

Ts10S

Tenkasi District Common Examinations  
Common Second Revision Examination - February 2023



22-02-2023

**Standard 10**

Time: 3.00 Hours

**SCIENCE**

Marks: 75

**PART - I****Note:** i) Answer all the questions. **12x1=12**

ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer

- 1) The unit of 'g' is  $ms^{-2}$ , it can be also expressed as  
 a)  $cms^{-1}$                       b)  $NKg^{-1}$                       c)  $Nm^2kg^{-1}$                       d)  $cm^2s^{-2}$
- 2) In which part of the eye, refraction of light takes place  
 a) Iris                              b) Retena                              c) Cornea                              d) pupil
- 3) The sound waves are reflected from an obstacle into the same medium from which they were incident. Which of the following changes?  
 a) Speed                              b) frequency  
 c) Wave length                              d) None of these
- 4) Kamini reactor is located at .....  
 a) kalpakkam                      b) Koodankulam                      c) Mumbai                              d) Rajasthan
- 5) The volume occupied by 4.4g of  $CO_2$  at S.T.P.  
 a) 22.4 litre                      b) 2.24 litre                      c) 0.24 litre                              d) 0.1 litre
- 6) ..... is an important metal to form amalgam.  
 a) Ag                              b) Hg                              c) Mg                              d) Al
- 7) Deliquescence is due to .....  
 a) Strong affinity to water                              b) Less affinity to water  
 c) Strong hatral to water                              d) Inertness to water
- 8) TFM in soaps represents ..... content in soap.  
 a) Mineral                              b) Vitamin  
 c) Fattyacid                              d) carbohydrates
- 9) Which part of the brain controls sleep awake cycle and respiratory cycle.  
 a) Medulla Oblongata                              b) Pons  
 c) Cerebellum                              d) Thalamus
- 10) Which one is referred as "master Gland"?  
 a) Pineal gland                      b) Pituitary gland                      c) Thyroid gland                      d) Adrenal gland
- 11) We can cut the DNA with the helpof  
 a) Scissors                              b) restriction endonucleases  
 c) Knife                              d) RNAase
- 12) Global warming wil cause  
 a) raise in level of oceans                              b) Melting of glaciess  
 c) Sinking of islands                              d) all of these

**PART - II****7x2=14****Note:** Answer any seven questions. Question No: 22 is compulsory.

- 13) Why are traffic signals red in colour?
- 14) State whether the following statements are true or false, if false explain why?
  - a) According to charle's law, at constent pressure, the temperature is inversly proportional to volume.
  - b) The SI unit for electric current

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15) Match the following:

- |                |   |             |
|----------------|---|-------------|
| a) Fuel        | - | lead        |
| b) Moderator   | - | heavy water |
| c) Control rod | - | cadmium rod |
| d) shield      | - | Uranium     |

- 16) Write the different types of isotopes of oxygen and its percentage abundance  
 17) A hot saturated solution of copper sulphate forms crystals as it cool. why?  
 18) Give any two uses of ethanoic acid.  
 19) What is photosynthesis and where in a cell does it occur?  
 20) What do you understand by the term phenotype and genotype?  
 21) What are the consequences of deforestation?  
 22) A change of 12 coulomb flows through a bulb in 5 second. What is the current through the bulb?

**PART - III****7×4=28****Note: Answer any seven questions. Question No: 32 is compulsory.**

- 23) Differentiate the eye defects Myopia and Hyper metropia.  
 24) 1) Define Joule's law of Heating  
 2) How does a fuse wire protect electrical appliances?  
 25) Write any four medical applications of radio isotopes.  
 26) Will the cool drinks give more fizz at top of the hills or at the foot? Explain.  
 27) Differentiate reversible and irreversible reactions.  
 28) a) Define: Atomicity  
 b) Applications of Avogadro's law.  
 29) What is transpiration? Give the importance of transpiration.  
 30) i) How is a cancer cell different from a normal cell?  
 ii) What is Scratch?  
 31) What are the consequences of soil erosion?  
 32) Calculate the gram molecular mass of the following: a) H<sub>2</sub>O b) Co<sub>2</sub>

**PART - IV****3×7=21****Note: Answer all the questions.**

- 33) a) i) Describe rocket propulsion?  
 ii) Differentiate mass and weight  
 (OR) Vallam - 627809  
 b) i) List the merits of LED bulb  
 ii) An alloy of nickel and chromium is used as the heating element why?  
 Denkasi District.
- 34) a) i) What is alloys?  
 ii) Reasons for alloying?  
 iii) Write any two methods for preventing corrosion  
 (OR)  
 b) i) Differentiate Soaps and detergents?  
 ii) How do detergents cause water pollution? suggest remedial measures to prevent this pollution?  
 iii) Name the simplest ketone and give its structural formula.
- 35) a) i) Why are thyroid hormones referred as personality hormone?  
 ii) Define triple fusion.  
 iii) Enumerate the importance of forest?  
 (OR)  
 b) i) Explain the structure of chromosome.  
 ii) List out the parasitic adaptations in leech.

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