

# Diseases and Illnesses

## Multiple-Choice Quiz with Answers and Explanations

### Section 1: General Knowledge (Questions 1–20)

1. Which of the following is considered a communicable disease?

- A) Diabetes
- B) Influenza
- C) Hypertension
- D) Osteoporosis

Answer: B) Influenza

Explanation: Communicable diseases are caused by infectious agents that can be transmitted from person to person. Influenza is caused by the influenza virus and spreads easily. Diabetes and hypertension are non-communicable.

2. What is the primary cause of malaria?

- A) Bacteria
- B) Virus
- C) Parasite
- D) Fungus

Answer: C) Parasite

Explanation: Malaria is caused by Plasmodium parasites, transmitted through the bite of infected Anopheles mosquitoes.

3. Which organ is primarily affected by hepatitis?

- A) Kidney
- B) Liver
- C) Heart
- D) Lungs

Answer: B) Liver

Explanation: Hepatitis is an inflammation of the liver, usually caused by viral infections, alcohol, or autoimmune reactions.

4. Which disease is characterized by high blood sugar levels?

- A) Asthma
- B) Diabetes mellitus
- C) Tuberculosis
- D) Arthritis

Answer: B) Diabetes mellitus

Explanation: Diabetes is a metabolic disorder that causes chronic hyperglycemia due to insulin deficiency or resistance.

5. What is the most common vector-borne disease worldwide?

- A) Zika
- B) Dengue
- C) Malaria
- D) Lyme disease

Answer: C) Malaria

Explanation: Malaria, transmitted by Anopheles mosquitoes, remains the most prevalent vector-borne disease globally, particularly in tropical regions.

6. Tuberculosis primarily affects which body system?

- A) Nervous system
- B) Respiratory system
- C) Digestive system
- D) Circulatory system

Answer: B) Respiratory system

Explanation: Tuberculosis, caused by Mycobacterium tuberculosis, mainly affects the lungs but can spread to other organs.

7. Which of the following is NOT a symptom of influenza?

- A) Fever
- B) Fatigue
- C) Joint pain
- D) Hair loss

Answer: D) Hair loss

Explanation: Influenza causes fever, fatigue, and muscle/joint aches, but hair loss is not a symptom.

8. What type of pathogen causes chickenpox?

- A) Bacteria
- B) Virus
- C) Fungus
- D) Parasite

Answer: B) Virus

Explanation: Chickenpox is caused by the varicella-zoster virus.

9. Which of the following is a non-communicable disease?

- A) Measles
- B) Hypertension
- C) Influenza
- D) Tuberculosis

Answer: B) Hypertension

Explanation: Non-communicable diseases are not spread from person to person; hypertension is related to genetic and lifestyle factors.

10. What is the main treatment for bacterial infections?

- A) Antivirals
- B) Antibiotics
- C) Vaccines
- D) Surgery

Answer: B) Antibiotics

Explanation: Antibiotics target bacterial pathogens and inhibit their growth or kill them. They are ineffective against viruses.

11. Which disease is caused by a deficiency of vitamin C?

- A) Rickets
- B) Scurvy
- C) Beriberi
- D) Pellagra

Answer: B) Scurvy

Explanation: Vitamin C deficiency leads to scurvy, causing bleeding gums, weakness, and skin issues.

12. Which condition is characterized by chronic inflammation of the joints?

- A) Osteoporosis
- B) Rheumatoid arthritis
- C) Gout
- D) Fibromyalgia

Answer: B) Rheumatoid arthritis

Explanation: Rheumatoid arthritis is an autoimmune disease that causes joint inflammation, pain, and deformity.

13. Which of the following is caused by a protozoan parasite?

- A) Influenza
- B) Malaria
- C) Tuberculosis
- D) Measles

Answer: B) Malaria

Explanation: Malaria is caused by Plasmodium species, which are protozoan parasites.

14. Which disease is primarily transmitted through contaminated water?

- A) Cholera
- B) Influenza
- C) HIV/AIDS
- D) Chickenpox

Answer: A) Cholera

Explanation: Cholera, caused by *Vibrio cholerae*, spreads through ingestion of contaminated water or food.

15. What type of pathogen causes athlete's foot?

- A) Virus
- B) Bacteria
- C) Fungus

D) Parasite

Answer: C) Fungus

Explanation: Athlete's foot is a fungal infection of the skin, commonly caused by dermatophytes.

16. Which of the following is a viral disease?

- A) Tuberculosis
- B) Measles
- C) Typhoid
- D) Leprosy

Answer: B) Measles

Explanation: Measles is caused by the measles virus and is highly contagious.

17. What is the main symptom of tuberculosis?

- A) Chronic cough
- B) Rash
- C) Hair loss
- D) Diarrhea

Answer: A) Chronic cough

Explanation: Tuberculosis typically causes a persistent cough, often with blood, along with fever and weight loss.

18. Which disease is caused by *Mycobacterium leprae*?

- A) Tuberculosis
- B) Leprosy
- C) Cholera
- D) Diphtheria

Answer: B) Leprosy

Explanation: Leprosy affects the skin and peripheral nerves and is caused by *Mycobacterium leprae*.

19. Which of the following increases the risk of cardiovascular disease?

- A) Low salt intake

- B) Smoking
- C) Regular exercise
- D) Adequate sleep

Answer: B) Smoking

Explanation: Smoking damages blood vessels and increases the risk of heart disease and stroke.

20. Which illness is caused by a spirochete bacterium?

- A) Syphilis
- B) Influenza
- C) Malaria
- D) Hepatitis

Answer: A) Syphilis

Explanation: Syphilis is caused by the spirochete *Treponema pallidum* and is sexually transmitted.

## Section 2: Infectious Diseases (Questions 21–40)

21. What is the incubation period?

- A) Time it takes for a disease to be cured
- B) Time from infection to the appearance of symptoms
- C) Time it takes for antibiotics to work
- D) Time it takes for immunity to develop

Answer: B) Time from infection to the appearance of symptoms

Explanation: The incubation period is the time between exposure to a pathogen and the onset of symptoms. For example, measles has an incubation period of about 10–14 days.

22. HIV primarily attacks which cells in the body?

- A) Red blood cells
- B) B lymphocytes
- C) T helper (CD4+) cells
- D) Platelets

Answer: C) T helper (CD4+) cells

Explanation: HIV targets the immune system, specifically CD4+ T cells, leading to immunodeficiency if untreated.

23. Which of the following diseases is waterborne?

- A) Tuberculosis
- B) Cholera
- C) Influenza
- D) Measles

Answer: B) Cholera

Explanation: Cholera spreads through ingestion of contaminated water, causing severe diarrhea and dehydration.

24. Which bacteria causes strep throat?

- A) Staphylococcus aureus
- B) Streptococcus pyogenes
- C) Escherichia coli
- D) Mycobacterium tuberculosis

Answer: B) Streptococcus pyogenes

Explanation: Strep throat is caused by Streptococcus pyogenes, leading to sore throat, fever, and swollen lymph nodes.

25. What type of infection is influenza?

- A) Bacterial
- B) Viral
- C) Fungal
- D) Parasitic

Answer: B) Viral

Explanation: Influenza is caused by the influenza virus, which infects the respiratory tract and is highly contagious.

26. Rabies is usually transmitted through:

- A) Contaminated water
- B) Mosquito bites
- C) Animal bites
- D) Airborne droplets

Answer: C) Animal bites

Explanation: Rabies virus is transmitted mainly through the saliva of infected animals, often via bites.

27. Which disease can be prevented by the Bacillus Calmette–Guérin (BCG) vaccine?

- A) Polio
- B) Tuberculosis
- C) Measles
- D) Hepatitis B

Answer: B) Tuberculosis

Explanation: The BCG vaccine protects against tuberculosis, especially severe forms in children.

28. Dengue fever is transmitted by which mosquito species?

- A) Anopheles
- B) Aedes
- C) Culex
- D) Mansonia

Answer: B) Aedes

Explanation: Dengue is transmitted by *Aedes aegypti* mosquitoes, which bite during the day.

29. Which of the following is a symptom of meningitis?

- A) Severe headache and stiff neck
- B) Rash on palms
- C) High blood sugar
- D) Weight gain

Answer: A) Severe headache and stiff neck

Explanation: Meningitis is inflammation of the meninges, often caused by bacterial or viral infection, presenting with headache, neck stiffness, and fever.

30. Lyme disease is caused by:

- A) Virus
- B) Fungus

- C) Bacterium
- D) Protozoa

Answer: C) Bacterium

Explanation: Lyme disease is caused by *Borrelia burgdorferi*, transmitted via tick bites, and may cause rash, fever, and joint pain.

31. Which disease is prevented by the MMR vaccine?

- A) Measles, mumps, rubella
- B) Malaria, meningitis, rabies
- C) Measles, malaria, rubella
- D) Mumps, malaria, rotavirus

Answer: A) Measles, mumps, rubella

Explanation: The MMR vaccine protects against three viral diseases: measles, mumps, and rubella.

32. Which pathogen causes athlete's foot?

- A) Virus
- B) Fungus
- C) Bacteria
- D) Parasite

Answer: B) Fungus

Explanation: Athlete's foot is caused by dermatophyte fungi, affecting skin between toes and causing itching and scaling.

33. Which disease is caused by a prion?

- A) Creutzfeldt-Jakob disease
- B) Influenza
- C) Malaria
- D) Tuberculosis

Answer: A) Creutzfeldt-Jakob disease

Explanation: Prions are misfolded proteins that cause rare but fatal neurodegenerative diseases like Creutzfeldt-Jakob.

34. What is the causative agent of tetanus?

- A) Clostridium tetani
- B) Escherichia coli
- C) Mycobacterium tuberculosis
- D) Streptococcus pyogenes

Answer: A) Clostridium tetani

Explanation: Tetanus is caused by Clostridium tetani, which releases a neurotoxin leading to muscle stiffness and spasms.

35. Which of the following is a fungal infection of the lungs?

- A) Histoplasmosis
- B) Malaria
- C) Influenza
- D) Measles

Answer: A) Histoplasmosis

Explanation: Histoplasmosis is caused by inhalation of Histoplasma capsulatum spores and can mimic tuberculosis symptoms.

36. Which of the following is a symptom of dengue fever?

- A) High fever, severe joint pain, rash
- B) Chronic cough and weight loss
- C) Skin peeling
- D) Hair loss

Answer: A) High fever, severe joint pain, rash

Explanation: Dengue fever, also called "breakbone fever," presents with sudden high fever, intense joint/muscle pain, and sometimes rash.

37. Which disease is caused by a spirochete bacterium?

- A) Lyme disease
- B) Influenza
- C) Malaria
- D) Tetanus

Answer: A) Lyme disease

Explanation: Lyme disease is caused by Borrelia burgdorferi, a spirochete bacterium transmitted by ticks.

38. Which viral disease can cause paralysis in children?

- A) Polio
- B) Influenza
- C) Dengue
- D) Measles

Answer: A) Polio

Explanation: Poliovirus can infect the nervous system and cause irreversible paralysis, usually in children under 5.

39. Scarlet fever is caused by:

- A) Streptococcus pyogenes
- B) Staphylococcus aureus
- C) Vibrio cholerae
- D) Mycobacterium leprae

Answer: A) Streptococcus pyogenes

Explanation: Scarlet fever results from a toxin produced by Streptococcus pyogenes, leading to fever, sore throat, and characteristic rash.

40. Which disease is vector-borne?

- A) Typhoid
- B) Malaria
- C) Measles
- D) Hepatitis A

Answer: B) Malaria

Explanation: Malaria is transmitted through Anopheles mosquito bites, classifying it as vector-borne.

### Section 3: Chronic Diseases (Questions 41–60)

41. Which of the following is a chronic respiratory disease?

- A) Asthma
- B) Influenza
- C) Tuberculosis
- D) Chickenpox

Answer: A) Asthma

Explanation: Asthma is a chronic inflammatory condition of the airways causing wheezing, shortness of breath, and coughing. Unlike influenza or tuberculosis, it is long-term and not infectious.

42. Type 2 diabetes is primarily associated with:

- A) Autoimmune destruction of insulin-producing cells
- B) Insulin resistance
- C) Viral infection
- D) Vitamin deficiency

Answer: B) Insulin resistance

Explanation: In type 2 diabetes, the body's cells become resistant to insulin, causing high blood sugar. Type 1 diabetes involves autoimmune destruction of beta cells.

43. Which condition is a risk factor for heart disease?

- A) High blood pressure
- B) Low blood sugar
- C) Chickenpox
- D) Influenza

Answer: A) High blood pressure

Explanation: Hypertension increases strain on the heart and arteries, contributing to cardiovascular diseases like heart attack and stroke.

44. Osteoporosis affects which part of the body?

- A) Muscles
- B) Bones
- C) Skin
- D) Lungs

Answer: B) Bones

Explanation: Osteoporosis weakens bones, making them fragile and more prone to fractures, often due to aging or low calcium/vitamin D intake.

45. Which chronic disease is characterized by persistent inflammation of the joints?

- A) Rheumatoid arthritis
- B) Influenza
- C) Measles
- D) Tuberculosis

Answer: A) Rheumatoid arthritis

Explanation: Rheumatoid arthritis is an autoimmune disorder causing joint pain, swelling, and eventual deformity over time.

46. Chronic obstructive pulmonary disease (COPD) primarily affects:

- A) Heart
- B) Lungs
- C) Liver
- D) Kidneys

Answer: B) Lungs

Explanation: COPD, often caused by smoking, includes chronic bronchitis and emphysema, leading to airflow obstruction and breathing difficulties.

47. Which of the following is a modifiable risk factor for cardiovascular disease?

- A) Age
- B) Genetics
- C) Smoking
- D) Sex

Answer: C) Smoking

Explanation: Smoking is a lifestyle factor that increases the risk of heart disease; age and genetics are non-modifiable.

48. Which chronic disease results from damage to the pancreas affecting insulin production?

- A) Type 1 diabetes
- B) Hypertension
- C) Osteoarthritis
- D) Asthma

Answer: A) Type 1 diabetes

Explanation: Type 1 diabetes is an autoimmune disease where the pancreas produces little or no insulin, leading to high blood sugar.

49. Which chronic condition is associated with high cholesterol levels?

- A) Cardiovascular disease
- B) Influenza
- C) Tuberculosis
- D) Malaria

Answer: A) Cardiovascular disease

Explanation: High cholesterol contributes to plaque buildup in arteries, increasing the risk of heart attacks and strokes.

50. Gout is caused by:

- A) High uric acid levels
- B) Low calcium intake
- C) Viral infection
- D) Autoimmune inflammation

Answer: A) High uric acid levels

Explanation: Gout occurs when uric acid crystals accumulate in joints, causing pain, swelling, and inflammation.

51. Which of the following is NOT a symptom of chronic kidney disease?

- A) Fatigue
- B) Swelling in the legs
- C) High blood pressure
- D) Rash

Answer: D) Rash

Explanation: Chronic kidney disease often causes fatigue, fluid retention, and hypertension, but skin rash is not a primary symptom.

52. Alzheimer's disease primarily affects:

- A) Lungs
- B) Brain
- C) Liver
- D) Kidneys

Answer: B) Brain

Explanation: Alzheimer's is a neurodegenerative disease causing memory loss, cognitive decline, and behavioral changes.

53. Which chronic disease is most closely linked to obesity?

- A) Type 2 diabetes
- B) Measles
- C) Tuberculosis
- D) Polio

Answer: A) Type 2 diabetes

Explanation: Obesity contributes to insulin resistance, increasing the risk of developing type 2 diabetes.

54. Which of the following is a chronic liver disease caused by long-term alcohol abuse?

- A) Cirrhosis
- B) Hepatitis A
- C) Influenza
- D) Dengue

Answer: A) Cirrhosis

Explanation: Cirrhosis is liver scarring from chronic injury, often due to alcohol, hepatitis, or fatty liver disease.

55. Hypertension is defined as:

- A) Low blood pressure
- B) High blood pressure
- C) Normal blood pressure
- D) Irregular heartbeat

Answer: B) High blood pressure

Explanation: Hypertension is persistently elevated blood pressure, which increases risk for heart attack, stroke, and kidney disease.

56. Which chronic disease involves narrowing and hardening of the arteries?

- A) Atherosclerosis
- B) Asthma
- C) Rheumatoid arthritis
- D) Diabetes

Answer: A) Atherosclerosis

Explanation: Atherosclerosis is the buildup of plaque in arteries, reducing blood flow and increasing cardiovascular risk.

57. Chronic bronchitis is part of which disease?

- A) COPD
- B) Asthma
- C) Tuberculosis
- D) Influenza

Answer: A) COPD

Explanation: Chronic bronchitis, characterized by persistent cough and mucus production, is a type of COPD.

58. Which of the following is a common symptom of chronic heart failure?

- A) Shortness of breath
- B) Rash
- C) Nausea only
- D) Hair loss

Answer: A) Shortness of breath

Explanation: Heart failure leads to fluid accumulation in the lungs, causing breathlessness and fatigue.

59. Which chronic disease is associated with both insulin resistance and obesity?

- A) Type 2 diabetes
- B) Rheumatoid arthritis
- C) COPD
- D) Polio

Answer: A) Type 2 diabetes

Explanation: Type 2 diabetes is often linked to obesity and metabolic syndrome, leading to insulin resistance and high blood sugar.

60. Osteoarthritis primarily affects:

- A) Bones and joints
- B) Kidneys
- C) Liver
- D) Lungs

Answer: A) Bones and joints

Explanation: Osteoarthritis involves degeneration of joint cartilage and underlying bone, causing pain, stiffness, and reduced mobility.

#### Section 4: Genetic Disorders (Questions 61–80)

61. Cystic fibrosis primarily affects which organ system?

- A) Digestive and respiratory
- B) Nervous
- C) Circulatory
- D) Muscular

Answer: A) Digestive and respiratory

Explanation: Cystic fibrosis is a genetic disorder causing thick mucus buildup in the lungs and digestive tract, leading to respiratory infections and malabsorption.

62. Sickle cell anemia is caused by a mutation in which gene?

- A) Hemoglobin beta (HBB) gene
- B) Insulin gene
- C) CFTR gene
- D) BRCA1 gene

Answer: A) Hemoglobin beta (HBB) gene

Explanation: Sickle cell anemia results from a mutation in the HBB gene, causing abnormal hemoglobin that distorts red blood cells into a sickle shape.

63. Down syndrome is caused by:
- A) A deletion in chromosome 21
  - B) An extra copy of chromosome 21
  - C) Mutation in the CFTR gene
  - D) Mutation in hemoglobin gene

Answer: B) An extra copy of chromosome 21

Explanation: Down syndrome is a trisomy, meaning three copies of chromosome 21, leading to developmental delays and characteristic facial features.

64. Huntington's disease is:
- A) Autosomal dominant
  - B) Autosomal recessive
  - C) X-linked recessive
  - D) Mitochondrial

Answer: A) Autosomal dominant

Explanation: Huntington's disease is caused by a dominant mutation in the HTT gene, leading to progressive neurodegeneration.

65. Which genetic disorder leads to fragile bones due to defective collagen?
- A) Osteogenesis imperfecta
  - B) Marfan syndrome
  - C) Sickle cell anemia
  - D) Tay-Sachs disease

Answer: A) Osteogenesis imperfecta

Explanation: Osteogenesis imperfecta is caused by mutations in collagen genes, making bones brittle and prone to fractures.

66. Phenylketonuria (PKU) results in:
- A) Inability to metabolize phenylalanine
  - B) Excess insulin production
  - C) High cholesterol
  - D) Low calcium levels

Answer: A) Inability to metabolize phenylalanine

Explanation: PKU is a metabolic disorder caused by a mutation in the PAH gene, leading to toxic buildup of phenylalanine and potential intellectual disability.

67. Tay-Sachs disease is caused by a deficiency of which enzyme?

- A) Hexosaminidase A
- B) Lactase
- C) Amylase
- D) Lipase

Answer: A) Hexosaminidase A

Explanation: Tay-Sachs is a fatal genetic disorder where lysosomal enzyme deficiency leads to accumulation of gangliosides in the brain, causing neurodegeneration.

68. Marfan syndrome primarily affects:

- A) Connective tissue
- B) Blood cells
- C) Liver
- D) Kidneys

Answer: A) Connective tissue

Explanation: Marfan syndrome is caused by mutations in the FBN1 gene, affecting connective tissue, leading to tall stature, long limbs, and heart complications.

69. Which genetic disorder is X-linked and affects blood clotting?

- A) Hemophilia
- B) Cystic fibrosis
- C) Huntington's disease
- D) Down syndrome

Answer: A) Hemophilia

Explanation: Hemophilia is X-linked, mostly affecting males, and results in impaired blood clotting due to factor VIII or IX deficiency.

70. Which of the following is a mitochondrial inherited disorder?

- A) Leber's hereditary optic neuropathy

- B) Sickle cell anemia
- C) Down syndrome
- D) Cystic fibrosis

Answer: A) Leber's hereditary optic neuropathy

Explanation: Mitochondrial disorders are inherited maternally. Leber's hereditary optic neuropathy affects vision due to mitochondrial DNA mutations.

71. Which genetic disorder is caused by a mutation in the CFTR gene?

- A) Cystic fibrosis
- B) Tay-Sachs
- C) Huntington's disease
- D) Sickle cell anemia

Answer: A) Cystic fibrosis

Explanation: CFTR gene mutations disrupt chloride transport in cells, leading to thick mucus in lungs and digestive organs.

72. Duchenne muscular dystrophy is primarily:

- A) X-linked recessive
- B) Autosomal dominant
- C) Autosomal recessive
- D) Mitochondrial

Answer: A) X-linked recessive

Explanation: Duchenne muscular dystrophy mostly affects boys and causes progressive muscle weakness due to mutations in the dystrophin gene.

73. Which genetic disorder is associated with excessive tall stature and long limbs?

- A) Marfan syndrome
- B) Sickle cell anemia
- C) Phenylketonuria
- D) Tay-Sachs

Answer: A) Marfan syndrome

Explanation: Marfan syndrome affects connective tissue, often causing cardiovascular complications and skeletal abnormalities like long limbs and fingers.

74. Which disease is caused by a deletion on chromosome 5?

- A) Cri-du-chat syndrome
- B) Down syndrome
- C) Turner syndrome
- D) Klinefelter syndrome

Answer: A) Cri-du-chat syndrome

Explanation: Cri-du-chat syndrome results from a deletion on chromosome 5, causing intellectual disability and a distinctive "cat-like" cry in infants.

75. Which genetic disorder leads to neurodegeneration in infants due to lysosomal storage malfunction?

- A) Tay-Sachs disease
- B) Marfan syndrome
- C) Huntington's disease
- D) Hemophilia

Answer: A) Tay-Sachs disease

Explanation: Tay-Sachs involves lysosomal enzyme deficiency, leading to accumulation of fatty substances in the brain, causing early death.

76. Turner syndrome occurs in:

- A) Females with a missing X chromosome
- B) Males with an extra Y chromosome
- C) Individuals with trisomy 21
- D) Individuals with CFTR mutation

Answer: A) Females with a missing X chromosome

Explanation: Turner syndrome is a chromosomal disorder (45,X) causing short stature, infertility, and heart defects in females.

77. Klinefelter syndrome is characterized by:

- A) XXY males

- B) XYY males
- C) XXX females
- D) XO females

Answer: A) XXY males

Explanation: Klinefelter syndrome (47,XXY) affects males, causing infertility, reduced testosterone, and sometimes learning difficulties.

78. Which genetic disorder affects the red blood cells' shape?

- A) Sickle cell anemia
- B) Hemophilia
- C) Down syndrome
- D) Marfan syndrome

Answer: A) Sickle cell anemia

Explanation: Abnormal hemoglobin causes red blood cells to take a sickle shape, leading to blockages in blood vessels and pain crises.

79. Which of the following is an autosomal recessive disorder?

- A) Cystic fibrosis
- B) Huntington's disease
- C) Marfan syndrome
- D) Achondroplasia

Answer: A) Cystic fibrosis

Explanation: Autosomal recessive disorders require two copies of the defective gene to manifest. Cystic fibrosis is inherited in this pattern.

80. Which genetic disorder leads to progressive muscle weakness in boys?

- A) Duchenne muscular dystrophy
- B) Marfan syndrome
- C) Turner syndrome
- D) Tay-Sachs disease

Answer: A) Duchenne muscular dystrophy

Explanation: Duchenne muscular dystrophy is caused by mutations in the dystrophin gene, leading to progressive muscle degeneration and weakness in affected boys.

## Section 5: Emerging Diseases & Miscellaneous Disorders (Questions 81–100)

81. COVID-19 is caused by which virus?

- A) SARS-CoV-2
- B) Influenza virus
- C) Ebola virus
- D) HIV

Answer: A) SARS-CoV-2

Explanation: COVID-19 is caused by the novel coronavirus SARS-CoV-2, which emerged in late 2019 and primarily affects the respiratory system.

82. Which disease is caused by the Ebola virus?

- A) Hemorrhagic fever
- B) Polio
- C) Dengue
- D) Tuberculosis

Answer: A) Hemorrhagic fever

Explanation: Ebola virus causes severe hemorrhagic fever with bleeding, fever, and high mortality.

83. Zika virus infection is most concerning for:

- A) Pregnant women
- B) Elderly adults
- C) Teenagers only
- D) Athletes

Answer: A) Pregnant women

Explanation: Zika virus infection during pregnancy can cause microcephaly and other birth defects in the developing fetus.

84. Which disease is transmitted by ticks and can cause fever, headache, and rash?

- A) Lyme disease
- B) Malaria
- C) Influenza
- D) Hepatitis B

Answer: A) Lyme disease

Explanation: Lyme disease is caused by *Borrelia burgdorferi*, transmitted via tick bites, and can cause long-term joint and neurological complications.

85. Which emerging infectious disease caused a pandemic in 2009?

- A) H1N1 influenza
- B) Ebola
- C) Zika
- D) SARS

Answer: A) H1N1 influenza

Explanation: The H1N1 "swine flu" virus caused a global pandemic in 2009, leading to widespread respiratory illness.

86. Which virus causes severe acute respiratory syndrome (SARS)?

- A) SARS-CoV
- B) HIV
- C) Influenza A
- D) Dengue virus

Answer: A) SARS-CoV

Explanation: SARS is caused by the SARS coronavirus (SARS-CoV), first identified in 2002–2003, leading to severe respiratory illness.

87. Which disease is associated with prions and causes neurodegeneration?

- A) Creutzfeldt-Jakob disease
- B) Tuberculosis
- C) Malaria
- D) Measles

Answer: A) Creutzfeldt-Jakob disease

Explanation: Prion diseases, like Creutzfeldt-Jakob, involve misfolded proteins that cause progressive brain damage and dementia.

88. Which viral disease re-emerged in 2019 in multiple countries?

- A) Measles
- B) Influenza
- C) Malaria
- D) Ebola

Answer: A) Measles

Explanation: Measles outbreaks have re-emerged due to declining vaccination coverage, despite being preventable by the MMR vaccine.

89. Hantavirus primarily spreads through:

- A) Rodent urine and droppings
- B) Mosquito bites
- C) Person-to-person contact
- D) Contaminated water

Answer: A) Rodent urine and droppings

Explanation: Hantavirus is carried by rodents, and humans can become infected by inhaling aerosolized virus from contaminated materials.

90. Which disease is caused by the Nipah virus?

- A) Severe respiratory and neurological illness
- B) Malaria
- C) Tuberculosis
- D) Measles

Answer: A) Severe respiratory and neurological illness

Explanation: Nipah virus causes high mortality respiratory and neurological disease and can spread from animals to humans.

91. Which of the following is an emerging tick-borne disease?

- A) Babesiosis

- B) Influenza
- C) Polio
- D) Measles

Answer: A) Babesiosis

Explanation: Babesiosis is caused by protozoan parasites transmitted by ticks, affecting red blood cells.

92. Which emerging disease is associated with hemorrhagic fever and fruit bats?

- A) Ebola
- B) Malaria
- C) COVID-19
- D) Influenza

Answer: A) Ebola

Explanation: Fruit bats are natural reservoirs of Ebola virus, which can cause severe hemorrhagic fever in humans.

93. Which virus is responsible for the 2012 Middle East Respiratory Syndrome (MERS)?

- A) MERS-CoV
- B) SARS-CoV-2
- C) H1N1
- D) Zika

Answer: A) MERS-CoV

Explanation: MERS-CoV is a coronavirus causing severe respiratory illness, first identified in Saudi Arabia in 2012.

94. Which disease is transmitted through Aedes mosquitoes and can cause hemorrhagic fever?

- A) Dengue
- B) Malaria
- C) Lyme disease
- D) Polio

Answer: A) Dengue

Explanation: Severe dengue (dengue hemorrhagic fever) is caused by *Aedes* mosquitoes and can lead to shock and bleeding.

95. Which emerging disease is associated with the paramyxovirus family?

- A) Nipah virus infection
- B) Ebola
- C) Zika
- D) SARS

Answer: A) Nipah virus infection

Explanation: Nipah virus, a paramyxovirus, can cause severe respiratory and neurological symptoms.

96. Which disease is caused by a coronavirus and led to a global pandemic in 2020?

- A) COVID-19
- B) SARS
- C) MERS
- D) H1N1

Answer: A) COVID-19

Explanation: COVID-19, caused by SARS-CoV-2, spread globally starting in late 2019, leading to widespread respiratory illness and public health measures.

97. Which of the following is considered a re-emerging disease?

- A) Tuberculosis
- B) Ebola
- C) COVID-19
- D) Zika

Answer: A) Tuberculosis

Explanation: TB is considered a re-emerging disease due to drug-resistant strains and increased prevalence in some regions despite being a long-known illness.

98. Which virus is transmitted sexually and can cause cervical cancer?

- A) Human papillomavirus (HPV)
- B) HIV
- C) Zika
- D) Dengue

Answer: A) Human papillomavirus (HPV)

Explanation: HPV infection can cause cervical cancer and genital warts; vaccines help prevent infection.

99. Which of the following is a zoonotic emerging disease?

- A) COVID-19
- B) Asthma
- C) Diabetes
- D) Hypertension

Answer: A) COVID-19

Explanation: Zoonotic diseases originate from animals. SARS-CoV-2 is believed to have crossed from animals to humans.

100. Which viral disease has re-emerged in parts of Africa due to vaccination gaps?

- A) Measles
- B) Polio
- C) Influenza
- D) Malaria

Answer: A) Measles

Explanation: Measles outbreaks occur in areas with low vaccination coverage, despite being preventable through the MMR vaccine.