MATTER IN OUR SURROUNDING

1. Which of the following is a characteristic of matter?
a) It occupies space
b) It has mass
c) It can be felt by senses
d) All of these
Ans: d) All of these

2. The smell of hot cooked food reaches us faster than cold food due to:
a) Osmosis
b) Diffusion
c) Conduction
d) Convection
Ans: b) Diffusion

3. The process of conversion of liquid into vapour at any temperature is called:
a) Boiling
b) Evaporation
c) Sublimation
d) Condensation
Ans: b) Evaporation

4. Which of the following shows the property of diffusion most easily?
a) Solid
b) Liquid
c) Gas
d) Plasma
Ans: c) Gas

5. The temperature at which a liquid changes into vapour is called:
a) Melting point
b) Condensation point
c) Boiling point
d) Freezing point
Ans: c) Boiling point

6. The SI unit of temperature is:
a) Celsius
b) Fahrenheit
c) Kelvin
d) Joule
Ans: c) Kelvin

7. The conversion of solid directly into gas is called:
a) Sublimation
b) Condensation
c) Fusion
d) Evaporation
Ans: a) Sublimation

8. Latent heat of fusion is related to the change of state from:

Is Matter Around Us Pure?

1. Which of the following is a pure substance?
a) Air
b) Steel
c) Water
d) Milk
Ans: c) Water

2. The components of a mixture are present in:
a) Fixed ratio
b) Variable ratio
c) Both fixed and variable
d) None of these
Ans: b) Variable ratio

3. Which of the following is a homogeneous mixture?
a) Soil
b) Brass
c) Concrete
d) Salad
Ans: b) Brass

4. Mixtures can be separated into their components by:
a) Physical methods
b) Chemical methods
c) Both a and b
d) None of these
Ans: a) Physical methods

5. Which of the following is not a mixture?
a) Lemon water
b) Air
c) Salt
d) Milk
Ans: c) Salt

6. Which of the following is an element?
a) Carbon
b) Water
c) Salt
d) Air
Ans: a) Carbon

7. A solution is a _____ mixture.
a) Homogeneous
b) Heterogeneous
c) Colloidal
d) Complex
Ans: a) Homogeneous

8. Which is a colloid?
a) Salt solution
b) Sugar solution
c) Milk
d) Air
Ans: c) Milk

9. Alloy is a:
a) Compound
b) Mixture
c) Element
d) Colloid
Ans: b) Mixture

10. Tyndall effect is shown by:
a) True solution

a) Solid to liquid
b) Liquid to solid
c) Liquid to gas
d) Gas to liquid
Ans: a) Solid to liquid

9. The boiling point of water at normal atmospheric pressure is:
a) 0°C
b) 100°C
c) 212°C
d) 273 K
Ans: b) 100°C

10. Which factor does NOT affect evaporation?
a) Surface area
b) Humidity
c) Wind speed
d) Colour of liquid
Ans: d) Colour of liquid

11. Dry ice is:
a) Solid CO_2
b) Solid N_2
c) Frozen water
d) Solid O_2
Ans: a) Solid CO_2

12. The inter-particle force is maximum in:
a) Solids
b) Liquids
c) Gases
d) Plasma
Ans: a) Solids

13. Matter can exist in:
a) Three states only
b) Four states only
c) Five states
d) Solid, liquid, gas, plasma & Bose-Einstein condensate
Ans: d) Solid, liquid, gas, plasma & Bose-Einstein condensate

14. The SI unit of pressure is:
a) mmHg
b) Pascal
c) atm
d) bar
Ans: b) Pascal

15. Which of the following has highest compressibility?
a) Solid
b) Liquid
c) Gas
b) Colloids
c) Suspension
d) Both b and c
Ans: d) Both b and c

11. Which of the following is a suspension?
a) Ink in water
b) Chalk in water
c) Copper sulphate solution
d) Sugar solution
Ans: b) Chalk in water

12. Which of the following shows Brownian motion?
a) Colloid
b) True solution
c) Suspension
d) Both a and c
Ans: d) Both a and c

13. The smallest particle of an element is:
a) Atom
b) Molecule
c) Ion
d) Mixture
Ans: a) Atom

14. Which technique is used to separate cream from milk?
a) Filtration
b) Evaporation
c) Centrifugation
d) Distillation
Ans: c) Centrifugation

15. Which method is used to obtain pure water from sea water?
a) Sedimentation
b) Filtration
c) Distillation
d) Chromatography
Ans: c) Distillation

16. Which method is used to separate camphor from salt?
a) Filtration
b) Sublimation
c) Evaporation
d) Chromatography
Ans: b) Sublimation

17. Which process is used to separate dyes from black ink?
a) Sedimentation
b) Evaporation
c) Chromatography
d) Filtration
Ans: c) Chromatography

18. Which method is used to separate two immiscible liquids?
a) Funnel method
b) Distillation
c) Chromatography
d) Crystallisation
Ans: a) Funnel method (Separating funnel)

d) All equal
Ans: c) Gas

16. The melting point of ice is:
a) 0 K
b) 0°C
c) 100°C
d) 273°C
Ans: b) 0°C

17. The process of conversion of vapour into liquid is called:
a) Sublimation
b) Boiling
c) Condensation
d) Evaporation
Ans: c) Condensation

18. Which factor increases evaporation?
a) High humidity
b) Low surface area
c) High wind speed
d) Low temperature
Ans: c) High wind speed

19. Liquefied petroleum gas (LPG) is stored under:
a) High pressure
b) Low pressure
c) High temperature
d) Room temperature
Ans: a) High pressure

20. Latent heat of vaporisation of water is about:
a) 22×10^5 J/kg
b) 100 J/kg
c) 540 J/kg
d) 50×10^3 J/kg
Ans: a) 22×10^5 J/kg

21. When naphthalene balls disappear with time, it is due to:
a) Melting
b) Boiling
c) Sublimation
d) Freezing
Ans: c) Sublimation

22. Which process is responsible for cooling in earthen pot (matka)?
a) Boiling
b) Evaporation
c) Sublimation
d) Condensation
Ans: b) Evaporation

23. The Kelvin temperature corresponding to 25°C is:
a) 298 K

19. Which method is used to separate salt from sea water?
a) Crystallisation
b) Evaporation
c) Filtration
d) Distillation
Ans: b) Evaporation

20. Which separation method gives pure crystals of substance?
a) Crystallisation
b) Distillation
c) Evaporation
d) Sublimation
Ans: a) Crystallisation

21. Which method is used in petroleum refineries?
a) Fractional distillation
b) Centrifugation
c) Sublimation
d) Evaporation
Ans: a) Fractional distillation

22. Mixtures of gases can be separated by:
a) Fractional distillation
b) Filtration
c) Sedimentation
d) Crystallisation
Ans: a) Fractional distillation

23. Which property is used in chromatography?
a) Solubility in same solvent
b) Difference in adsorption
c) Density difference
d) Boiling point difference
Ans: b) Difference in adsorption

24. Which of the following is not a colloid?
a) Fog
b) Smoke
c) Salt solution
d) Milk
Ans: c) Salt solution

25. Air is a:
a) Compound
b) Mixture
c) Colloid
d) Pure substance
Ans: b) Mixture

26. The scattering of light by colloidal particles is called:
a) Diffusion
b) Tyndall effect
c) Dispersion
d) Refraction
Ans: b) Tyndall effect

27. Which of the following has particles larger than 100 nm?
a) Colloid
b) Solution
c) Suspension
d) Gas
Ans: c) Suspension

b) 250 K
c) 273 K
d) 225 K
Ans: a) 298 K

24. During summer, people sprinkle water on the roof because:
a) Water is cheap
b) Water evaporates and cools the surface
c) Water reduces heat conduction
d) None of these
Ans: b) Water evaporates and cools the surface

25. Which is a plasma state example?
a) Sun
b) Moon
c) Earth
d) Mercury
Ans: a) Sun

26. What happens when we increase temperature of a solid?
a) Intermolecular force decreases
b) Kinetic energy increases
c) Particles vibrate more freely
d) All of these
Ans: d) All of these

27. Which one shows property of "shape memory"?
a) Solid
b) Liquid
c) Gas
d) Plasma
Ans: a) Solid

28. The boiling point of a liquid increases with:
a) Decrease in pressure
b) Increase in pressure
c) Decrease in temperature
d) Increase in surface area
Ans: b) Increase in pressure

29. Which among these is not matter?
a) Air
b) Heat
c) Stone
d) Water
Ans: b) Heat

30. Which property is common to all states of matter?
a) Definite shape
b) Definite volume
c) Mass and space occupancy
d) Rigidity
Ans: c) Mass and space occupancy

Fundamental Unit of Life

28. Which method is used to separate volatile and non-volatile substances?
a) Filtration
b) Distillation
c) Sublimation
d) Chromatography
Ans: b) Distillation

29. Pure substances are always made up of:
a) One kind of particles
b) Two kinds of particles
c) Three kinds of particles
d) Many kinds of particles
Ans: a) One kind of particles

30. Which of the following is a heterogeneous mixture?
a) Brass
b) Air
c) Soil
d) Sugar solution
Ans: c) Soil

Tissue

Plant Tissues

1. The study of tissues is called:
a) Anatomy
b) Histology
c) Cytology
d) Physiology
Ans: b) Histology

2. The term 'tissue' was coined by:
a) Schleiden
b) Bichat
c) Hooke
d) Schwann
Ans: b) Bichat

3. Plant tissues are classified into:
a) Two types
b) Three types
c) Four types
d) Five types
Ans: a) Two types (Meristematic and Permanent)

4. Meristematic tissue is found:
a) In roots only
b) In shoots only
c) In growing regions of plants
d) In fruits only
Ans: c) In growing regions of plants

5. Cells of meristematic tissue are:
a) Dead
b) Thin-walled, living, and dividing
c) Thick-walled and lignified
d) With intercellular spaces
Ans: b) Thin-walled, living, and dividing

6. Which meristem increases the length of plant?
a) Apical meristem
b) Lateral meristem
c) Intercalary meristem
d) Secondary meristem
Ans: a) Apical meristem

1. The basic structural and functional unit of life is:
a) Tissue
b) Cell
c) Organ
d) Organ system
Ans: b) Cell

2. Who discovered the cell in 1665?
a) Robert Hooke
b) Schleiden
c) Schwann
d) Leeuwenhoek
Ans: a) Robert Hooke

3. The term 'cell' was coined by:
a) Schwann
b) Hooke
c) Virchow
d) Schleiden
Ans: b) Hooke

4. Who gave the cell theory?
a) Schleiden and Schwann
b) Hooke
c) Virchow
d) Watson and Crick
Ans: a) Schleiden and Schwann

5. "Omnis cellula e cellula" (cells arise from pre-existing cells) was stated by:
a) Hooke
b) Schleiden
c) Schwann
d) Virchow
Ans: d) Virchow

6. Who discovered the nucleus?
a) Robert Brown
b) Robert Hooke
c) Leeuwenhoek
d) Virchow
Ans: a) Robert Brown

7. The control centre of the cell is:
a) Cytoplasm
b) Nucleus
c) Mitochondria
d) Cell membrane
Ans: b) Nucleus

8. The smallest cell is:
a) Bacterium
b) Mycoplasma
c) Yeast
d) RBC
Ans: b) Mycoplasma

7. Which meristem is present at the base of leaves or internodes?
a) Apical
b) Intercalary
c) Lateral
d) Secondary
Ans: b) Intercalary

8. Which meristem is responsible for increase in girth of stem?
a) Apical
b) Lateral
c) Intercalary
d) All
Ans: b) Lateral

9. Permanent tissues are formed from:
a) Xylem
b) Phloem
c) Meristematic tissue
d) Cork
Ans: c) Meristematic tissue

10. Parenchyma cells are:
a) Dead
b) Living and thin-walled
c) Thick-walled
d) Lignified
Ans: b) Living and thin-walled

11. Parenchyma containing chlorophyll is called:
a) Aerenchyma
b) Collenchyma
c) Chlorenchyma
d) Sclerenchyma
Ans: c) Chlorenchyma

12. Which tissue provides buoyancy to aquatic plants?
a) Parenchyma
b) Aerenchyma
c) Collenchyma
d) Xylem
Ans: b) Aerenchyma

13. Collenchyma provides:
a) Flexibility
b) Rigidity
c) Food storage
d) Transport
Ans: a) Flexibility

14. Sclerenchyma cells are:
a) Living and thick-walled
b) Dead and lignified
c) Thin-walled
d) Flexible
Ans: b) Dead and lignified

15. Which tissue makes husk of coconut?
a) Parenchyma
b) Collenchyma
c) Sclerenchyma
d) Xylem
Ans: c) Sclerenchyma

9. The largest cell in the human body is:
a) Neuron
b) RBC
c) Ovum
d) Liver cell
Ans: c) Ovum

10. The longest cell in the human body is:
a) Muscle cell
b) Nerve cell
c) RBC
d) Bone cell
Ans: b) Nerve cell

11. Cell wall is present in:
a) Animal cells only
b) Plant cells only
c) Both plant and animal cells
d) None
Ans: b) Plant cells only

12. Cell wall is made up of:
a) Starch
b) Protein
c) Cellulose
d) Glycogen
Ans: c) Cellulose

13. The living substance inside the cell is called:
a) Protoplasm
b) Cytoplasm
c) Nucleoplasm
d) Organelle
Ans: a) Protoplasm

14. Powerhouse of the cell is:
a) Golgi apparatus
b) Ribosome
c) Mitochondria
d) Lysosome
Ans: c) Mitochondria

15. Mitochondria are absent in:
a) Plant cells
b) Animal cells
c) Bacteria
d) Fungi
Ans: c) Bacteria

16. Site of protein synthesis is:
a) Mitochondria
b) Ribosome
c) Nucleus
d) Lysosome
Ans: b) Ribosome

16. Complex tissues in plants are:
a) Xylem and phloem
b) Parenchyma and collenchyma
c) Collenchyma and sclerenchyma
d) None
Ans: a) Xylem and phloem

17. Xylem conducts:
a) Food
b) Water and minerals
c) Hormones
d) Enzymes
Ans: b) Water and minerals

18. Which is not a component of xylem?
a) Tracheids
b) Vessels
c) Companion cells
d) Xylem parenchyma
Ans: c) Companion cells

19. Phloem conducts:
a) Water
b) Minerals
c) Food
d) Hormones
Ans: c) Food

20. Which is a component of phloem?
a) Sieve tubes
b) Companion cells
c) Phloem fibres
d) All of these
Ans: d) All of these

21. Which phloem element is absent in gymnosperms?
a) Phloem fibres
b) Sieve tubes
c) Companion cells
d) Phloem parenchyma
Ans: b) Sieve tubes

Animal Tissues

22. Which tissue forms outer covering of body?
a) Muscular
b) Nervous
c) Epithelial
d) Connective
Ans: c) Epithelial

23. Epithelium with cube-like cells is called:
a) Columnar epithelium
b) Cuboidal epithelium
c) Squamous epithelium
d) Ciliated epithelium
Ans: b) Cuboidal epithelium

24. Epithelium with flat cells is:
a) Squamous
b) Columnar
c) Cuboidal
d) Ciliated
Ans: a) Squamous

17. Lysosomes are called:
a) Suicidal bags
b) Powerhouse
c) Protein factory
d) Packaging centre
Ans: a) Suicidal bags

18. Plant cell vacuoles are filled with:
a) Plasma
b) Sap
c) Enzymes
d) DNA
Ans: b) Sap

19. The cell organelle responsible for photosynthesis is:
a) Mitochondria
b) Chloroplast
c) Ribosome
d) Golgi body
Ans: b) Chloroplast

20. Chloroplasts are green due to:
a) Xanthophyll
b) Chlorophyll
c) Carotene
d) Hemoglobin
Ans: b) Chlorophyll

21. Golgi apparatus is also called:
a) Suicidal bag
b) Protein factory
c) Packaging centre
d) Control centre
Ans: c) Packaging centre

22. Plant cell has an additional layer outside cell membrane called:
a) Capsule
b) Cell wall
c) Chloroplast
d) Nuclear envelope
Ans: b) Cell wall

23. The semi-permeable covering of the cell is:
a) Cell wall
b) Cytoplasm
c) Cell membrane
d) Nucleus
Ans: c) Cell membrane

24. Diffusion is:
a) Movement of water molecules through membrane
b) Movement of solute particles from high to low concentration
c) Active transport
d) Endocytosis

25. Ciliated epithelium is found in:
a) Kidney tubules
b) Lining of respiratory tract
c) Skin
d) Stomach lining
Ans: b) Lining of respiratory tract

26. Which tissue connects bones to muscles?
a) Ligament
b) Tendon
c) Cartilage
d) Areolar
Ans: b) Tendon

27. Which tissue connects bone to bone?
a) Ligament
b) Tendon
c) Cartilage
d) Adipose
Ans: a) Ligament

28. Which tissue connects muscles to muscles?
a) Tendon
b) Ligament
c) Fascia
d) Cartilage
Ans: c) Fascia

29. Which connective tissue stores fat?
a) Cartilage
b) Areolar
c) Adipose
d) Ligament
Ans: c) Adipose

30. Which connective tissue has fluid matrix?
a) Blood
b) Bone
c) Cartilage
d) Ligament
Ans: a) Blood

31. Matrix of bone is rich in:
a) Calcium and phosphorus
b) Protein
c) Chitin
d) Potassium
Ans: a) Calcium and phosphorus

32. Which connective tissue joins bones together at joints?
a) Cartilage
b) Ligament
c) Tendon
d) Fascia
Ans: b) Ligament

33. The fluid part of blood is:
a) Plasma
b) Lymph
c) Serum
d) Platelets
Ans: a) Plasma

34. Which blood cells transport oxygen?
a) WBC
b) RBC

Ans: b) Movement of solute particles from high to low concentration

25. Osmosis is:
a) Diffusion of water through a semi-permeable membrane
b) Active transport
c) Movement of solute particles
d) Phagocytosis
Ans: a) Diffusion of water through a semi-permeable membrane

26. Plasmolysis occurs when a cell is placed in:
a) Hypotonic solution
b) Hypertonic solution
c) Isotonic solution
d) Pure water
Ans: b) Hypertonic solution

27. Endocytosis is found in:
a) Plants
b) Animals
c) Bacteria
d) Fungi
Ans: b) Animals

28. Cell sap is stored in:
a) Cytoplasm
b) Mitochondria
c) Vacuole
d) Lysosome
Ans: c) Vacuole

29. The organelle responsible for secretion is:
a) Ribosome
b) Mitochondria
c) Golgi apparatus
d) Lysosome
Ans: c) Golgi apparatus

30. Prokaryotic cells lack:
a) Nucleus
b) Cell wall
c) Cytoplasm
d) DNA
Ans: a) Nucleus (true nucleus)

31. Example of a prokaryotic cell is:
a) Amoeba
b) Bacterium
c) Yeast
d) Paramecium
Ans: b) Bacterium

32. The genetic material of prokaryotes is present in:
a) Nucleolus
b) Nucleoid
c) Platelets
d) Lymphocytes
Ans: b) RBC

35. Which blood cells fight infection?
a) RBC
b) WBC
c) Platelets
d) Plasma
Ans: b) WBC

36. Which blood cells help in clotting?
a) RBC
b) WBC
c) Platelets
d) Plasma
Ans: c) Platelets

37. Which connective tissue is flexible but not rigid?
a) Cartilage
b) Bone
c) Adipose
d) Ligament
Ans: a) Cartilage

38. Which connective tissue joins epithelium to organs?
a) Cartilage
b) Adipose
c) Areolar
d) Ligament
Ans: c) Areolar

39. Which muscular tissue is voluntary?
a) Skeletal muscle
b) Smooth muscle
c) Cardiac muscle
d) All
Ans: a) Skeletal muscle

40. Which muscular tissue is involuntary and unstriated?
a) Skeletal
b) Smooth
c) Cardiac
d) None
Ans: b) Smooth

41. Which muscular tissue is involuntary and striated?
a) Skeletal
b) Smooth
c) Cardiac
d) None
Ans: c) Cardiac

42. Heart muscles are:
a) Skeletal
b) Smooth
c) Cardiac
d) Voluntary
Ans: c) Cardiac

43. Muscles responsible for movement of limbs are:
a) Cardiac
b) Smooth
c) Skeletal

c) Chromosomes
d) Nuclear envelope
Ans: b) Nucleoid

33. Plastids are found in:
a) Animal cells
b) Plant cells
c) Both
d) None
Ans: b) Plant cells

34. The coloured plastids other than chloroplast are called:
a) Chromoplast
b) Leucoplast
c) Ribosome
d) Mitochondria
Ans: a) Chromoplast

35. Colourless plastids are called:
a) Chromoplast
b) Leucoplast
c) Chloroplast
d) Centrosome
Ans: b) Leucoplast

36. Food is stored in potato in:
a) Chloroplast
b) Chromoplast
c) Leucoplast
d) Vacuole
Ans: c) Leucoplast

37. Which cell organelle is called "cell's kitchen"?
a) Mitochondria
b) Ribosome
c) Chloroplast
d) Lysosome
Ans: c) Chloroplast

38. Nucleolus is mainly concerned with:
a) Protein synthesis
b) Ribosome formation
c) ATP production
d) Lipid synthesis
Ans: b) Ribosome formation

39. Centrosome is present in:
a) Plant cells
b) Animal cells
c) Both
d) Prokaryotes
Ans: b) Animal cells

40. Which is the site of respiration?
a) Golgi body
b) Ribosome
d) None
Ans: c) Skeletal

44. Nerve cells are called:
a) Nephrons
b) Neurons
c) Neuroglia
d) Synapse
Ans: b) Neurons

45. Part of neuron receiving impulses is:
a) Axon
b) Dendrite
c) Synapse
d) Myelin sheath
Ans: b) Dendrite

46. Part of neuron carrying impulse away is:
a) Axon
b) Dendrite
c) Synapse
d) Nissl's granules
Ans: a) Axon

47. Junction between two neurons is called:
a) Axon
b) Synapse
c) Dendrite
d) Node of Ranvier
Ans: b) Synapse

48. Impulse travels in neurons in the form of:
a) Blood
b) Chemicals
c) Electrical signals
d) Hormones
Ans: c) Electrical signals

49. Which tissue makes up the brain and spinal cord?
a) Muscular tissue
b) Nervous tissue
c) Epithelial tissue
d) Connective tissue
Ans: b) Nervous tissue

50. Which tissue forms the basic packing material between organs?
a) Bone
b) Cartilage
c) Areolar tissue
d) Ligament
Ans: c) Areolar tissue

MOTION

1. Motion is defined as:
a) Change in mass with time
b) Change in position with time
c) Change in energy with time
d) Change in shape with time
Ans: b) Change in position with time

2. Which of the following is a scalar quantity?
a) Displacement
b) Velocity
c) Acceleration
d) Speed
Ans: d) Speed

c) Lysosome
d) Mitochondria
Ans: d) Mitochondria

41. Ribosomes are made of:
a) DNA and protein
b) RNA and protein
c) Lipids and protein
d) Only protein
Ans: b) RNA and protein

42. Which organelle is responsible for digestion?
a) Ribosome
b) Mitochondria
c) Lysosome
d) Vacuole
Ans: c) Lysosome

43. The fluid part of cytoplasm is called:
a) Protoplasm
b) Cytosol
c) Matrix
d) Nucleoplasm
Ans: b) Cytosol

44. Which organelle forms the endoplasmic reticulum?
a) Nuclear membrane
b) Plasma membrane
c) Golgi body
d) Mitochondria
Ans: a) Nuclear membrane

45. Rough ER is associated with:
a) Lipid synthesis
b) Protein synthesis
c) DNA replication
d) Respiration
Ans: b) Protein synthesis

46. Smooth ER helps in:
a) Protein synthesis
b) Lipid synthesis
c) ATP formation
d) DNA formation
Ans: b) Lipid synthesis

47. Which of the following is absent in prokaryotic cells?
a) DNA
b) Cell wall
c) Ribosomes
d) Membrane-bound organelles
Ans: d) Membrane-bound organelles

48. Which scientist first saw free living cells in pond water?

3. Which of the following is a vector quantity?
a) Distance
b) Speed
c) Time
d) Displacement
Ans: d) Displacement
4. Displacement can be:
a) Zero
b) Negative
c) Positive
d) All of these
Ans: d) All of these
5. Which of the following can never be negative?
a) Displacement
b) Distance
c) Velocity
d) Acceleration
Ans: b) Distance

Speed, Velocity & Acceleration
6. Speed =
a) Distance ÷ Time
b) Displacement ÷ Time
c) Velocity ÷ Time
d) Acceleration ÷ Time
Ans: a) Distance ÷ Time
7. Velocity =
a) Distance ÷ Time
b) Displacement ÷ Time
c) Acceleration ÷ Time
d) Mass ÷ Time
Ans: b) Displacement ÷ Time
8. SI unit of speed/velocity is:
a) m/s^2
b) m/s
c) km/h
d) m^2/s
Ans: b) m/s
9. If a body moves with uniform velocity, its acceleration is:
a) Positive
b) Negative
c) Zero
d) Variable
Ans: c) Zero
10. The rate of change of velocity is called:
a) Speed
b) Acceleration
c) Displacement
d) Momentum
Ans: b) Acceleration

Distance & Displacement
11. A particle goes from A to B and returns to A. Its displacement is:
a) Equal to distance
b) Zero
c) Greater than distance

a) Hooke
b) Schwann
c) Leeuwenhoek
d) Brown
Ans: c) Leeuwenhoek

49. Which of the following is the site of ATP generation?
a) Nucleus
b) Lysosome
c) Mitochondria
d) Golgi body
Ans: c) Mitochondria

50. The boundary of the nucleus is formed by:
a) Cell membrane
b) Nuclear envelope
c) Nucleoplasm
d) Endoplasmic reticulum
Ans: b) Nuclear envelope

LAWS OF MOTION

Newton's First Law / Inertia

1. Newton's First Law is also called:
a) Law of acceleration
b) Law of action-reaction
c) Law of inertia
d) Law of gravitation
Ans: c) Law of inertia

2. Inertia means:
a) Resistance to motion
b) Tendency of a body to resist change in state
c) Lack of force
d) Constant acceleration
Ans: b) Tendency of a body to resist change in state

3. Which of the following has more inertia?
a) A cricket ball
b) A football
c) A truck at rest
d) A moving scooter
Ans: c) A truck at rest

4. A passenger moves forward when a moving bus suddenly stops due to:
a) Law of gravitation
b) Inertia of rest
c) Inertia of motion
d) Newton's Third Law
Ans: c) Inertia of motion

5. A ball placed on the car seat rolls backward when car starts suddenly. Reason:
a) Inertia of rest
d) Can't say
Ans: b) Zero

12. The total path length travelled by an object is:
a) Displacement
b) Distance
c) Speed
d) Velocity
Ans: b) Distance

13. If distance is constant, then:
a) Velocity is constant
b) Speed is zero
c) Speed is constant
d) Displacement is zero
Ans: c) Speed is constant

14. Displacement is always equal to distance when:
a) Path is straight line
b) Motion is circular
c) Motion is random
d) Motion is oscillatory
Ans: a) Path is straight line

15. A body moves in a circle of radius r and comes back to the same point. Its displacement is:
a) 2πr
b) Zero
c) r
d) πr
Ans: b) Zero

Equations of Motion

16. First equation of motion is:
a) v=u+at
b) $s=ut+1/2at^2$
c) $v^2=u^2+2as$
d) None of these
Ans: a) v=u+at

17. Second equation of motion is:
a) v=u+atv = u + atv=u+at
b) s=ut+12at2s = ut + \tfrac{1}{2}at^2s=ut+21at2
c) v2=u2+2asv^2 = u^2 + 2asv2=u2+2as
d) None of these
Ans: b) $s=ut+1/2at^2$

18. Third equation of motion is:
a) v=u+at
b) s=ut+12at2
c) v2=u2+2as
d) None of these
Ans: c) v2=u2+2asv^2 = u^2 + 2asv2=u2+2as

19. SI unit of acceleration is:
a) m/s
b) m/s^2
c) km/h^2
d) m^2/s
Ans: b) m/s^2

20. Retardation means:
a) Positive acceleration
b) Negative acceleration
c) Uniform acceleration

b) Inertia of motion
c) Gravitational force
d) Friction
Ans: a) Inertia of rest

Force and Momentum

6. SI unit of force is:
a) dyne
b) Newton
c) Joule
d) Watt
Ans: b) Newton

7. 1 Newton =
a) 1 kg m/s
b) 1 kg m/s²
c) 1 g m/s²
d) 10 kg m/s²
Ans: b) 1 kg m/s²

8. Momentum is defined as:
a) Force × time
b) Mass × velocity
c) Force ÷ acceleration
d) Mass ÷ time
Ans: b) Mass × velocity

9. SI unit of momentum is:
a) kg m/s²
b) kg m/s
c) N/m
d) J/s
Ans: b) kg m/s

10. The momentum of a body at rest is:
a) Zero
b) Infinite
c) One
d) Constant
Ans: a) Zero

Newton's Second Law

11. Newton's Second Law gives:
a) Definition of inertia
b) Measurement of force
c) Conservation of momentum
d) Reaction of force
Ans: b) Measurement of force

12. Force =
a) Mass × Acceleration
b) Mass × Velocity
c) Mass × Displacement
d) Mass ÷ Acceleration
Ans: a) Mass × Acceleration

d) No acceleration
Ans: b) Negative acceleration

Graphs
21. The slope of a distance-time graph gives:
a) Acceleration
b) Speed
c) Velocity
d) Displacement
Ans: b) Speed
22. The slope of a velocity-time graph gives:
a) Distance
b) Displacement
c) Acceleration
d) Speed
Ans: c) Acceleration
23. The area under a velocity-time graph gives:
a) Speed
b) Displacement
c) Acceleration
d) Momentum
Ans: b) Displacement
24. The area under an acceleration-time graph gives:
a) Speed
b) Displacement
c) Change in velocity
d) Time
Ans: c) Change in velocity
25. A horizontal line on a velocity-time graph parallel to time axis shows:
a) Uniform acceleration
b) Uniform velocity
c) Rest
d) Variable acceleration
Ans: b) Uniform velocity

Free Fall & Numericals
26. Value of acceleration due to gravity (g) on Earth is:
a) 8.9 m/s²
b) 9.8 m/s²
c) 10.8 m/s²
d) 9.2 m/s²
Ans: b) 9.8 m/s²
27. A body falls freely for 2 s. Its velocity is:
a) 9.8 m/s
b) 19.6 m/s
c) 4.9 m/s
d) 39.2 m/s
Ans: b) 19.6 m/s
28. A ball is thrown upward with velocity 20 m/s. Maximum height reached is:
a) 10 m
b) 15 m
c) 20 m
d) 40 m
Ans: c) 20 m

13. Acceleration produced in a body is:
a) Directly proportional to its mass
b) Inversely proportional to its mass
c) Independent of force applied
d) None
Ans: b) Inversely proportional to its mass

14. Rate of change of momentum is equal to:
a) Velocity
b) Force
c) Impulse
d) Work
Ans: b) Force

15. A body of 10 kg has acceleration of 5 m/s². Force applied is:
a) 50 N
b) 5 N
c) 2 N
d) 500 N
Ans: a) 50 N

Impulse

16. Impulse =
a) Force × distance
b) Force × time
c) Mass × velocity
d) Work ÷ time
Ans: b) Force × time

17. SI unit of impulse is same as:
a) Force
b) Momentum
c) Work
d) Power
Ans: b) Momentum

18. Cushioning in cars (airbags) works on the principle of:
a) Increasing time of impact
b) Decreasing time of impact
c) Reducing mass of passengers
d) Reducing velocity
Ans: a) Increasing time of impact

19. A cricketer lowers hands while catching a ball because:
a) To increase force
b) To decrease impulse
c) To increase time of impact
d) To increase momentum
Ans: c) To increase time of impact

20. Impulse changes:
a) Force
b) Mass

29. A car starts from rest and attains velocity 20 m/s in 10 s. Acceleration is:
a) 1 m/s²
b) 2 m/s²
c) 3 m/s²
d) 4 m/s²
Ans: b) 2 m/s²

30. A train moving at 20 m/s stops in 10 s. Retardation is:
a) 2 m/s²
b) 5 m/s²
c) 4 m/s²
d) 3 m/s²
Ans: a) 2 m/s²

Conceptual Applications

31. In uniform circular motion, speed is constant but velocity changes because:
a) Mass changes
b) Direction changes
c) Time changes
d) Energy changes
Ans: b) Direction changes

32. Which is always true?
a) Displacement ≥ Distance
b) Distance ≥ Displacement
c) Distance = Displacement
d) Displacement = Distance²
Ans: b) Distance ≥ Displacement

33. A car covers 60 km in 2 h. Average speed is:
a) 30 km/h
b) 60 km/h
c) 15 km/h
d) 120 km/h
Ans: a) 30 km/h

34. When does average velocity = average speed?
a) When motion is circular
b) When motion is in a straight line
c) Always
d) Never
Ans: b) When motion is in a straight line

35. Which of the following is NOT a vector?
a) Velocity
b) Acceleration
c) Speed
d) Displacement
Ans: c) Speed

Higher Order Thinking

36. If a body returns to its starting point, then average velocity is:
a) Zero
b) Equal to average speed
c) Infinite
d) Equal to distance/time
Ans: a) Zero

37. A body covers equal distances in equal intervals of time. It is in:

c) Momentum
d) Acceleration
Ans: c) MomentumNewton's Third Law

21. Newton's Third Law states:
a) Force = mass × acceleration
b) Every action has equal and opposite reaction
c) Objects at rest remain at rest
d) Momentum is conserved
Ans: b) Every action has equal and opposite reaction

22. Walking is possible because of:
a) Inertia
b) Momentum
c) Newton's Third Law
d) Acceleration
Ans: c) Newton's Third Law

23. A gun recoils when a bullet is fired due to:
a) Conservation of energy
b) Newton's First Law
c) Newton's Third Law
d) Friction
Ans: c) Newton's Third Law

24. Swimming is possible due to:
a) Law of gravitation
b) Action-reaction force between water and swimmer
c) Conservation of energy
d) Inertia
Ans: b) Action-reaction force between water and swimmer

25. The recoil velocity of a gun is an example of:
a) Inertia of rest
b) Newton's Third Law
c) Frictional force
d) Retardation
Ans: b) Newton's Third Law

26. Law of conservation of momentum is based on:
a) Newton's First Law
b) Newton's Second Law
c) Newton's Third Law
d) Inertia
Ans: c) Newton's Third Law

27. Total momentum of an isolated system is:
a) Increasing
b) Decreasing
c) Conserved
d) Zero always
Ans: c) Conserved

28. When two bodies collide, their total momentum:
a) Increases
b) Decreases
a) Non-uniform motion
b) Rest
c) Uniform motion
d) Retardation
Ans: c) Uniform motion
38. A car accelerates from 5 m/s to 20 m/s in 3 s. Acceleration is:
a) 3 m/s^2
b) 5 m/s^2
c) 6 m/s^2
d) 4 m/s^2
Ans: a) 5 m/s^2
39. Which of the following represents uniform acceleration?
a) A freely falling body
b) A car moving at constant speed
c) A pendulum
d) A body at rest
Ans: a) A freely falling body
40. SI unit of displacement is:
a) m/s
b) m/s^2
c) m
d) cm/s
Ans: c) m

Mixed Numericals
41. A train moves with uniform acceleration. Its velocity increases from 5 m/s to 25 m/s in 10 s. Distance covered is:
a) 150 m
b) 200 m
c) 250 m
d) 300 m
Ans: b) 200 m
42. A body moves 3 km north and then 4 km east. Displacement is:
a) 7 km
b) 5 km
c) 12 km
d) 1 km
Ans: b) 5 km
43. The velocity-time graph of a uniformly retarded body is:
a) Straight line sloping upwards
b) Straight line sloping downwards
c) Parabola
d) Horizontal line
Ans: b) Straight line sloping downwards
44. Which of the following graphs shows rest?
a) Distance-time graph parallel to time axis
b) Velocity-time graph sloping upwards
c) Distance-time graph sloping upwards
d) None
Ans: a) Distance-time graph parallel to time axis
45. A car covers 100 m in 5 s. Average speed is:
a) 10 m/s
b) 15 m/s

c) Remains constant
d) Becomes zero
Ans: c) Remains constant

29. A 50 g bullet fired from a gun with velocity 500 m/s. Gun mass = 5 kg. Recoil velocity of gun is:
a) –2.5 m/s
b) –5 m/s
c) –50 m/s
d) –0.5 m/s
Ans: a) –2.5 m/s

30. Conservation of momentum is applicable in:
a) Elastic collisions only
b) Inelastic collisions only
c) Both elastic and inelastic collisions
d) None
Ans: c) Both elastic and inelastic collisions

Applications & Conceptual

31. Seat belts in cars reduce injury by:
a) Increasing acceleration
b) Reducing mass
c) Increasing time of impact
d) Increasing velocity
Ans: c) Increasing time of impact

32. When a bus suddenly starts, passengers fall backward due to:
a) Inertia of motion
b) Inertia of rest
c) Momentum
d) Newton's Third Law
Ans: b) Inertia of rest

33. A person jumping out of a moving train falls forward because of:
a) Inertia of rest
b) Inertia of motion
c) Law of gravitation
d) Third Law
Ans: b) Inertia of motion

34. If net force on body = 0, then acceleration is:
a) Zero
b) Constant
c) Increasing
d) Decreasing
Ans: a) Zero

35. A body at rest remains at rest unless:
a) A net external force acts
b) No force acts
c) Velocity increases

c) 20 m/s
d) 25 m/s
Ans: c) 20 m/s
46. A body moving uniformly means:
a) Zero velocity
b) Constant velocity
c) Increasing speed
d) Decreasing speed
Ans: b) Constant velocity
47. A speedometer of a car measures:
a) Average speed
b) Average velocity
c) Instantaneous speed
d) Instantaneous velocity
Ans: c) Instantaneous speed
48. A body has acceleration only when:
a) It is moving
b) It is at rest
c) Its velocity changes
d) Its distance increases
Ans: c) Its velocity changes
49. A body starts from rest, attains velocity 10 m/s in 5 s. Distance covered is:
a) 10 m
b) 25 m
c) 50 m
d) 100 m
Ans: b) 25 m
50. The motion of the tip of a second's hand of a clock is:
a) Uniform motion
b) Non-uniform motion
c) Oscillatory motion
d) Uniform circular motion
Ans: d) Uniform circular motion

Crop Production & Management
1. Growing of crops is called:
a) Agriculture
b) Horticulture
c) Sericulture
d) Pisciculture
Ans: a) Agriculture
2. The practice of growing only one type of crop in a field is called:
a) Mixed cropping
b) Monocropping
c) Crop rotation
d) Poly-cropping
Ans: b) Monocropping
3. Two or more crops grown simultaneously in the same field is:
a) Crop rotation
b) Intercropping
c) Mixed cropping
d) Monoculture
Ans: c) Mixed cropping

d) Friction decreases
Ans: a) A net external force acts

Numerical Based

36. Mass = 20 kg, acceleration = 3 m/s². Find force.
a) 50 N
b) 60 N
c) 80 N
d) 100 N
Ans: b) 60 N

37. A 100 g ball moving with velocity 20 m/s has momentum:
a) 1 kg m/s
b) 2 kg m/s
c) 5 kg m/s
d) 10 kg m/s
Ans: b) 2 kg m/s

38. Force = 200 N, time = 0.1 s, impulse = ?
a) 10 Ns
b) 20 Ns
c) 30 Ns
d) 40 Ns
Ans: a) 20 Ns

39. Mass = 50 kg, velocity = 10 m/s. Momentum = ?
a) 100 Ns
b) 200 Ns
c) 500 Ns
d) 1000 Ns
Ans: c) 500 Ns

40. A hammer of mass 2 kg strikes a nail with velocity 10 m/s. Momentum transferred = ?
a) 5 Ns
b) 10 Ns
c) 15 Ns
d) 20 Ns
Ans: d) 20 Ns

Higher Order / HOTS

41. Why does a karate player break bricks easily with a sudden blow?
a) To increase force
b) To decrease impulse
c) To decrease time of impact
d) To increase momentum
Ans: c) To decrease time of impact

42. A balloon bursts when pricked because:
a) Force is distributed

4. The practice of growing different crops alternately to improve fertility is:
a) Intercropping
b) Crop rotation
c) Shifting cultivation
d) Strip cropping
Ans: b) Crop rotation
5. First step of crop production is:
a) Irrigation
b) Sowing
c) Ploughing
d) Weeding
Ans: c) Ploughing

Soil & Manures
6. Turning and loosening soil is called:
a) Levelling
b) Tilling/Ploughing
c) Irrigation
d) Manuring
Ans: b) Tilling/Ploughing
7. Which is not an advantage of tilling?
a) Aerates the soil
b) Kills weeds
c) Increases soil moisture
d) Adds humus
Ans: d) Adds humus
8. Addition of nutrients to soil is called:
a) Irrigation
b) Harvesting
c) Manuring
d) Weeding
Ans: c) Manuring
9. Which of the following is an organic manure?
a) Urea
b) Ammonium sulphate
c) Farmyard manure
d) Superphosphate
Ans: c) Farmyard manure
10. A chemical fertilizer is:
a) Compost
b) Gobar gas slurry
c) Ammonium nitrate
d) Vermicompost
Ans: c) Ammonium nitrate

Irrigation
11. Supply of water to crops at regular intervals is called:
a) Weeding
b) Irrigation
c) Harvesting
d) Storage
Ans: b) Irrigation
12. Traditional irrigation method is:
a) Drip irrigation
b) Sprinkler system
c) Moat (well)

b) Force is concentrated at sharp point
c) Momentum increases
d) Air pressure increases
Ans: b) Force is concentrated at sharp point

43. The motion of a rocket is based on:
a) Law of inertia
b) Conservation of momentum
c) Gravitation
d) Centripetal force
Ans: b) Conservation of momentum

44. Walking on ground is possible because:
a) Action-reaction between feet and ground
b) Gravity pulls us down
c) Friction is zero
d) Force is absent
Ans: a) Action-reaction between feet and ground

45. Newton's Third Law acts on:
a) Same body
b) Two different bodies
c) Earth only
d) Air only
Ans: b) Two different bodies

Final Quick Revision

46. A goalkeeper pulls his hands backward while catching ball to:
a) Increase time, reduce force
b) Decrease time, increase force
c) Reduce impulse
d) Increase mass
Ans: a) Increase time, reduce force

47. Momentum is a:
a) Scalar
b) Vector
c) Unit-less
d) Constant
Ans: b) Vector

48. Unit of force in SI is equivalent to:
a) kg m/s
b) kg m/s²
c) Joule
d) Watt
Ans: b) kg m/s²

49. Newton's laws are not applicable in:
a) Rest frames
b) Non-inertial frames
c) Inertial frames

d) Pump system
Ans: c) Moat (well)
13. Modern irrigation method which saves water is:
a) Persian wheel
b) Chain pump
c) Drip irrigation
d) Pulley system
Ans: c) Drip irrigation
14. Sprinkler irrigation is best suited for:
a) Sandy soil
b) Clayey soil
c) Both a and b
d) None
Ans: a) Sandy soil
15. Waterlogging and soil salinity occur due to:
a) Proper irrigation
b) Over-irrigation
c) Crop rotation
d) Manuring
Ans: b) Over-irrigation

Weeds, Harvesting & Storage
16. Unwanted plants growing with crop are called:
a) Pests
b) Weeds
c) Fertilizers
d) Manures
Ans: b) Weeds
17. Removal of weeds is called:
a) Harvesting
b) Weeding
c) Tilling
d) Threshing
Ans: b) Weeding
18. Chemicals used to kill weeds are called:
a) Insecticides
b) Pesticides
c) Fungicides
d) Weedicides
Ans: d) Weedicides
19. Harvesting is:
a) Storage of food
b) Cutting and gathering crops
c) Removal of weeds
d) Threshing
Ans: b) Cutting and gathering crops
20. Removing grain from chaff is called:
a) Winnowing
b) Threshing
c) Grinding
d) Milling
Ans: b) Threshing

Storage & Pests
21. Pests attack mainly:
a) Leaves only
b) Stems only
c) Stored grains and standing crops

d) Earth frame
Ans: b) Non-inertial frames

50. If equal forces act on unequal masses, then:
a) Both have same acceleration
b) Smaller mass has larger acceleration
c) Larger mass has larger acceleration
d) Both remain at rest
Ans: b) Smaller mass has larger acceleration

1. The best way to improve milk yield in cows is:
a) Increasing water supply
b) Cross-breeding with high-yield varieties
c) Giving more salt in diet
d) Keeping cows indoors
Ans: b) Cross-breeding with high-yield varieties

2. White Revolution was led by:
a) Dr. Verghese Kurien
b) M.S. Swaminathan
c) Dr. Homi Bhabha
d) C.V. Raman
Ans: a) Dr. Verghese Kurien

3. Which one improves milk quality in dairy farming?
a) Cross-breeding
b) Vaccination
c) Balanced nutrition
d) All of these
Ans: d) All of these

4. Vaccination in livestock is essential because it:
a) Increases weight
b) Prevents infectious diseases
c) Increases reproduction
d) Reduces feed intake
Ans: b) Prevents infectious diseases

5. Which of the following is a draught animal?
a) Cow
b) Horse
c) Buffalo
d) Goat
Ans: b) Horse

6. Poultry farming mainly helps in production of:
a) Meat and eggs
b) Milk and butter
c) Silk and wool
d) Leather
Ans: a) Meat and eggs

7. Apiculture provides:
a) Silk
b) Honey and wax
c) Meat
d) Soil
Ans: c) Stored grains and standing crops
22. Which is not a storage loss?
a) Loss due to insects
b) Loss due to fungi
c) Loss due to sunlight
d) Loss due to rodents
Ans: c) Loss due to sunlight
23. Fumigation is used for:
a) Sowing
b) Killing pests in stored grains
c) Threshing
d) Harvesting
Ans: b) Killing pests in stored grains
24. Which method prevents moisture in storage?
a) Drying before storage
b) Adding water
c) Spraying pesticides
d) Mixing urea
Ans: a) Drying before storage
25. Metal bins are preferred for storage because:
a) They are costly
b) They protect from insects and rats
c) They are transparent
d) They reduce germination
Ans: b) They protect from insects and rats

Improvement in Crop Yield
26. Hybridisation is done to improve:
a) Seed colour
b) Crop yield
c) Waterlogging
d) Storage
Ans: b) Crop yield
27. Bio-fertilizers are:
a) Chemicals
b) Living organisms (like Rhizobium, Cyanobacteria)
c) Pesticides
d) None
Ans: b) Living organisms (like Rhizobium, Cyanobacteria)
28. Green Revolution is related to:
a) Increase in rice and wheat production
b) Increase in cotton production
c) Use of machines
d) Increase in fisheries
Ans: a) Increase in rice and wheat production
29. Nitrogen-fixing bacteria in legumes are:
a) Azotobacter
b) Rhizobium
c) Nitrosomonas
d) Clostridium
Ans: b) Rhizobium
30. Bio-pesticides are obtained from:
a) Plants and microbes
b) Chemicals
c) Soil only

d) Fruits
Ans: b) Honey and wax

8. Pisciculture is best suited for:
a) Increasing fish production in natural water only
b) Controlled breeding of fish in ponds and tanks
c) Only marine fishing
d) Storing fish after catching
Ans: b) Controlled breeding of fish in ponds and tanks

9. Marine fisheries include:
a) Rohu, Catla, Mrigal
b) Tuna, Sardine, Prawn
c) Trout, Carp
d) Goat, Sheep
Ans: b) Tuna, Sardine, Prawn

10. Blue Revolution is related to:
a) Wheat production
b) Milk production
c) Fish production
d) Silk production
Ans: c) Fish production

11. Composite fish culture means:
a) Only one species of fish in a pond
b) Different species together without competition
c) Fishing from rivers
d) Artificial fishing nets
Ans: b) Different species together without competition

12. Inland fisheries refer to:
a) Oceans only
b) Lakes, rivers, ponds
c) Sea coasts
d) Hills only
Ans: b) Lakes, rivers, ponds

13. Fish liver oil is rich in:
a) Vitamin A and D
b) Vitamin B
c) Vitamin C
d) Vitamin E
Ans: a) Vitamin A and D

14. Chipko Movement was started to protect:
a) Soil
b) Forests
c) Rivers
d) Wildlife
Ans: b) Forests

15. Which of these is not a forest product?
a) Timber
b) Gum
d) Fertilizers
Ans: a) Plants and microbes

Animal Husbandry
31. Rearing of animals for food and other products is called:
a) Agriculture
b) Animal husbandry
c) Pisciculture
d) Poultry
Ans: b) Animal husbandry
32. Milk-producing animals are called:
a) Draught animals
b) Dairy animals
c) Poultry
d) Fisheries
Ans: b) Dairy animals
33. Poultry farming deals with:
a) Sheep
b) Goats
c) Hens and ducks
d) Cows
Ans: c) Hens and ducks
34. White Revolution is related to:
a) Increase in cotton
b) Increase in milk production
c) Increase in wheat
d) Increase in poultry
Ans: b) Increase in milk production
35. Rearing of honey bees is called:
a) Apiculture
b) Sericulture
c) Pisciculture
d) Horticulture
Ans: a) Apiculture

Fisheries & Forestry
36. Large-scale production of fish is called:
a) Apiculture
b) Pisciculture
c) Poultry
d) Sericulture
Ans: b) Pisciculture
37. Marine fisheries include:
a) Prawns, tuna, sardine
b) Carp, catla, rohu
c) Cow, buffalo
d) Silkworms
Ans: a) Prawns, tuna, sardine
38. Inland fisheries are carried out in:
a) Oceans
b) Lakes, ponds, rivers
c) Hills
d) Forests
Ans: b) Lakes, ponds, rivers
39. Blue Revolution refers to:
a) Increase in rice
b) Increase in wheat

c) Petroleum
d) Medicinal plants
Ans: c) Petroleum

16. Social forestry aims at:
a) Planting trees on community land
b) Reducing soil fertility
c) Cutting forests for farming
d) Growing food crops only
Ans: a) Planting trees on community land

17. Deforestation does not lead to:
a) Soil erosion
b) Loss of biodiversity
c) Increase in rainfall
d) Desertification
Ans: c) Increase in rainfall

18. Agroforestry means:
a) Growing crops and trees together
b) Growing only fruit trees
c) Protecting wildlife only
d) Only irrigating crops
Ans: a) Growing crops and trees together

19. Which tree is mostly used in paper industry?
a) Teak
b) Eucalyptus
c) Mango
d) Banyan
Ans: b) Eucalyptus

20. Forests help in maintaining balance of:
a) Carbon dioxide and oxygen
b) Nitrogen only
c) Hydrogen only
d) Sulphur dioxide only
Ans: a) Carbon dioxide and oxygen

Apiculture (Beekeeping) – Top MCQs

Basics of Apiculture

1. Apiculture is related to:
a) Silk production
b) Honey and wax production
c) Fish farming
d) Poultry farming
Ans: b) Honey and wax production

2. The scientific study of bees is called:
a) Sericulture
b) Entomology
c) Apiculture

c) Increase in fish production
d) Increase in cotton
Ans: c) Increase in fish production
40. Forestry provides:
a) Wood, gum, medicinal plants
b) Cement
c) Plastic
d) Minerals
Ans: a) Wood, gum, medicinal plants

Management of Resources
41. Natural resources are:
a) Air, water, soil, minerals
b) Cars, machines
c) Mobile phones
d) Plastic
Ans: a) Air, water, soil, minerals
42. Resources which can be regenerated are:
a) Renewable resources
b) Non-renewable resources
c) Both
d) None
Ans: a) Renewable resources
43. Which of these is non-renewable?
a) Sunlight
b) Forests
c) Petroleum
d) Water
Ans: c) Petroleum
44. Chipko Movement was related to:
a) Water saving
b) Forest conservation
c) Energy saving
d) Soil erosion
Ans: b) Forest conservation
45. Water harvesting increases:
a) Groundwater level
b) Soil erosion
c) Deforestation
d) Salinity
Ans: a) Groundwater level

Higher Order / HOTS
46. Excess use of fertilizers causes:
a) Soil fertility increase
b) Water pollution
c) Increase in microbes
d) No effect
Ans: b) Water pollution
47. Which farming method is eco-friendly?
a) Organic farming
b) Chemical farming
c) Excess irrigation
d) Pesticide farming
Ans: a) Organic farming
48. The best method to conserve soil fertility is:
a) Overgrazing
b) Crop rotation

d) Pisciculture
Ans: c) Apiculture

3. Apiculture is an example of:
a) Agriculture
b) Sericulture
c) Animal husbandry
d) Floriculture
Ans: c) Animal husbandry

4. The main product of apiculture is:
a) Honey
b) Gum
c) Silk
d) Resin
Ans: a) Honey

5. Beeswax is secreted from:
a) Mouth
b) Wings
c) Hind legs
d) Abdominal glands
Ans: d) Abdominal glands

Honeybee Species & Uses

6. The Indian honeybee is:
a) Apis cerana indica
b) Apis dorsata
c) Apis mellifera
d) Apis florea
Ans: a) Apis cerana indica

7. The Italian bee used in commercial farming is:
a) Apis cerana
b) Apis dorsata
c) Apis mellifera
d) Apis florae
Ans: c) Apis mellifera

8. The wild honeybee (rock bee) in India is:
a) Apis dorsata
b) Apis florae
c) Apis mellifera
d) Apis cerana
Ans: a) Apis dorsata

9. Which bee produces less honey?
a) Apis dorsata
b) Apis mellifera
c) Apis florea
d) Apis cerana indica
Ans: c) Apis florea

10. Honey is rich in:
a) Proteins
c) Cutting trees
d) Burning crops
Ans: b) Crop rotation

49. Which gas is produced in biogas plants?
a) Carbon dioxide
b) Oxygen
c) Methane
d) Hydrogen
Ans: c) Methane

50. Which is the most important necessity for food production?
a) Soil fertility
b) Modern machines
c) Fertilizers only
d) Labour only
Ans: a) Soil fertility

Types of Bees

51. Which bee lays eggs in a colony?
a) Worker bee
b) Queen bee
c) Drone
d) Soldier bee
Ans: b) Queen bee

52. Worker bees are:
a) Male fertile
b) Female sterile
c) Female fertile
d) Male sterile
Ans: b) Female sterile

53. Male bees in a hive are called:
a) Drones
b) Workers
c) Soldiers
d) Guards
Ans: a) Drones

54. Which bees do not collect nectar or pollen?
a) Worker bees
b) Queen bee
c) Drones
d) Guard bees
Ans: c) Drones

55. Which bee has the longest life span?
a) Worker bee
b) Drone
c) Queen bee
d) Soldier bee
Ans: c) Queen bee

Colony & Behaviour

b) Sugars (glucose & fructose)
c) Lipids
d) Minerals only
Ans: b) Sugars (glucose & fructose)

Colony & Behaviour

11. Bee communication is by:
a) Sound only
b) Dance movements
c) Chemical signals only
d) Vibrations only
Ans: b) Dance movements

12. The dance language of bees was discovered by:
a) Mendel
b) Karl von Frisch
c) Darwin
d) Aristotle
Ans: b) Karl von Frisch

13. Which bee guards the hive?
a) Worker bee
b) Drone
c) Queen bee
d) All bees
Ans: a) Worker bee

14. Which bee stings?
a) Drones only
b) Queen bee only
c) Worker bees
d) Both drones and workers
Ans: c) Worker bees

15. Drone bees die after:
a) Mating
b) Stinging
c) Collecting nectar
d) Guarding hive
Ans: a) Matin

16. Apiculture is most profitable when kept near:
a) Factories
b) Polluted rivers
c) Orchards and crop fields
d) Rocky areas
Ans: c) Orchards and crop fields

17. A good apiary location must have:
a) Flowering plants
b) Clean water
c) Sunlight and shade
d) All of these
Ans: d) All of these

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b) Dance movements
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d) Vibrations only
Ans: b) Dance movements

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Ans: c) Worker bees

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b) Stinging
c) Collecting nectar
d) Guarding hive
Ans: a) Mating

Economical & Scientific Importance

61 Honey contains:
a) Vitamins A and D
b) Glucose, fructose, enzymes
c) Proteins only
d) Fats only
Ans: b) Glucose, fructose, enzymes

62. Honey is used in:
a) Medicine
b) Food industry
c) Cosmetic industry
d) All of these
Ans: d) All of these

63. Beeswax is used in:
a) Candle and polish making
b) Soap industry
c) Cosmetic industry

18. Which month is best for collecting honey?
a) Summer
b) Rainy season
c) Spring
d) Winter
Ans: c) Spring

19. The sting of bee contains:
a) Formic acid
b) Citric acid
c) Methanoic acid
d) Both a and c
Ans: d) Both a and c

d) All of these
Ans: d) All of these

64. Pollination by bees is called:
a) Autogamy
b) Entomophily
c) Hydrophily
d) Zoophily
Ans: b) Entomophily

65. Beekeeping helps in:
a) Honey production
b) Wax production
c) Pollination and crop yield
d) All of these
Ans: d) All of these

66 Honeybees play dual role in agriculture by:
a) Producing wax only
b) Pollination + honey production
c) Increasing soil fertility
d) Killing pests
Ans: b) Pollination + honey production