. Viral protein</p> <p>d. Viral nucleic acid</p>
Q. No. 99	<p>Identify the part of virus structure which surrounds the Genetic material?</p> <p>a. Viral capsid</p> <p>b. Viral envelope</p> <p>c. Viral protein</p> <p>d. Viral spikes</p>
Q. No. 100	<p>Capsid is made up of?</p> <p>a. Protein</p> <p>b. Lipids</p> <p>c. Carbohydrates</p> <p>d. Nucleic acid</p>