

**Class : 10**Register  
Number**REVISION EXAMINATION, JANUARY - 2023****SCIENCE****PART - 1**

Time Allowed : 3.00 Hours]

[Max. Marks : 75

Choose the correct answer.

Answer all the questions.

12x1=12

- Impulse is equal to
  - Rate of change of momentum
  - Rate of force and time
  - Change of momentum
  - Rate of change of mass
- The eye defect 'presbopia' can be corrected by
  - Convex lens
  - Concave lens
  - Convex mirror
  - Bifocal lenses
- SI unit of resistance is
  - mho
  - Joule
  - Ohm
  - ohm meter
- isotope is used for the treatment of cancer.
  - Radio Iodine
  - Radio cobalt
  - Radio carbon
  - Radio Nickel
- Which of the following is a triatomic molecule?
  - Glucose
  - Helium
  - Carbon dioxide
  - Hydrogen
- Which of the following is the universal solvent?
  - Acetone
  - Benzene
  - Water
  - Alcohol
- TFM in soaps represents ----- content in soap.
  - mineral
  - vitamin
  - fatty acid
  - carbohydrate
- The endarch condition is the characteristic feature of
  - Root
  - Stem
  - leaves
  - flower
- 'Heart of Heart' is called
  - SA node
  - Av node
  - Purkinje fibres
  - Bundle of his
- Vomiting centre is located in
  - Medulla oblongata
  - Stomach
  - Cerebrum
  - Hypothalamus
- The ----- units form the backbone of DNA
  - 5 carbon sugar
  - Phosphate
  - Nitrogenous bases
  - Sugar phosphate
- World 'No Tobacco Day' is observed on -----
  - May 31
  - June 6
  - April 22
  - October 2

**Part - II**

Answer any seven questions. Q.No. 22 is compulsory.

7x2 = 14

- Classify the types of force based on their application.
- Why does the Sky appear in blue colour?
- State Boyle's law.
- Name three animals, which can hear ultrasonic vibrations.
- Define: Atomicity.
- True or false. [If false given the correct statement]
  - At the equilibrium of a reversible reaction, the concentration of the reactants and the products will be equal.
  - On dipping a pH paper in a solution, it turns yellow. Then the solution is basic.
- What is respiratory quotient?

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20. Fill in the blanks.

i) Normal blood pressure is \_\_\_\_\_

ii) The normal human heartbeat is about \_\_\_\_\_ time per minute.

21. Identify the parts A,B,C and D.



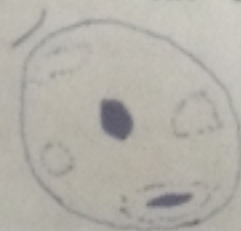
22. How many electrons are passing per second in an circuit in which there is a current of 5A?

### PART - III

Answer any seven questions .Q.No: 32 is compulsory.

7x4 = 28

23. Define inertia. Give its classification.
24. Differentiate convex lens and concave lens.
25. Differentiate soaps and detergents.
26. Why is the sinoatrial node called the pacemaker of heart?
27. (i) What is bolting? How can it be induced artificially?  
(ii) Why are thyroid hormones referred as personality hormone?
28. (i) What are allosomes?  
(ii) What are Okazaki fragments?
29. How can you determine the age of the fossils?
30. How is a cancer cell different from normal cell?
31. Enumerate the importance of forest.
32. What is the PH of  $1.0 \times 10^{-5}$  molar solution of KOH?



### PART-IV

Answer all the questions in detail.

3x7=21

33. a) (i) Derive the ideal gas equation.  
(ii) Distinguish between ideal gas and real gas.

(OR)

- b) What is meant by reflection of sound? Explain:
  - i) Reflection at the boundary of a raver medium.
  - ii) Reflection at the boundary of a denser medium.
  - iii) Reflection at curved surfaces.

34. a) In what way hygroscopic substances differ from deliquescent substances.

b) Classify the following substances into deliquescent, hydroscopic.

- |                                     |                       |
|-------------------------------------|-----------------------|
| (i) Conc.suphuric acid              | (ii) Silica gel       |
| (iii) Copper sulphate penta hydrate | (iv) Calcium chloride |
| (v) Gypsum salt                     | $\alpha, \beta$       |

(OR)

a) What is a chemical equilibrium? What are its characteristics?

b) Differentiate reversible and Irreversible reactions.

35. a) i) How does the light dependent reaction differ from the light independent reaction? What are the end products and reactants in each? Where does each reaction occur within the chloroplast?

(OR)

a) With a neat labelled diagram describe the parts of a typical angiosperimic ovule.

b) Define triple fusion.