Q1. Which of the following is correctly matched with its causative organism?

A. Typhoid – Salmonella typhi
B. Malaria – Entamoeba histolytica
C. Pneumonia – Plasmodium vivax
D. Amoebiasis – Trichophyton

Answer: A
Explanation:

Typhoid is caused by Salmonella typhi.

Malaria – Plasmodium, Pneumonia – Streptococcus pneumoniae or Haemophilus influenzae, Amoebiasis – Entamoeba histolytica.

Q2. Which one of the following diseases is not caused by a virus?

A. Influenza
B. Dengue
C. Typhoid
D. AIDS

Answer: C
Explanation: Typhoid is a bacterial disease caused by Salmonella typhi.

Q3. Malarial parasite is introduced into the human body by:

A. Female Anopheles mosquito
B. Male Culex mosquito
C. Female Culex mosquito
D. Male Anopheles mosquito

Answer: A
Explanation: The female Anopheles mosquito transmits Plasmodium while feeding on blood.

Q4. Which among the following is a fungal disease?

A. Ringworm

B. Tuberculosis
C. Typhoid
D. Pneumonia

Answer: A
Explanation: Ringworm is caused by dermatophytic fungi like Trichophyton.

Q5. Which of the following is NOT a lymphoid organ?

A. Spleen
B. Liver
C. Tonsils
D. Thymus

Answer: B
Explanation: Liver is not a lymphoid organ. Others participate in immunity.

Q6. Match the following:

Column I (Disease) Column II (Causative agent)

A. Malaria 1. Plasmodium vivax
B. Typhoid 2. Salmonella typhi
C. Ringworm 3. Microsporum
D. Amoebiasis 4. Entamoeba histolytica

A. A–1, B–2, C–3, D–4
B. A–2, B–1, C–3, D–4
C. A–1, B–2, C–4, D–3
D. A–4, B–2, C–3, D–1

Answer: A
Explanation: Matching is correct per causative organisms.

Q7. Assertion (A): B cells produce antibodies.
Reason (R): B cells mature in the bone marrow.

A. Both A and R are true, and R is the correct explanation of A
B. Both A and R are true, but R is not the correct explanation
C. A is true, R is false
D. Both A and R are false

Answer: A
Explanation: B cells mature in bone marrow and are responsible for antibody production.

Q8. Which of the following provides passive immunity?

A. Vaccination
B. Antiserum
C. Attenuated microbes
D. Toxoid

Answer: B
Explanation: Passive immunity is given directly via ready-made antibodies (e.g., antiserum).

Q9. Which of the following cells are involved in the cell-mediated immune response?

A. B lymphocytes
B. Helper T cells
C. Cytotoxic T cells
D. Plasma cells

Answer: C
Explanation: Cytotoxic T cells kill virus-infected and tumor cells.

Q10. Which of the following immunoglobulins is present in colostrum?

A. IgA
B. IgG
C. IgM
D. IgE

Answer: A
Explanation: IgA is the main antibody in colostrum, providing passive immunity to infants.

Q11. Which one of the following pairs is correctly matched?

A. Asthma – Inflammation of the kidney
B. AIDS – Destruction of helper T cells
C. Ringworm – Viral infection of skin
D. Cancer – Uncontrolled death of body cells

Answer: B
Explanation: AIDS is caused by HIV, which destroys helper T cells, weakening immunity.

Q12. Which vaccine is given to children soon after birth?

A. BCG
B. Polio
C. Hepatitis B
D. All of the above

Answer: D
Explanation: These are part of the newborn vaccination schedule in India.

Q13. Which of the following is used in cancer immunotherapy?

A. Monoclonal antibodies
B. Antibiotics
C. Antigens
D. Interferons only

Answer: A
Explanation: Monoclonal antibodies target specific antigens on cancer cells.

Q14. Which cells help in allergic reactions by releasing histamine?

A. Neutrophils
B. Basophils and mast cells
C. Lymphocytes
D. Monocytes

Answer: B
Explanation: Mast cells and basophils release histamine causing allergy symptoms.

Q15. A person with a weakened immune system is most susceptible to:

A. Autoimmune diseases
B. Opportunistic infections
C. Genetic disorders
D. Allergies

Answer: B
Explanation: Immunocompromised individuals are vulnerable to opportunistic infections.

Q16. Which one of the following diseases is not transmitted by a mosquito?

A. Malaria
B. Dengue
C. Filariasis
D. Typhoid

Answer: D
Explanation: Typhoid is transmitted through contaminated food and water, not by mosquitoes.

Q17. Antibodies are:

A. Lipids secreted by T cells
B. Proteins produced by plasma cells
C. Enzymes that digest pathogens
D. Hormones released during stress

Answer: B
Explanation: Plasma cells (derived from B lymphocytes) produce protein-based antibodies.

Q18. Which of the following is not a symptom of ascariasis?

A. Intestinal blockage
B. Anaemia

C. Vomiting
D. Skin blisters

Answer: D
Explanation: Ascariasis typically causes digestive symptoms but not skin blisters.

Q19. The ‘booster dose’ of a vaccine is given to:

A. Cure an existing disease
B. Increase the memory response of immune system
C. Suppress allergic reaction
D. Induce passive immunity

Answer: B
Explanation: Booster doses help sustain a strong immune memory against the antigen.

Q20. Match the following:

Column I (Disease)	Column II (Symptoms)
A. Filariasis	1. Chronic inflammation of lymph nodes
B. Typhoid	2. High fever and intestinal ulcers
C. Ringworm	3. Dry scaly skin lesions
D. Malaria	4. Recurrent chills and fever

A. A–1, B–2, C–3, D–4
B. A–2, B–3, C–1, D–4
C. A–3, B–1, C–4, D–2
D. A–1, B–4, C–2, D–3

Answer: A
Explanation: Matches correctly with disease-specific symptoms.

Q21. Assertion (A): Allergies are due to hypersensitive immune responses.
Reason (R): Mast cells release histamine and serotonin during allergic reactions.

A. Both A and R are true, and R is the correct explanation

B. Both A and R are true, but R is not the correct explanation
C. A is true, R is false
D. Both A and R are false

Answer: A
Explanation: Mast cells release histamine causing allergy, explaining hypersensitivity.

Q22. The pathogen responsible for causing malaria undergoes sexual reproduction in:

A. Human liver
B. Human RBC
C. Salivary gland of mosquito
D. Gut of mosquito

Answer: D
Explanation: Sexual reproduction of Plasmodium occurs in the female Anopheles mosquito's gut.

Q23. Which type of cancer originates from connective tissue?

A. Carcinoma
B. Sarcoma
C. Leukemia
D. Lymphoma

Answer: B
Explanation: Sarcomas are malignant tumors of connective tissues like bone, muscle, fat.

Q24. Which of the following is not a characteristic of innate immunity?

A. Non-specific defense
B. Present from birth
C. Provides long-term memory
D. First line of defense

Answer: C
Explanation: Long-term memory is a feature of acquired immunity, not innate.

Q25. The incubation period for Plasmodium vivax is:

A. 7–10 days
B. 10–14 days
C. 2–3 days
D. 14–21 days

Answer: B
Explanation: After a mosquito bite, it takes about 10–14 days for symptoms to appear.

Q26. Which of the following pairs is correctly matched?

A. AIDS – Vector-borne disease
B. Pneumonia – Droplet infection
C. Typhoid – Sexual contact
D. Dengue – Contaminated water

Answer: B
Explanation: Pneumonia spreads through droplets. AIDS is not vector-borne.

Q27. The process of cancerous cells spreading to distant parts of the body is called:

A. Oncogenesis
B. Metastasis
C. Mutation
D. Differentiation

Answer: B
Explanation: Metastasis is the migration of malignant cells to new tissues via blood/lymph.

Q28. BCG vaccine is given for protection against:

A. Typhoid
B. Tuberculosis
C. Tetanus
D. Diphtheria

Answer: B

Explanation: BCG (Bacillus Calmette–Guérin) is for TB.

Q29. Which of the following immunoglobulins is most abundant in human serum?

A. IgA
B. IgD
C. IgE
D. IgG

Answer: D
Explanation: IgG is the most abundant in plasma and confers long-term immunity.

Q30. Assertion (A): Antibiotics are effective only against bacterial infections.
Reason (R): Antibiotics block bacterial metabolic pathways.

A. Both A and R are true, and R is the correct explanation
B. Both A and R are true, but R is not the correct explanation
C. A is true, R is false
D. Both A and R are false

Answer: A
Explanation: Antibiotics inhibit key bacterial enzymes or cell wall synthesis, not viruses.

Q31. Which of the following is a secondary lymphoid organ?

A. Bone marrow
B. Thymus
C. Spleen
D. Yolk sac

Answer: C
Explanation: Spleen is a secondary lymphoid organ where lymphocytes interact with antigens.

Q32. Which cells are responsible for mediating cell-mediated immunity?

A. B lymphocytes
B. T lymphocytes

C. Neutrophils
D. Macrophages

Answer: B
Explanation: T cells (especially cytotoxic T cells) mediate cell-mediated immune responses.

Q33. Which of the following acts as an antipyretic and analgesic?

A. Aspirin
B. Chloramphenicol
C. Morphine
D. Streptomycin

Answer: A
Explanation: Aspirin reduces fever (antipyretic) and pain (analgesic).

Q34. Which of the following diseases is caused by Wuchereria bancrofti?

A. Ascariasis
B. Filariasis
C. Ringworm
D. Schistosomiasis

Answer: B
Explanation: Wuchereria bancrofti causes lymphatic filariasis, also known as elephantiasis.

Q35. Match the following:

Column I (Drug Type) Column II (Example)

A. Stimulant 1. Cocaine
B. Sedative 2. Benzodiazepine
C. Hallucinogen 3. LSD
D. Opiate 4. Heroin

A. A–1, B–2, C–3, D–4

B. A–2, B–1, C–3, D–4
C. A–3, B–4, C–2, D–1
D. A–4, B–2, C–1, D–3

Answer: A
Explanation: Correct pairings based on drug type and example.

Q36. Assertion (A): Vaccination is a form of active immunity.
Reason (R): It involves the administration of antibodies directly into the body.

A. Both A and R are true, and R is the correct explanation
B. Both A and R are true, but R is not the correct explanation
C. A is true, R is false
D. Both A and R are false

Answer: C
Explanation: Vaccination involves stimulating the immune system to produce antibodies, not administering them directly.

Q37. Which of the following antibodies is present in colostrum and provides passive immunity to the newborn?

A. IgM
B. IgA
C. IgG
D. IgE

Answer: B
Explanation: IgA is abundant in colostrum and provides localized immunity to the infant.

Q38. ELISA is used to detect:

A. Cancer cells
B. Malaria parasite
C. HIV antibodies
D. Typhoid pathogen

Answer: C

Explanation: ELISA is a test for detecting HIV infection through identification of antibodies.

Q39. Which of the following is not a feature of cancer cells?

A. Metastasis
B. Controlled mitosis
C. Loss of contact inhibition
D. Immortality in culture

Answer: B
Explanation: Cancer cells divide uncontrollably and do not respond to normal regulatory mechanisms.

Q40. Which of the following statements is correct?

A. Morphine is a stimulant
B. Cocaine is a hallucinogen
C. Heroin is a depressant
D. LSD is an analgesic

Answer: C
Explanation: Heroin is a depressant derived from opium.

Q41. Which of the following can be used to treat allergic conditions?

A. Histamine
B. Interferons
C. Antihistamines
D. Antibiotics

Answer: C
Explanation: Antihistamines block histamine receptors and relieve allergy symptoms.

Q42. Assertion (A): AIDS can spread through the sharing of needles.
Reason (R): HIV is a virus present in body fluids like blood and semen.

A. Both A and R are true, and R is the correct explanation
B. Both A and R are true, but R is not the correct explanation

C. A is true, R is false
D. Both A and R are false

Answer: A
Explanation: Sharing infected needles transmits HIV due to contaminated blood.

Q43. Which of the following disorders is fungal in origin?

A. Filariasis
B. Ringworm
C. Pneumonia
D. Typhoid

Answer: B
Explanation: Ringworm is caused by dermatophyte fungi such as Trichophyton.

Q44. The first symptoms of AIDS usually appear:

A. Within 24 hours
B. Within 3–4 days
C. Within 6 months
D. After several years

Answer: D
Explanation: HIV may remain asymptomatic for years before symptoms of AIDS develop.

Q45. Match the following:

Column I (Immune Response) Column II (Description)

A. Active immunity 1. Long-lasting response
B. Passive immunity 2. Immediate but short-term response
C. Autoimmunity 3. Immune attack on self-antigens
D. Allergy 4. Hypersensitive immune reaction

A. A–1, B–2, C–3, D–4
B. A–2, B–1, C–4, D–3

C. A–1, B–4, C–2, D–3
D. A–3, B–2, C–1, D–4

Answer: A
Explanation: Each immune concept correctly matches its feature.