## UPSC NDA 1 2026: Highly Expected Science Questions (50 MCQs)

**Instructions:** Each question has four options. Choose the correct answer.

#### Physics (17 Questions)

- 1. The SI unit of luminous intensity is:
  - a) Candela
  - b) Lumen
  - c) Lux
  - d) Watt
- 2. A body is projected horizontally from the top of a cliff. Its path is:
  - a) A straight line
  - b) A circle
  - c) A parabola
  - d) A hyperbola
- 3. Newton's First Law of Motion is also known as:
  - a) Law of Momentum
  - b) Law of Inertia
  - c) Law of Energy Conservation
  - d) Law of Force
- 4. The working principle of a washing machine is:
  - a) Centripetal force
  - b) Centrifugal force
  - c) Gravitational force
  - d) Frictional force
- 5. Which of the following is a scalar quantity?
  - a) Force
  - b) Velocity
  - c) Momentum
  - d) Work
- 6. The splitting of white light into its constituent colours is called:
  - a) Reflection
  - b) Refraction
  - c) Dispersion
  - d) Scattering
- 7. A person sitting in an artificial satellite of the Earth feels weightlessness because:
  - a) The Earth does not attract the objects in the satellite.
  - b) The satellite is too far from the Farth.
  - c) The gravitational force of the Earth provides the necessary centripetal force.

- d) The mass of the satellite is negligible.
- 8. Sound waves cannot travel through

a:

- a) Solid
- b) Liquid
- c) Gas
- d) Vacuum
- 9. The lens used to correct myopia (short-sightedness) is:
  - a) Convex Lens
  - b) Concave Lens
  - c) Cylindrical Lens
  - d) Bifocal Lens
- 10. The value of 'g' (acceleration due to gravity) is maximum at the:
  - a) Equator
  - b) Poles
  - c) Top of Mount Everest
  - d) Centre of the Earth
- 11. Which of the following is NOT a greenhouse gas?
  - a) Carbon Dioxide (CO₂)
  - b) Methane (CH<sub>4</sub>)
  - c) Nitrous Oxide (N<sub>2</sub>O)
  - d) Nitrogen (N<sub>2</sub>)
- 12. The process by which a liquid changes into a vapour at its boiling point is called:
  - a) Evaporation
  - b) Condensation
  - c) Boiling
  - d) Sublimation
- 13. Which mirror is used as a rear-view mirror in vehicles?
  - a) Plane Mirror
  - b) Concave Mirror
  - c) Convex Mirror
  - d) Spherical Mirror
- 14. The nuclear reactor at the Kudankulam Nuclear Power Plant is based on:
  - a) Fast Breeder Reactor
  - b) Pressurized Heavy Water Reactor (PHWR)
  - c) Boiling Water Reactor (BWR)
  - d) Pressurized Water Reactor (PWR)
- 15. The device used to measure the depth of the ocean is based on the principle of:
  - a) Echo

- b) Interference
- c) Refraction
- d) Resonance

### 16. A fuse wire is used in an electric circuit to:

- a) Complete the circuit
- b) Break the circuit in case of overloading
- c) Increase the current flow
- d) Reduce power consumption

### 17. Which law explains the working of a hydraulic lift?

- a) Bernoulli's Principle
- b) Pascal's Law
- c) Archimedes' Principle
- d) Newton's Law of Viscosity

#### **Chemistry (16 Questions)**

- 18. The pH of a neutral solution at 25°C
  - is:
  - a) 0
  - b) 7
  - c) 10
  - d) 14

### 19. The chemical formula of washing soda is:

- a) NaHCO₃
- b) NaOH
- c) Na<sub>2</sub>CO<sub>3</sub>·10H<sub>2</sub>O
- d) CaOCl<sub>2</sub>

### 20. Which of the following is a noble gas?

- a) Hydrogen
- b) Oxygen
- c) Neon
- d) Nitrogen

## 21. The process of rusting of iron is an example of:

- a) Combustion
- b) Reduction
- c) Oxidation
- d) Displacement

## 22. The hardest naturally occurring substance is:

- a) Gold
- b) Iron
- c) Diamond
- d) Platinum

### 23. The gas used in the advertisement signboards (neon signs) is:

- a) Helium
- b) Argon

- c) Neon
- d) Krypton

### 24. Which of the following is an example of a thermoplastic?

- a) Bakelite
- b) Melamine
- c) Polythene
- d) Teflon

### 25. The isotope of Uranium used as fuel in a nuclear reactor is:

- a) U-234
- b) U-235
- c) U-238
- d) U-239

#### 26. The acid present in vinegar is:

- a) Acetic Acid
- b) Citric Acid
- c) Lactic Acid
- d) Formic Acid

# 27. The most abundant gas in the Earth's atmosphere is:

- a) Oxygen
- b) Argon
- c) Nitrogen
- d) Carbon Dioxide

## 28. Which of the following is NOT a property of acids?

- a) Sour taste
- b) Turn blue litmus red
- c) Liberate hydrogen gas with metals
- d) Feel soapy to touch

### 29. The chemical name of 'Plaster of Paris' is:

- a) Calcium Sulphate Hemihydrate
- b) Calcium Carbonate
- c) Calcium Oxide
- d) Calcium Sulphate Dihydrate

#### 30. Covalent bonds are formed by:

- a) Transfer of electrons
- b) Sharing of electrons
- c) Donation of protons
- d) Sharing of protons

### 31. The process used to purify seawater is:

- a) Filtration
- b) Distillation
- a) Carlina a a la l'
- c) Sedimentation
- d) Chlorination

# 32. Which gas is responsible for the 'greenhouse effect'?

a) Oxygen

- b) Nitrogen
- c) Carbon Dioxide
- d) Ozone

#### 33. The element common to all acids is:

- a) Hydrogen
- b) Oxygen
- c) Nitrogen
- d) Chlorine

#### **Biology (17 Questions)**

- 34. The cell organelle responsible for cellular respiration is:
  - a) Nucleus
  - b) Ribosome
  - c) Mitochondria
  - d) Chloroplast
- 35. Which of the following is a nitrogen-fixing bacteria?
  - a) Lactobacillus
  - b) Rhizobium
  - c) Yeast
  - d) E. coli
- 36. The process by which plants lose water in the form of vapour is called:
  - a) Evaporation
  - b) Transpiration
  - c) Respiration
  - d) Photosynthesis
- 37. The smallest bone in the human body is found in the:
  - a) Spine
  - b) Ear
  - c) Finger
  - d) Toe
- 38. Which vitamin is produced in the human body when exposed to sunlight?
  - a) Vitamin A
  - b) Vitamin B12
  - c) Vitamin C
  - d) Vitamin D
- 39. The red colour of blood is due to the presence of:
  - a) Haemoglobin
  - b) Plasma
  - c) Platelets
  - d) Lymph
- 40. The botanical name for the 'Neem' tree is:
  - a) Azadirachta indica
  - b) Ocimum sanctum

- c) Ficus religiosa
- d) Moringa oleifera
- 41. Which of the following is not a part of the human digestive system?
  - a) Stomach
  - b) Liver
  - c) Kidney
  - d) Small Intestine
- 42. The universal recipient blood group
  - is:
  - a) A
  - b) B
  - c) AB
  - d) O
- 43. Plants receive their nutrients mainly from:
  - a) Chlorophyll
  - b) Atmosphere
  - c) Light
  - d) Soil
- 44. The hormone insulin is secreted by:
  - a) Pituitary Gland
  - b) Thyroid Gland
  - c) Pancreas
  - d) Adrenal Gland
- 45. Which of the following diseases is caused by a virus?
  - a) Tuberculosis
  - b) Cholera
  - c) Malaria
  - d) COVID-19
- 46. The structural and functional unit of the nervous system is:
  - a) Nephron
  - b) Neuron
  - c) Brain
  - d) Spinal Cord
- 47. The process of conversion of sugar into alcohol by yeast is called:
  - a) Fermentation
  - b) Pasteurization
  - c) Digestion
  - d) Respiration
- 48. Biodiversity is maximum in:
  - a) Tropical Rainforests
  - b) Temperate Forests
  - c) Deserts
  - d) Tundra Regions
- 49. The 'Project Tiger' initiative in India was launched in which year?
  - a) 1973

- b) 1984
- c) 1991
- d) 2002
- 50. Which of the following is a water-borne disease?
  - a) Tuberculosis
  - b) Influenza
  - c) Cholera
  - d) Tetanus

#### **Answer Key**

- 1. a) Candela
- 2. c) A parabola
- 3. b) Law of Inertia
- 4. b) Centrifugal force
- 5. d) Work
- 6. c) Dispersion
- 7. c) The gravitational force of the Earth provides the necessary centripetal force.
- 8. d) Vacuum
- 9. b) Concave Lens
- 10. b) Poles
- 11. d) Nitrogen (N<sub>2</sub>)
- 12. c) Boiling
- 13. c) Convex Mirror
- 14. b) Pressurized Heavy Water Reactor (PHWR)
- 15. a) Echo
- 16. b) Break the circuit in case of overloading
- 17. b) Pascal's Law
- 18. b) 7
- 19. c) Na<sub>2</sub>CO<sub>3</sub>·10H<sub>2</sub>O
- 20. c) Neon
- 21. c) Oxidation
- 22. c) Diamond
- 23. c) Neon
- 24. c) Polythene
- 25. b) U-235
- 26. a) Acetic Acid
- 27. c) Nitrogen
- 28. d) Feel soapy to touch
- 29. a) Calcium Sulphate Hemihydrate
- 30. b) Sharing of electrons
- 31. b) Distillation
- 32. c) Carbon Dioxide
- 33. a) Hydrogen
- 34. c) Mitochondria
- 35. b) Rhizobium
- 36. b) Transpiration

- 37. b) Ear (Stapes)
- 38. d) Vitamin D
- 39. a) Haemoglobin
- 40. a) Azadirachta indica
- 41. c) Kidney
- 42. c) AB
- 43. d) Soil
- 44. c) Pancreas
- 45. d) COVID-19
- 46. b) Neuron
- 47. a) Fermentation
- 48. a) Tropical Rainforests
- 49. a) 1973
- 50. c) Cholera