



RAMAN SPACE MANTHAN

2025-26

Standard:- VIII

Name:- _____

Std:- _____

Roll no:- _____

School Name:- _____

INSTRUCTIONS

- There will be 3 sections
- Physics: 40 Questions
- Chemistry: 30 Questions
- Biology: 30 Questions
- Total questions 100 each carries 4 mark.
- Total exam time 2 hour.
- Don't mark anything on the question paper

➤PHYSICS

1. What will happen to the body if there is no applied force?
 - A. The body gets reshaped
 - B. Either the body remain at rest or move with uniform velocity
 - C. The body move with a increasing speed
 - D. The body will stop moving
2. Which of the following is a contact force?
 - A. Tension
 - B. Gravitational force
 - C. Electrostatic force
 - D. Magnetic force
3. A force of 6 N is applied on a particle, its velocity increases from 50m/s to 60m/s in 2 sec. What is mass of the particle?
 - A. 2.4 kg
 - B. 1.2 kg
 - C. 4.8 kg
 - D. 3.2 kg
4. What is nature of force of friction between the two bodies
 - A. Parallel to the contact force
 - B. Perpendicular to the contact surface
 - C. Inclined at 30° to the contact surface
 - D. Inclined at 60° to the contact surface
5. An unbalanced force acts when
 - (i) Force acts in one direction is greater than in the other directions
 - (ii) No net force acts on the object
 - (iii) An object undergoes acceleration
 - A. (i) and (ii) only
 - B. (ii) and (iii) only
 - C. (iii) and (i) only
 - D. (i), (ii) and (i)
6. A force F is applied on a block of mass 10kg but does not move. The value of frictional force is of (if coefficient of friction is $\mu=0.2$)
 - A. 10 N
 - B. 20 N
 - C. 100 N
 - D. 40 N
7. Calculate the pressure on the wall when the palm of a hand with area 150 cm^2 is pushed against the wall a force of 210 N?
 - A. 1.4 N cm^{-2}
 - B. 140 N cm^{-2}
 - C. 315 N cm^{-2}
 - D. 1000 N cm^{-2}

8. A wooden block of dimensions $8\text{cm} \times 10\text{cm} \times 12\text{cm}$ weighs 12 N . On which side, should the wooden block be placed to produce a maximum pressure exerted on the table. What is value of this pressure
- A. $10000\text{ dyne cm}^{-2}$ C. 1000 dyne cm^{-2}
B. 1250 dyne cm^{-2} D. $15000\text{ dyne cm}^{-2}$
9. On what factors, the pressure at a point inside a liquid does not depend upon?
- A. The depth of the point below the surface of the liquid
B. The nature of the liquid
C. The acceleration due to the gravity
D. The shape of the containing vessel
10. What does pascal's law deal with?
- A. The application of the pressure
B. Hydraulic pressure
C. The transmission of pressure
D. The communicating vessel
11. What is basic concept used in hydraulic system?
- A. Fluids cannot be compressed
B. Fluids are compressed to produce pressure
C. Fluids that can flow produce the most pressure
D. Pressure in fluids can be transferred partially throughout the fluid
12. The upthrust on a body when immersed in water was found to be less than its weight. What will happen to the body?
- A. It will sink
B. It will float on the top
C. It will float half way in the water
D. It will sink first then gradually rises up
13. A concrete block of dimension $1.5\text{m} \times 2.0 \times 3.0$ weights 60 N . the ratio of minimum pressure to maximum pressure is
- A. 1:1 B. 2:1 C. 1:2 D. 4:1
14. A vibrator sends ripples across the surface of the water. They run closer together as they travel farther from the vibrator. This shows that the ripples
- A. Decrease in a frequency C. Slow down
B. Increased in frequency D. Slow down

15. Which of the following is correct order of velocity of sound?
- A. $V_{\text{gas}} > V_{\text{liq}} > V_{\text{solid}}$
 - B. $V_{\text{gas}} < V_{\text{liq}} < V_{\text{solid}}$
 - C. $V_{\text{solid}} > V_{\text{liq}} > V_{\text{gas}}$
 - D. $V_{\text{liq}} > V_{\text{gas}} < V_{\text{solid}}$
16. Which characteristics of the sound depends on frequency?
- A. Pitch
 - B. Loudness
 - C. Quality
 - D. All of these
17. Which of the following help us to distinguish between the two notes of the same pitch and loudness produced by two different vibrating bodies?
- A. Amplitude
 - B. Frequency
 - C. Quality
 - D. Time period
18. A longitudinal wave that has time period of 0.05sec travels along a coil spring. If the distance between two successive compressions is 0.400 m, what is the speed of the wave?
- A. 0.02 m/s
 - B. 0.13m/s
 - C. 4 m/s
 - D. 8m/s
19. The speed of the sound at 0°C is 320m/s. find temperature at which speed is halved?
- A. 68.2 K
 - B. 94 K
 - C. 100 K
 - D. 60.25 K
20. Identify the property of light.
- A. Light undergoes rectilinear propagation
 - B. Light is a mechanical wave
 - C. Light can undergo only absorption
 - D. Light cannot have velocity in vacuum
21. What is the angle between the incident and reflected rays, when a ray of incident is normally on a plane mirror.
- A. 90°
 - B. 45°
 - C. 180°
 - D. 0°
22. The image formed by spherical mirror is always virtual. What type of spherical mirror it should be?
- A. Concave
 - B. Convex
 - C. Either concave or convex
 - D. All of these
23. The refractive index of water with respect to air is $\frac{4}{3}$. What will be refractive index of air with respect to air?
- A. 1.75
 - B. 0.50
 - C. 0.75
 - D. 0.25

24. Myopia is a defect of vision due to which a person finds difficulty in seeing:
- A. Distant objects
B. Near objects
C. Object at all distance
D. Colours
25. When object is placed at the centre of curvature of a convex lens what will be the nature of image formed?
- A. Virtual, erect and magnified
B. Real, inverted and of the same size
C. Real, inverted and diminished
D. Real inverted and highly diminished
26. A boy walks towards a mirror at a speed of 2.5 m/s. at what speed is his image approaching him?
- A. 1 m/s B. 2 m/s C. 3 m/s D. 5m/s
27. A neutral body contains
- A. Only negative charges
B. Only positive charges
C. No positive and negative charges
D. Equal number of positive and negative charges
28. If a body has +5C and -2C, then the net charge on the body is
- A. +3 C B. -3 C C. +7 C D. -10 C
29. If a body is positively charge then which of the following statements is true?
- A. excess of electrons
B. deficiency of protons
C. deficiency of electron
D. deficiency of neutrons
30. which of the following is non-electrolyte?
- A. Ethyl alcohol C. Urea
B. Sodium chlorite D. Sodium solution
31. To protect tall buildings from lighting, what can be done
- A. Not to build tall buildings
B. Install lighting conductors
C. Install many TV antennas
D. Have a roof top garden with tall trees
32. A charge of 32×10^{-19} C contains how many numbers of electrons?
- A. 5 B. 2 C. 50 D. 20

33. Seismic waves are usually generated by movements of the earth tectonic plates. Apart from that they are also caused by
(i) Explosions (ii) volcanoes (iii) landslides
A. I and II only C. III only
B. II and III only D. all of these
34. A ball of mass 20×10^{-3} kg has a velocity 210m/s, then its energy in calorie is
A. 100 B. 105 C. 95 D. 21
35. Which of the following cannot alter the rate at which water evaporates from a dish?
A. Increasing surface area of the dish
B. Using fan above the surface of the water
C. Bringing dish and water at a higher altitude where the air is less dense
D. Increasing the depth of the water in the dish.
36. Evaporation is different from boiling. Which of the following option supports these?
A. Evaporation does not require heat to change a liquid into a gas
B. Evaporation takes place in high temperature only
C. Evaporation can take place only when the liquid is volatile
D. Evaporation involves only surface molecules
37. In an experiment, iodine undergoes sublimation. In this process, during the change of the state, what will happen to temperature of iodine?
A. Remains same C. Decreases
B. Increases D. May increase or decreases
38. X is a process due to which gaseous form of a substance changes to liquid state without any fall in the temperature. Identify the process X.
A. Liquefaction C. Vaporisation
B. Condensation D. Fusion
39. A swimmer comes out of the water on a windy day. He may feel colder before he dries himself than afterwards. Why is this so?
A. The water is cooled down by the swimmer
B. The water on his skin is colder than the air.
C. The water prevents warm air from reaching his skin
D. The wind evaporates the water, cooling his skin

40. 20g of water at 0 °C is mixed with 40g water at 10 °C. find the temperature of the mixture.

- A. 20 °C B. 6.6 °C C. 5 °C D. 0 °C

➤ CHEMISTRY

41. Which of the following is a physical change?

- A. Formation of a curd C. Rusting of a iron rod
B. Burning of a candle D. Heating of copper wire by electricity

42. Which of the following is a chemical change?

- A. Evaporation C. Sublimation
B. Precipitation D. Dissolution

43. Which of the following is most reactive metal?

- A. Gold B. Mercury C. Magnesium D. Silver

44. A reversible thermal reaction is called:

- A. Redox reaction C. Thermal dissociation reaction
B. Thermal combination reaction D. Catalytic reaction

45. Which one is the oxidising reagent in the reaction $\text{ZnO} + \text{C} \rightarrow \text{Zn} + \text{CO}$?

- A. ZnO B. C C. Zn D. CO

46. What is correct order of metal reactivity series?

- A. Copper > Mercury > Sodium > Magnesium
B. Potassium > Sodium > Calcium > Magnesium
C. Sodium > Tin > Zinc > Magnesium
D. Potassium > Calcium > Aluminium

47. Second most widely used fibre after cotton is

- A. Silk B. Jute C. Coir D. Flax

48. Cellulose is a natural polymer occurring in the walls of

- A. Animal cell B. Plant cell C. Mucous cell D. Stem cell

49. Nylon is obtain from which of the following?

- A. Treating wood pulp C. Mixing coal, air and water
B. Solidifying water D. Mixing chemicals

50. Which of the substances can be used to make insulation of wires ?

- A. Rubber B. Plastic C. Wood D. Glass

51. When plastic are burnt they release?

- A. Oxygen gas C. Biogas
B. Nitrogen gas D. Toxic gas

52. Which of the following is correct sequence of “4R” principle?
- A. Recycle → recover → reduce → reuse
 - B. Reduce → reuse → recycle → recover
 - C. Reuse → recycle → recover → reduce
 - D. Recover → reduce → reuse → recycle
53. Name the metal which exist in liquid state at room temperature.
- A. Copper
 - B. Gold
 - C. Mercury
 - D. Silver
54. What is the ore of iron?
- A. Bauxite
 - B. Malachite
 - C. Cuprite
 - D. Hematite
55. The noble gases are made up of:
- A. Triatomic molecules
 - B. Diatomic molecules
 - C. Tetra-atomic molecules
 - D. Single free atoms
56. What happens when calcium is treated with water?
- (i) It does not react with water
 - (ii) It reacts violently with water
 - (iii) It react less violently with water
 - (iv) Bubbles of hydrogen gas formed stick to the surface of calcium.
- A. I and IV only
 - B. I and II only
 - C. II and III only
 - D. III and IV only
57. What is used of bromine in textile industry?
- A. It is used inn preparation of dyes
 - B. It is used to remove the dust particles on clothes
 - C. It is use to prevent colour
 - D. It is use in preparation of dyes
58. Corrosion is a chemical reaction that involves:
- A. The inside of the object changing from an element to a compound
 - B. The surface of the object changing from an element to a compound
 - C. Nothing happens to a object
 - D. The surface of a object changing from an element into compound
59. How is the weight of diamond measured?
- A. Gram
 - B. Dozen
 - C. Carats
 - D. Metres
60. What is the molecular formula of calcium carbide?
- A. Ca_2C
 - B. CaC
 - C. Ca_2C_3
 - D. CaC_2
61. Burning of substance in the presence of air(oxygen) is called:
- A. Oxidation
 - B. Sublimation
 - C. Reduction
 - D. Combustion

72. Hoe is used for:

- A. Ploughing
- B. Removing weeds
- C. Loosening the soil
- D. All of the above

73. Breeding of crops with higher levels of proteins, vitamins, etc is called

- A. Weeding
- B. Biofortification
- C. Harvesting
- D. Threshing

74. Which of the following are transplanted to fields?

- A. Brinjal
- B. Chilli
- C. Tomato
- D. all of the above

75. Large scale of rearing of fish for food is known as:

- A. Horticulture
- B. Apiculture
- C. Agriculture
- D. Pisciculture

76. X is an artificial or man made inorganic salt, that causes soil and water pollution and is soluble in water. Identify X.

- A. Compost
- B. Vermicompost
- C. Fertiliser
- D. Manure

77. Identify the bacterium that converts milk into curd.

- A. *Acetobacter aceti*
- B. *Lactobacillus*
- C. *streptococcus*
- D. *Salmonella*

78. Which of the following is acellular?

- A. Virus
- B. Bacterium
- C. Fungus
- D. Protozoan

79. The consumption of spoiled food leads to:

- A. Enhancement of food test
- B. Food poisoning
- C. Enhancement food texture
- D. Increase in nutritional value of food

80. Which of the following rays are used in the method of cold sterilization is called as:

- A. UV rays
- B. X rays
- C. Gamma rays
- D. All of the above

81. Most of the plants gets or absorb nitrogen from soil in the form of:

- A. Nitrogen gas
- B. Nitric acid
- C. Nitride
- D. Nitrates

82. The process of conversion of amino acids to ammonium by soil decomposers is called as:

- A. Ammonification
- B. Nitrification
- C. Nitrification
- D. Denitrification

83. Binary fission is observed in
- A. Hydra
B. Yeast
C. Amoeba
D. Human being
84. The clone of amoeba is formed by
- A. Budding
B. Regeneration
C. Fragmentation
D. Binary fission
85. Which of the following represents life cycle of silkworm correctly?
- A. Egg → larva/caterpillar → pupa → adult
B. Larva → caterpillar → pupa → adult
C. Egg → Tadpole → pupa → adult
D. Egg → caterpillar → tadpole → adult
86. Foetus is a stage which represents
- A. Fertilisation
B. The embryo in which all body parts can be identified
C. Formation of zygote
D. Metamorphism
87. Identify false statements regarding the sexual reproduction.
- A. It produce clones
B. It is a slow process
C. Gametes are always formed
D. It is usually biparental
88. Which of the following is wrongly matched?
- A. Sperm duct- carries sperm to the duct
B. Testes- produces sperms
C. Penis – produces sperms
D. Tail of sperm- movement of the sperm to reached egg
89. What is Adam's apple?
- A. Pharynx
B. Larynx
C. Puberty
D. Ovulation
90. When do the sexual characteristics develop in girls?
- A. 8 to 11 years
B. 11 to 13 years
C. 13 to 16 years
D. 16 to 19 years
91. Which hormone is secreted only in female body?
- A. Testosterone
B. Thyroxine
C. Adrenaline
D. Progesterone
92. After leaving the ovary where does the mature egg enters?
- A. Uterus
B. Vagina
C. Penis
D. Oviducts

93. The primary sex organ is
- A. Prostrate C. Testis
B. Scrotum D. Penis
94. What is common duct for passing both urine and semen in males?
- A. Uterus C. Urethra
B. Ureter D. Vas deferens
95. Identify the major air pollutant of air.
- A. Carbon monoxide C. Oxygen
B. Nitrogen D. Propane
96. Deforestation of forests leads to:
- A. Increased level of oxygen
B. Increased level of carbon dioxide
C. Decreased level of carbon dioxide
D. Increased level of nitrogen
97. Which of the following diseases is caused by polluted water?
- A. Malaria C. Cancer
B. Diarrhoea D. Heart diseases
98. Pollution of water is due to:
- A. Oil refiners C. Sewage
B. Paper factories D. All of the above
99. Volcanoes can contribute to air pollution through the release of toxic gases like:
- A. Carbon dioxide C. Hydrogen chloride
B. Sulphur dioxide D. All of the above
100. Why does pollution caused by air pollutants have a negative impact on plants?
- A. As they tend to change the pH levels of the soil
B. Solubilizing toxic salts of metals like aluminium
C. Release of toxic gases
D. Leads to an increase in oxygen and soil enrichment

Best of luck...

