

Chennai district

Class : 8

Register
Number

COMMON QUARTERLY EXAMINATION - 2024 - 25

Time Allowed : 2.30 Hours

SCIENCE
PART - IPrepared by, [Max. Marks : 100
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15x1= 15

- Choose the correct answer.
 - Electric current is a ----- Quantity
a) Base b) Supplementary c) Derived d) Professional
 - Luminous intensity is the intensity of -----
a) Laser light b) UV Light c) Visible light d) IR light
 - The Unit of Viscosity is
a) Nm² b) Poise c) Kgms⁻¹ d) No unit
 - The distance from the pole to the focus is called
a) Pole length b) Focal length c) Principal axis d) None of the above
 - If the image and object distance is same, then the object is placed at
a) Infinity b) at F c) Between F and P d) at C
 - Conduction is the way of heat transfer which takes place in a -----
a) Solid b) Liquid c) Gas d) All of them
 - undergoes rusting.
a) Tin b) Sodium c) Copper d) Iron
 - Aerated Water contains -----
a) Air b) Oxygen c) Carbon dioxide d) Sodium Carbonate
 - Symbol of Mercury is -----
a) Ag b) Hg c) Au d) Pb
 - The Non - metal which conducts Electric current is
a) Carbon b) Oxygen c) Aluminium d) Sulphur
 - Which of the following is known as azote?
a) Oxygen b) Nitrogen c) Sulphur d) Carbon-di oxide
 - Micro Organisms are measured in -----
a) cm b) mm c) Micron d) meter
 - Common cold human is caused by -----
a) Plasmodium b) Influenza c) Vibrio Cholera d) Aphthovirus
 - Plant that prevent soil erosion are
a) algae b) fungi c) Bryophytes d) Pteridophytes
 - Cells are specialised cells that can be transformed into any kind of cells.
a) nerve b) Stem c) Heart d) Bone

II. Fill in the blanks:

5x1=5

- A sample barometer was first constructed by Torricelli
- A calorimeter is a device used to measure the heat capacity of H₂O
- NH₃ is the basic material to manufacture Urea. (Ammonia)
- Agar agar is obtained from Red Algae
- The largest cell is egg of an Ostrich

III. Match the following.

5X1=5

- Lubricants - Bacteria 25
- Copper - Solid to gas 24
- Snell's law - For making wire 22

CH / 8 / Sci / 1

Q 37 Concave mirror: Make up mirror, torch.
Convex mirror: Rear view mirror, Hallway mirror

- 24. Sublimation - reduce friction 21
- 25. Tuberculosis - $\sin i / \sin r = \mu$ 23
- IV. State True or False. If false correct the statement.
- 26. Force acting on a given area is called Pressure. ✓
- 27. Convection is the process by which the thermal energy Flows in Solids. ✓
- 28. CFC is a Pollutant. True
- 29. Pinus is a closed seeded plants. False
- 30. Human beings are Warm blooded in nature. ✓

Q.49 Algae
(Ans)
(i) Autotrophs
(ii) has pigments
Ex Nostoc

Fungi
heterotrophs
No pigment
5x1=5
Ex Agaricus

- V. Draw the neat diagrams and label the parts of the following (any two) 2x5=10
- 31. (i) Structure of Human eye (ii) Structure of yeast
- (iii) Cell structure of Bacteria (iv) Structure of Chlamydomonas

PART - II

- VI. Answer any 15 of the following questions: 15x2=30
- 32. What is Measurement? Finding unknown quantity by using standard quantity
- 33. Define - Ampere. One Coulomb charge moving in conductor in 1 second
- 34. Which has greater Viscosity, Oil or honey? Why? Honey; thicker liquids more viscous
- 35. State Pascal's Law? Pressure applied at any point of liquid will be distributed equally to all regions
- 36. State Snell's Law of Refraction? $\sin i / \sin r = \mu$
- 37. Give any two applications of a Concave and Convex Mirror.
- 38. Name three types of Heat Transfer. Conduction, Convection, Radiation
- 39. Define specific Heat Capacity? Heat reqd to raise 1kg of substance by 1°C
- 40. Write the symbols for the following elements
a) Oxygen O b) Gold Au c) Iron Fe d) Calcium Ca e) Cadmium Cd
- 41. Write three Properties of Metalloids? Solids, form Alloys, Some are semi conductors
- 42. Define Catalysis chemicals used to alter speed of reaction
- 43. Why Photosynthesis is a Chemical Reaction? Sunlight use CO₂ & H₂O to form Starch
- 44. What is Global warming? Increase in CO₂
- 45. What is Dry Ice? what are its uses? Solid CO₂; Refrigerant
- 46. What are Antibiotics? Substance produced by ~~atoms~~ living things that is toxic for other organisms
- 47. Why Micro Organisms are essential for Agriculture? → fertilizer, Nitrogen fixation
- 48. Write any two Economic importance of Fungi? Mushroom, Antibiotic
- 49. Write the difference between Algae and Fungi?
- 50. Mention the Function of "Alveoli" Exchange of gases
- 51. Define - Metabolism. Sum of chemical reactions by which living things sustain their life

PART - III

- VII. Answer any six in detail: 6x5=30
- 52. List out the base Quantities with their Units.
- 53. a) Speed of light in Air is $3 \times 10^8 \text{ ms}^{-1}$ and the refractive index of a medium is 1.5. Find the Speed of light in the Medium. (3)
$$\mu = \frac{c}{v} \quad v = \frac{c}{\mu} = \frac{3 \times 10^8}{1.5} = 2 \times 10^8 \text{ m/s (Ans)}$$
- b) Define Focal Length. (2)
- 54. Tabulate the differences between Metals and Non - metals.
- 55. Explain the Environment effects of Chemical Reactions.
- 56. What are the effects of Acid Rain? How can we prevent them?
- 57. Write a short note on common Human Disease caused by Micro Organisms.
- 58. Write any Five differences between Monocot and Dicot plants.
- 59. Explain Osmosis with an Example?